**The Journal of British Military Thought**

**ARMY**
**BE THE BEST**

# Contents

BAR is interested in sparking professional debate and, consequently, we are looking for articles on any aspect of current or past military experience that has contemporary relevance, so long as they are well-researched, clearly written and suitably engaging. Subjects of particular current interest are: contemporary operations; Integrated Action; 21st Century manoeuvre; Information Manoeuvre; Strike; urban operations; innovation and adaptability; leadership and Mission Command. For further guidance please contact BAR at: **armyreview@armymail.mod.uk**

**CHACR**

Link to BAR homepage via the Defence Gateway

## BAR 172
## SUMMER 2018

## HISTORY

## BOOKS

# British Army Review Readership Survey

The new BAR Readership Survey is now available online. It only takes a few minutes to complete and I urge you to do so. For BAR to remain relevant and alive it needs to be reviewed from time to time and as such we need to hear from you, the BAR Reader. As we begin the new review process for BAR there are many questions that need to be answered before we can settle on the right format. And what that right format is will, in large part, be shaped by your answers to these questions.

For example, do we continue to print and distribute hard copies in these times of austerity or do we make it primarily an online journal? We believe it is time to expand the BAR's online presence so that it can provide forums for debate, quick themed publications such as newsletters or bespoke reports, more visual content, blogs and vlogs so it becomes a dynamic and relevant repository of information and debate.

We need to know your views about BAR and what you want the future of BAR to be. This is why we are running the New BAR Readership Survey. So please take a few minutes to complete it. Your thoughts and comments will help us shape your journal.

To get to the survey simply log on to your Defence Gateway account click on the Army Knowledge Exchange (AKX) button, then click on the Conceptual Support tab in the top right corner and finally click on BAR. You'll see the link to the survey right there. Please take a little time to complete the survey. The more answers we get, the more we can shape BAR to suit your needs.

We look forward to hearing from you.

The Editor

# Editorial

Welcome to the new-look BAR. As you can see, both inside and outside there have been changes in the way BAR looks and feels. This is to ensure that we reflect the Army's branding policy and is part of an on-going review that will cover just about every facet of the publication in one way or another.

Appearances aside, I am particularly proud of this edition as we have secured contributions, rich insight and provoking opinions, from two very distinguished academics: Professor Reverend Nigel Biggar and Sir Roger Scruton.

Professor Biggar's contribution to this issue is a transcript of a lecture he gave at the Centre for Historical Analysis and Conflict Research (CHACR) in March 2018 on his views about when, in the wake of Iraq and Afghanistan, the UK should go to war. The ethical case for intervention that he sets out, even when some desirable criteria for commitment are absent, is powerful and, in the wake of the UK's recent involvement in bombing Syria, highly topical. If you read nothing else in this issue I believe that you should read this piece.

Also, look out for the article by the Army's Director of Leadership, Major General Paul Nanson (who also leads the new Army Recruiting and Initial Training Command), who gives his views of the Army Leadership Code one year on from its launch. This is another 'must read' article, but there are a whole host of excellent contributions covering diverse themes from the failure of logistics in Operation Barbarossa to analysis of suicide bombing as a tactical and strategic weapon. That's why this is one of my favourite editions.

Just as the Army is embarked upon an ambitious change programme to make it ready for future challenges, so we must ensure that the BAR is as relevant, useful and engaging as we can make it for you our readers. Consequently, we are reviewing all that we do and how we present content. This will lead us to consider how much (and what) we should publish on-line, how BAR is printed and distributed, how many copies we need to print and whether our readers find the length of articles, and the journal as a whole, digestible. These, and many other questions, are posed in our on-line reader survey the results from which we will analyse in the coming months.

**https://surveys.defencegateway.mod. uk/index.php/812943?lang=en**

Ultimately, we aim to extend our readership and increase the quality of the material we publish in all formats. So, over the next few issues you may see further changes to the printed and online versions of BAR. Hopefully that will make our content more immediate and interactive, although this may take time to achieve. If you have suggestions or ideas as to how we can accomplish this then please email me at armyreview@ armymail.mod.uk.

So, please bear with us and enjoy this edition.

*The Editor*

# After Iraq and Afghanistan: When Should the UK go to War?

This is the transcript of a lecture on when the UK should go to war given by **Professor Reverend Nigel Biggar PhD**, Regius Professor of Moral and Pastoral Theology, University of Oxford, at the Centre for Historical Analysis and Conflict Research (CHACR), 16th March 2018. As a result, it represents only the personal views of Professor Biggar and not those of the MOD, British Army or any part thereof.

*Members of W Company Mortar Platoon, 1st Battalion, The Royal Regiment of Fusiliers, prepare to engage enemy targets after an intense evening of incoming fire on the front line just south of Basra. Photo: Corporal Paul Jarvis, Crown Copyright*

Here's how the story goes: *'Under Tony Blair, and subsequently under David Cameron, Britain sought to punch above its weight - and got roundly beat. Under Blair, we got caught up in an American neo-con, neo-imperialist fantasy of remaking the world in our own image, and came crashing down to earth in the sectarian anarchy of post-invasion Iraq and a Taliban insurgency in Afghanistan. Under Cameron, we attempted smarter intervention in Libya, more efficient and surgical, avoiding all-but-specialist boots on the ground, relying on air-power, and supporting the new regime at a safe arm's length. In the course of it, we (and France) ran out of ammunition and had to go cap-in-hand to Washington. And in return for all our efforts we got civil war, a failed state, boatloads of refugees in the Mediterranean, and a new breeding-ground for the so-called 'Islamic State'.'*

The moral of the story, therefore, is clear: Britain must forswear its lingering imperial pretensions, stop trying to live on as a global power by playing poodle to the United States, settle down to the life of a normal middle-class European state, leave the world's policing to the U.N., and concentrate on the British national interest.

That, is generally the narrative that prevails in circles now present in every major political party - among Labour's Corbynistas, among all or most Liberal Democrats and Scottish Nationalists, and even among some Conservatives.

It's also a narrative that our international rivals are keen to play back to us. In 2011 a British diplomat in China was told, 'What you have to remember is that you come from a weak and declining nation'. And two years later, during the G20 summit in St Petersburg, Vladimir Putin's official spokesman commented in public that Britain is 'just a small island …. No one pays any attention to them'.

If Henry Kissinger is to be believed, ever since Sun Tzu's *Art of War* in the 5th century BC, China's *Realpolitik* has placed a premium on gaining psychological advantage. Judging by his first formal meeting with Angela Merkel in 2007, so does Putin. Knowing her phobia of dogs, he made sure that the door was left ajar, so that his black Labrador could nudge his way in. Our enemies have observed our diffident tendencies and they have no scruples about exploiting them.

Current British diffidence expresses itself in the acute risk-aversion of the report of the *Iraq Inquiry*, and of other recent parliamentary reports on British military intervention in Syria and Libya.

Thus in October 2015, reporting on the possibility of British military intervention in Syria, the House of Commons' Foreign Affairs Committee showed itself uneasy with anything less than the safest possible legal basis - namely, a UN Security Council Resolution authorising military action. And it counselled against intervention in the absence of a fully worked-out strategy for defeating the Islamic State and ending the civil war in Syria.

Evidently, the Committee was not satisfied with the authoritative witness of former Attorney General Dominic Grieve that there were 'perfectly clear grounds in international law why air strikes could be used'.

And, evidently, the Committee was undisturbed by the thought that, if Britain shouldn't intervene in the absence of a thorough strategic plan, then nor should anyone else, which implied that *all* military action to stem the expansion of Islamic State should cease forthwith, until a plan had been fully developed. Or did the Committee intend that other states should bear the burden of fighting, while Britain sat back and put its thinking-cap on?

In July 2016 the Iraq Inquiry concluded that, in future, the U.K. Government must not commit itself to a firm political objective before it is clear that it can be achieved. At first glance this looks like common sense, but the closer you inspect it, the further its meaning retreats.

Obviously, before we attempt something we should assure ourselves that success is possible - that is to say, that we *could* succeed. And we should plan as scrupulously as we can to get all of our ducks in a row. The virtue of prudence demands that; our experience in Iraq has surely taught it.

But the truth remains that the conditions of success are seldom entirely in our hands and under our control. Usually they depend on many other agents, who can't always be relied upon to do as we want. And sometimes victory hangs upon a change in the wind. It follows that

almost any venture will necessarily involve the taking of risks. Of course, it's foolish to take high risks for a trivial gain, but it can be prudent to take high risks for a substantial one.

In May 1940 with our army smashed up in Northern France, Churchill persuaded us to fight on with little clarity about how regime-change in Berlin could be achieved, and less certainty that it would be, but in the conviction that it *had* to be and in the hope that it *might* be. High stakes can justify high risks.

Then in September 2016 the Foreign Affairs Committee expressed the current lust for certainty in its report on British intervention in Libya - initially, to prevent Colonel Gaddafi's threatened slaughter of civilians in rebel Benghazi, and eventually to overthrow Gaddafi's regime altogether.

On the one hand, the Committee accepted that the Government's reading of the situation was shaped by a desire not to preside over a repeat of Srebrenica, and that it had to act on sometimes unavoidably imperfect intelligence and under pressure of events.

Nevertheless, since *subsequent* analysis had revealed evidence that the immediate threat to civilians had been exaggerated, the report took the Government to task for acting on erroneous assumptions and in incomplete understanding of the evidence and for presenting the scale of the threat to civilians with unjustified certainty.

Hindsight is indeed a very fine thing, but it's really not fair to beat decision-makers with it. Moreover, what the report in effect argues is that the British Government should have risked another Srebrenica, because the risk was, arguably, low. But being low doesn't stop a risk turning bad. Suppose Gaddafi's bloodthirsty rhetoric had turned out to be more than just rhetoric or that his troops had run amok: would the Committee then have absolved the Government? The scapegoating temper of current British culture suggests not.

So one respect in which the narrative about Britain's overdue retirement from global policing needs correcting, is this: that achievable clarity about what's actually going on is seldom crystal; that waiting carries risks, too; that even low risks can turn bad; and that present certainty about future success is very rare. All of that, of course,

*An RAF Typhoon FGR4 fitted with AMRAAM and ASRAAM missiles, departs from Gioia Del Colle Airfield in Southern Italy on a mission to enforce the No Fly Zone over Libya during Operation Ellamy in support of UN Securty Council 1973.* **Photo: Corporal Babs Robinson RAF, Crown Copyright**

is common sense. But judging by recent parliamentary reports, it's rather less common than it should be.

Another correction to the 'retirement-narrative' is this: the UN is no substitute for states. It doesn't provide global government. Its power to enforce international law is limited to the resources that states loan it. And not infrequently its power is reduced to the ineffectual expression of moral indignation. Think Syria.

The UN is, however, very important. It is enormously valuable as a standing forum for international communication and as an international bar at which states are required to give an account of their actions and to suffer criticism. At its best, it's a forum for the forging of international consensus as the basis of concerted action.

But it's not a global government, and until trust among states worldwide has risen to a degree that now seems utopian, it won't become one. So if Britain were to retire from global policing, it couldn't hand over responsibility to the UN; it could only hand it over to other states. But if some states have to carry it, then why shouldn't we? What special excuse would relieve us of the responsibility? What would give us moral permission to walk away?

But maybe calls to leave global policing to the UN intend, not that Britain should vacate its seat on the Security Council, but rather that it should become a more scrupulous servant of international law. International law, however, is problematic. In part, this is because its content is controversial. Is it simply what is written in treaties or does it also embrace customary law as expressed in state-practice? And how should different bodies of law relate to one another? Should the battlefield be governed by the Laws of War or by International Human Rights Law?

When eminent lawyers pronounce, 'International law says this or that', we ought not to be over-impressed. They are behaving as advocates, making a case, pushing a particular point of view. There is more than one reasonable view of what international law is and what it says. We've already seen that in regard to British military intervention in Syria: Dominic Grieve thought that there were perfectly clear grounds in international law for intervention, but the Foreign Affairs Committee (like the Scottish Nationalists) wasn't satisfied. Perfect clarity wasn't enough; they wanted incontrovertibility.



*A Royal Air Force C-17 from RAF Brize Norton delivers a consignment of aid to the National Transition Council in Benghazi, Libya.*
*Photo: SAC Gareth Little, Crown Copyright*

It has been long recognised in literary and biblical studies that the interpretation of a text is inseparable from the views that the interpreter brings to it. Accordingly, lawyers' construal of the meaning of the texts of international law is not at all immune from the influence of their moral and political convictions.

What this means is that being a scrupulous servant of international law isn't going to save the British Government from having to venture an interpretation of what the law says, which some lawyers and some states - at least - will dispute, because they don't share the Government's political and moral assumptions, or its responsibilities.

*A Royal Air Force Tornado GR4 departs on a mission supporting Operation Shader in support of the Counter-Daesh operations in Iraq and Syria. Photo: Corporal Babs Robinson, RAF, Crown Copyright.*

It also means that parliamentary committees should be careful not to rely upon a single source of legal argument - as did the Joint Committee on arms-sales to the Saudis upon the opinion that Philippe Sands and his colleagues at Matrix Chambers had prepared on the instructions of Amnesty International, Oxfam, and Saferworld.

So, contrary to the retirement-narrative, Britain can't retreat behind either the UN or international law. The UN has no power to enforce, except that which states, like Britain, give it. Then perhaps what Britain needs to forswear is 'liberal imperialism'. The term is a loaded one and allows only one answer. If 'imperialism' means the unjustified and rapacious domination of foreign peoples, then, of course, Britain should forswear it. But was it 'imperialist' to intervene in Kosovo in 1999, to save Muslims from ethnic cleansing and Macedonia from implosion? Was it 'imperialist' to defend the government of Sierra Leone in 2000 from take-over by diamond-hungry, drug-crazed, limb chopping rebels? Was it 'imperialist' in 2001 to dislodge the cruelly puritan and misogynist Taliban regime in Afghanistan - and cruel, by the way, not just in Western eyes, but in lots of Afghan ones as well? Was it 'imperialist' in 2011 to prevent what might have been another Srebrenica in Libya, and then to uproot its cause?

Let's suppose that we haven't been exactly imperialist. Nevertheless, haven't we learned that Western meddling, however well-meaning, hasn't been successful and does more evil than good?

Perhaps not. Human affairs seldom occasion perfect success. Most people will agree, that regime-change in Berlin in 1945 was a very good thing, but it did require the deaths of between 60 and 80 million human beings, and it did result in the surrender of Eastern Europe to the tender mercies of Stalin. The war against fascism was a success, but it wasn't pure: it involved evils and it entailed them.

Britain's military interventions in the past two decades have achieved different levels of success: Sierra Leone was perhaps the most successful, followed by Kosovo. The results in Afghanistan, Iraq, and Libya have been much more mixed, but not even these have been simple failures. For example, when I asked a young Iraqi entrepreneur six years ago whether the 2003 invasion should have happened he said, 'It's good that it happened, it could have been done better, and it isn't over.'

That said, it is certainly true that our recent experience has rightly chastened us: regime-toppling is the relatively

easy bit; regime-reconstruction is a lot more complicated and difficult. In Afghanistan, Iraq, and Libya there was clearly a mismatch between our ambition and our commitment, and one lesson that we should learn for the future is to marry the two better, either by lowering our ambitions or raising our commitments.

But the lesson we should *not* learn is that military intervention is generally hopeless and that in future, Britain should give it a wide berth. In support, I call two witnesses, both of whom have served as soldiers, diplomats, and politicians, and both of whom have had direct experience of responsibility for nation-building: Paddy Ashdown and Rory Stewart.

Ashdown, the international High Representative for Bosnia and Herzegovina from 2002-6, argues that high profile failures like Iraq should not blind us to the fact that, overall, the success stories outnumber the failures by a wide margin. Notwithstanding the fact that we got it considerably wrong in Iraq and Afghanistan, he remains convinced that there is a way of getting it right.

Rory Stewart was the Coalition Provisional Authority's deputy governor of two provinces of southern Iraq from 2003-4. He approached the task of building a more stable, prosperous Iraq with optimism, but experience brought him disillusion. He now thinks that foreigners' short-term commitment, ignorance of local conditions, and consequent inability to build on local strengths, hamstrings many of their well-intentioned efforts. Nevertheless, he remains convinced that 'there is still a possibility of avoiding the horrors not only of Iraq but also of Rwanda; and that there is a way of approaching intervention than can be good for us and good for the country concerned.'

Ashdown and Stewart have both had first-hand experience of trying to make intervention work and, despite being chastened, still believe that intervention *can* be done well. With the right strategy creating the right conditions, sufficient success is possible.

*Kosovo: Soldiers of 2 Royal Tank Regiment leave their tanks behind to patrol the mountain villages along the Macedonian border. The village of Brod demonstrates the complexity of the local politics. The inhabitants are ethnic Albanians whose language is a mixture of Albanian and Hungarian, and who are aligned with the Serbs. The soldiers of KFOR are persuading the villages here to hand in weapons left them by the departing Serb army. **Photo: Stuart Bingham, Crown Copyright**

Sometimes the complaint about recent British military interventions is not that they have been 'imperialist' or that success has entirely eluded them, but rather that they have been too loosely tied to the national interest. How far we should agree with that depends on what's meant by 'the national interest'.

I don't share the popular Kantian view that self-interest is necessarily an immoral motive and that, in order to be ethical, governments must act out of pure altruism. According to that view, whenever national interests motivate military intervention, they vitiate it.
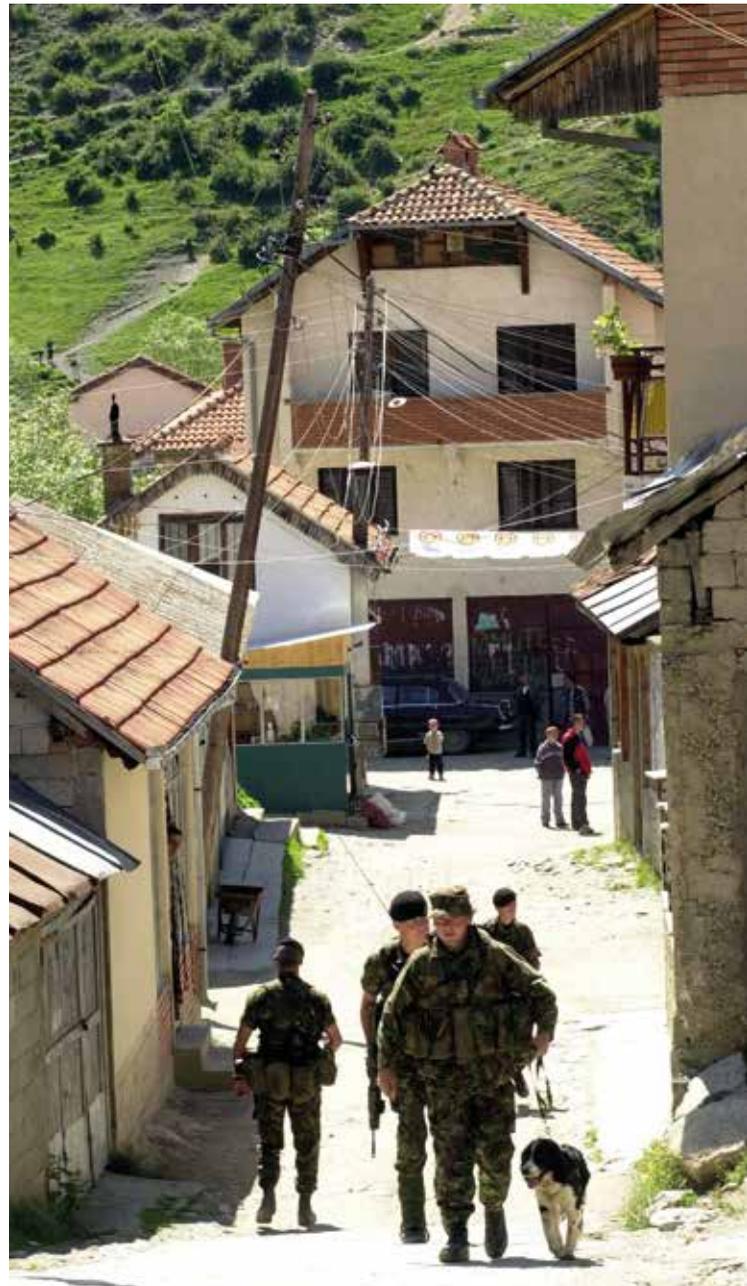
There is, however, an alternative and, I think, superior ethical tradition, which finds classic expression in Thomas Aquinas's combination of the *Book of Genesis* with Aristotle. Thomist thought does not view all self-interest as selfish and immoral. Indeed, it holds that there is such a thing as morally obligatory self-love. The human individual has a duty to care for himself properly, to seek what is genuinely his own good. As with an individual, so with a national community and the organ of its cohesion and decision, namely, its government: a national government has a moral duty to look after the well-being of its own people - and in that sense to advance its genuine interests.

This duty is not unlimited, of course. There cannot be a moral obligation to pursue the interests of one's own nation by riding roughshod over the rights of others.

Still, not every pursuit of national interest does involve injustice; so the fact that national interests are among the motives for military intervention does not by itself vitiate the latter's moral justification.

This is politically important, because some kind of national interest has to be involved if military intervention is to attract popular support; and because without such support intervention is hard, eventually impossible, to sustain.

One such interest, however, is moral integrity. Nations usually care about more than just being safe and fat. Usually they want to believe that they are doing the right or the noble thing, and they will tolerate the costs of military intervention in a just cause that could succeed.

I am proud that the British Empire played a leading role in the suppression of the Atlantic and African slave trades in the 19th century. I doubt that it profited the Treasury, and I know that it cost the Royal Navy the lives of 17,000 sailors.

And I thank God that Churchill persuaded the Cabinet in May 1940 not to heed the advice of Lord Halifax to pursue peace with Hitler via Mussolini. Had we made peace, we could well have spared ourselves the half-

*Members of B Squadron, The Queens Royal Lancers, are shown on patrol in Southern Iraq as part of 19 Light Brigade. The Lancers' operated in Maysan Province, Iraq and were responsible for conducting anti-smuggling patrols along the border between Iraq and Iran. Photo: Corporal Ian Forsythe, Crown Copyright*

*Kosovo: AS90 self-propelled guns head out of their temporary location, north towards the Serbian border. As part of the Kings Royal Hussars Battlegroup they helped the VJ army keep to the terms of the Military Technical Agreement.* **Photo: Kevin Capon, Crown Copyright**

million military casualties, national bankruptcy, the precipitous dissolution of the Empire, and humiliating dependence upon the United States. But Churchill's instincts were right: the future of humane civilisation in Europe (and beyond) was more important than British economic prosperity and even the bare lives of Britons. A country that heroically took the grave risk of refusing ignominious peace, remembers it, continues to admire it, and measures itself by it, is one deserving of loyalty - and deserving of the confidence of allies. And I am proud to belong to it, as are tens of millions of others.

Citizens often care that their country should do the right thing. Moral integrity is part of the national interest.

However, a nation's interest in its own moral integrity and nobility alone won't underwrite military intervention that incurs very heavy costs. So other interests - such as national security - are needed to stiffen popular support for a major intervention. For over five years now we have lamented the protracted humanitarian catastrophe that is Syria. But while we have committed ourselves to playing a low risk military role in helping to stem and reverse the expansion of so-called Islamic State into Iraq, we've judged the high costs and risks of deeper engagement to be disproportionate to our national interest. Were Aleppo geographically located where Amsterdam or Dublin is,

our direct national security interest in settling the Syrian conflict would be much more obvious.

I don't consider national interest to be morally ignoble as such. National interest need not vitiate the motivation for military intervention. Indeed, some kind of interest will be necessary to make it politically possible and sustainable. It isn't unreasonable for a people to ask why they, rather than others, should bear the burdens of military intervention, especially in remote parts of the world. And the answer to that question will have to present itself in terms of the nation's own interests. And it could and ought to present itself in terms of the nation's own morally legitimate interests.

So in the light of Kosovo, Sierra Leone, Afghanistan, Iraq, Libya, and Syria, when should Britain go to war?

• *Going to war is only morally justified **to defend the innocent against grave injustice**. That, at least, is the view of the historic, Christian tradition of 'just war' thinking that finds expression in the Doctrine of the Responsibility to Protect. Given the British Government's special responsibility for its own people, it has a primary obligation to defend British innocents. However, the British national interest is often bound up with international interests. Further, at least in the*

*Soldiers from the 1st Battalion Princess of Wales Royal Regiment in their Warrior Infantry Fighting Vehicles take part in NATO Exercise Allied Spirit 8 in Southern Germany. The exercise is an assurance measurement designed to develop relationships and promote interoperability and integration with NATO, Allied and Coalition partners.* **Photo: Dominic King, Crown Copyright**

*eyes of God a Briton's life is no more valuable than that of any other human being. And further still, as a permanent member of the U.N. Security Council the U.K. has a special responsibility to uphold international law and order. For these three reasons, Britain also has a secondary obligation to defend foreign innocents, too.*

- *In order to sustain military intervention overseas politically, the Government will have to persuade the British people that it is right that they should bear this burden, by appealing to a range of **national interests**. These interests should include national security, but*

*also Britain's moral integrity and responsibility. Even if the Cabinet were entirely tone-deaf morally, the British public is evidently not.*

- *Going to war is a very risky and costly business, and it's right that we should guesstimate those **risks and costs** as conscientiously as possible, so that we're prepared to manage a variety of scenarios. But no government can control the future; risk cannot be abolished. And inaction carries risks and costs, too. If you doubt it, reflect upon the consequences of the West's surrender of initiative to Russia in Syria - first, military, then political.*

*have significant power of various kinds, and we have a moral obligation to use that power to best effect, and to maximise it. Punching above our weight is not delusional; it's canny.*

- *We need to marry ambition to commitment, but one lesson we should learn from Libya and Iraq, is that success requires more, not less; and efficient success requires more, earlier.*

- *But in order to commit more, we must have the resources to commit: so if we anticipate that legitimate military intervention will sometimes be necessary, and unless we're content to rely upon others to do it, and unless others are content to be relied upon, we need to resource our armed forces appropriately - that is, appropriate to what we expect them to do. This will mean having to **increase defence spending** at the expense of some other public service or policy. It's not that we can't afford it: British GDP per head now is about four times what it was in 1945. Yet defence-spending has declined from just under 10 per cent of GDP in 1954 to barely 2 per cent now (notwithstanding periods of real-terms growth). Meanwhile, social security spending has tripled in the same period from 4 to over 12 per cent and healthcare has almost tripled from 3 to about 8 per cent. We could decide to spend more on defence, if we were persuaded of the need. And the need is now much more obvious than it was even five years ago. The resurgence of aggressive nationalism in Putin's Russia has reminded us of NATO's reason for living. And the election of President Trump has made Europe's need to avoid exhausting American patience with our persistent free-riding on defence - three generations after 1945 - altogether more urgent.*

- *Whenever possible, we should continue **punching above our solitary weight** by means of alliances, as we almost always have. Even at the height of our imperial power we seldom fought alone and we often paid others to do our fighting for us. Among the troops that Wellington commanded in defeating Napoleon at Waterloo, Britons were a minority. More recently in 1999 Tony Blair succeeded in manoeuvring a reluctant President Clinton into putting American military muscle behind intervention in Kosovo. In both of these cases, Britain punched above its solitary weight - to very good effect. Just because we can't be Number One any more, doesn't mean that we're nothing. If we really were a little island of no consequence, Russia and China wouldn't bother trying to unnerve us. We continue to*

Of course, it's peace that we want, not war. But if we want aggressive enemies to nibble at the diplomatic carrot of peaceful resolution - and we do want that - then we need to give them sight of a credible military stick. It's an ancient truth, and a sad and ironic one, but it remains a truth nonetheless: that if we *really* care for peace, we will prepare well for war.

*This is an abbreviated version of a lecture delivered at CHACR on 16 March 2018 (see video on CHACR pages of AKX). Earlier versions of this lecture were delivered at Policy Exchange, London on 31 January 2017 and at St John's College, Cambridge (as the Hinsley Memorial Lecture) on 9 November 2017. The full text of the Policy Exchange version can be found here: https://policyexchange.org.uk/publication/after-iraq-when-to-go-to-war/*

# Britain's Army Today

Philosopher and author **Sir Roger Scruton**, Research Professor for the Institute for the Psychological Sciences, provides an external view of the British Army and the character of modern patriotism based on his book, *Where We Are*, published by Bloomsbury, 2017.



*A Warrior Infantry Fighting Vehicle from the 1st Battalion Princess of Wales Royal Regiment streaks by during NATO Exercise Allied Spirit 8 in Southern Germany. Approximately 200 soldiers from 1st Battalion Princess of Wales's Royal Regiment (1PWRR) were among 4,000 soldiers from 10 different NATO countries participating in the exercise. **Photo: Dominic King, Crown Copyright***

Recent developments, both at home and abroad, have put a spotlight on the British Army and its role. Ours is a professional army, consisting of dedicated men and women who have chosen to make a career of serving their country. It retains something of its traditional regional regimental structure, and is integrated into the ceremonies and duties of the monarchy. Its regiments reflect the distinct characters of our component nationalities, and also the common loyalty that unites them. It is an army that has proved itself magnificently in two world wars, and which has continued to defend our national interest with bravery, honour and success - most strikingly in the Falklands conflict, when it set an example of heroic action and honourable conduct far from home that astonished the world.

That was a conflict that we fought alone, our American allies being reluctant to join in a dispute that had no bearing on their sovereign interests, and our European neighbours tending to support the other side. It is doubtful if we could today engage in such an operation; recent defence cuts have made it unlikely that we could extend military force at such a distance, or field a range of equipment that would enable front-line troops to withstand the fury of a reinforced assault. At the same time we are witnessing shifts in the balance of power that are by no means reassuring. The Russians are constantly monitoring and prodding the defences of NATO states, and actively developing weaponry designed to render our battlefield equipment obsolete. The Chinese are militarising the Pacific arena with a view to controlling trade routes necessary to Western interests. And in the Middle East, thanks to a series of blunders, the United States is rapidly giving way to Russia as principal peacemaker and peace enforcer - Russian 'peace' being peace of a kind that is more likely to generate refugees than to attract them home.

Meanwhile, the Brexit vote has revealed the divisions within our Kingdom, and in particular the division between a globalised urban elite without strong local attachments, and the rooted majority for whom their place and their neighbourhood are vital to who they are. This majority provides the core of our British identity, and our soldiers are largely recruited from its members.

Our army is not a collection of hired mercenaries; nor is it a bureaucracy whose main task is to borrow troops from elsewhere when the need arises. Ours is an army shaped by patriotic sentiment, which exists in order to express and enforce our national independence, security and resolve. Its history speaks of this, as does its presence in the national culture.

When Britain faced the prospect of annihilation by Hitler's forces, George Orwell wrote a famous essay - *The Lion and the Unicorn* – urging his readers to unite in defence of their country. The instinct of the British people in the face of the threat was to resist it, since that is what duty and love both require. Orwell's essay was a passionate attempt to show that the ordinary people could be trusted precisely because they were motivated by neither the self-interest of the upper class nor the self-righteousness of the intellectuals on the left, but by the only thing that mattered, namely an undemonstrative love of their country.

Orwell's essay speaks to us still. It tells us that patriotism is the *sine qua non* of survival, and that it arises spontaneously in the ordinary human heart. It does not depend upon any grand narrative of triumph of the kind put about by the fascists and the communists, but grows from the habits of association that we British have been fortunate enough to inherit. The patriotism that is engrained in our psyche is not based in ideology or doctrine; it is neither bigoted nor chauvinistic. When we wish to summon it we refer to our country. We do not use grand and tainted honorifics like *'la patrie'* or *'das Vaterland'*. We refer simply to this spot of earth, which belongs to us because we belong to it, have lived in it, loved it, defended it and established peace and prosperity within its borders.

Patriotism of that kind is not, as was so often claimed in the wake of the Brexit vote, merely 'racism and xenophobia'. Patriots are simply those who identify with their country, and recognize the need to make sacrifices for the common good. In identifying themselves in this way they acknowledge the value of living within established borders amid institutions, laws and landscapes that foster a shared sense of belonging. It is that shared sense of belonging that our army represents, and if our politicians are to be the true representatives of our national interest they must acknowledge that the Army should be treated as the first among our institutions, to be maintained in a condition and a morale of which we all can be proud, and on which we can all depend for our future.

*British soldiers from 176th Battery, 19th Regiment Royal Artillery, conduct live fire training using the Guided Multiple Launch Rocket System (GMLRS) during Dynamic Front 18 in Grafenwoehr in Germany.* **Photo: Specialist Dustin Biven, 22nd Mobile Public Affairs Detachment, Released**

# Hope

This comment is the author's opinion and does not reflect official Army policy in any way. (Ed)



*Warrior armoured personnel carriers of the Irish Guards, are cheered on as they pass refugees from Brazda camp on the Macedonian Kosovar border as they advance towards Pristina.* **Photo: Captain Jim Gallagher, Released, Wikimedia**

Lately, I have been thinking a lot about hope and faith. Not religious faith you understand but the kind of faith that says everything is going to be alright. My mother passed away recently and that has changed the way I see the world. I was deeply saddened by this but I was comforted by the fact that I knew up to the end she had hope, hope that there would be a better future, and faith that the better future would happen.

Her passing has made me realise just how precious life is and how much faith plays in our lives. I'm talking here about faith in others and faith in ourselves - the faith that there will be enough people in the future to do the right thing and ensure that the nation is safe and secure. That's where the British Army comes in. While it might be an army of warfighting it is also an army of hope and faith.

I've seen with my own eyes how people in far off lands view the arrival of the British Army, in Bosnia, Kosovo, Sierra Leone and, for a short while, even in Iraq.

When I was in Sierra Leone I interviewed a young girl who had been blinded by the rebels. They'd poured hot plastic into her eyes. It was difficult to hear her story and has haunted me ever since. Yet she was happy and full of hope, her spirit shone through her tragedy and not only was she full of hope she was full of love as well. I have never stopped thinking about the effects of the civil war in Sierra Leone and the hope that so many of its victims had despite their suffering.

For them, the British Army had been their saviours. Indeed, the people I spoke to said that the British Army had brought hope back to the country and helped them to rebuild their lives, their nation and their faith. It was as if the British Army had defeated the darkness in Sierra Leone, swept it away and replaced it with light.

Of course this quasi-religious viewpoint is understandable given the atrocities the people of Sierra Leone experienced during the civil war. And perhaps it is a bit over the top in terms of the way the Army was seen by the civilians in Sierra Leone but then most of us don't live there. Our officers, soldiers and civilians can come back to the UK, to a peaceful, prosperous and secure nation. So maybe this fervent belief that the British Army is the bringer of hope to many nations around the world is a justified viewpoint?

I saw it also in Bosnia and Kosovo. I remember sitting in a café in Bosnia talking with the locals who told us about the civil war and the things that had taken place. The day before we'd seen several houses that Serb forces had burnt to the ground. Through our interpreter we heard about how families were torn apart when brothers, fathers, cousins were on different sides and fought each other.

It was difficult to hear all this but then came the words I'd heard before in Sierra Leone and in Kosovo - 'but now the British are here and we are safe. We have hope again.' Usually, these words would be accompanied by a huge grin and a face full of joy. The café was a usual stopping point for British soldiers on their regular patrols as they would drop in to chat with the proprietor and to chat with the people in the café to gauge the mood of the people.

More and more people arrived at the café to talk to us. One man told us that the street outside had been full of bullet holes and blood. You could see the evidence of this on the walls of some of the buildings in the town. Yet, these people had hope, they had faith in the fact that their future was going to be better, without war, and it was because the British Army was there.

Even in Iraq, when I had a chance to chat with a few Iraqis, who spoke good English, they were glad the British Army was there. They were glad that Saddam had gone. They felt there was a glimmer of hope for their country. However, since I have not been back I don't know if they still feel that way after everything that has happened.

What I do know is that for a short period of time, the British Army was the bringer of hope and faith to the people of Basra in the same way as they were for the people of Sierra Leone, Kosovo and Bosnia.

So let's not lose sight of the fact that the British Army has been, and I fervently believe, will be, the bringer of hope and faith to many people around the world, for many years to come. Instead of talking about 'hearts and minds' perhaps we should talk about hope and faith instead, because this is tangible and you can see it in people's faces and in their eyes. This was especially true in Sierra Leone where that hope and faith was so

evident. The girl who was blinded by the rebels was full of hope that she would have a better future, a future where she was safe and secure, a future where she could better herself and in so doing help others. Since we were there she has gone on to earn a university degree as have many of her friends whose lives were blighted by that dreadful civil war. But when I spoke with her she knew she could not look forward to a brighter future if it had not been for the British Army. She, like so many others we met, was intensely grateful for the British Army being there and didn't want us to leave.

My mother's passing has made me realise not just how precious life is but also how much hope there is in life and how much hope all of us can bring to the table of life.

So while we grapple with all the internal issues that face this Army it might be worth giving a thought to the hope and faith that this Army can bring to people suffering around the world. If we have faith that the internal issues will be sorted, that a new Army will emerge from all the changes then perhaps we can cast aside the current worries and think about the hope the British Army can bring to those who are crying out for it.

*Editor*

*Pictured is a member of Team 4 from the Port Loko District Ebola Response Centre washing his hands with chlorinated water after decontamination of a property in Sierra Leone.* **Photo: Corporal Paul Shaw ABIPP, Crown Copyright**

# Army Leadership
# One Year On

**Major General Paul Nanson CBE**, DLeadership provides a view of Army Leadership one year on from the launch of the Army Leadership Doctrine.



*Army Air Corps soldiers taking part in section attacks as part of their 3 week long leadership course. Photo: Peter Davies (MOD), Crown Copyright*

# BAR LEADERSHIP

One of the key changes for the Army over the last year has been CGS's drive to professionalise our approach to leadership. Leadership is the central pillar that not only supports the Army's ability to achieve the mission on operations, but also to undertake organisational transformation and adequately prepare for the future. In the words of one US three-star, good leadership 'is essential not only as the ultimate force-multiplier but also as the primary guardian of the institution.'[1] As such, in January 2017 CGS launched the Army's new Leadership Doctrine just weeks after opening the new Centre for Army Leadership (CAL); two milestones on the road to institutionalising leadership excellence in the Army. One year on, it is time to assess the progress towards that objective through this 'state of the nation' article. Its aim is to outline emerging leadership challenges and reflect on how we are doing at adapting to those challenges while suggesting what needs to change and what needs to be done to effect that change.

## CONTEXT
At the 2017 RUSI Land Warfare Conference we heard a graphic depiction of the challenge faced by military leaders in this era of constant competition.[2] Alongside the conventional enduring Clausewitzian 'frictions of war', today's Army leader will operate in an environment characterised by increased complexity. This is not new, history shows us that change is constant, but the rate and pace of current change is novel.[3] As a consequence, leaders need not only to embrace that change but be resilient enough to withstand its unyielding demands. It is a task made all the more exacting because leading is far more visible than it has ever been before with even those 'in the moment' of a tactical fight scrutinised not only by those directing, managing and overseeing, but also by civilians tracking events from afar. Such challenges are only exacerbated by the growing amount of information that leaders need to analyse to inform

agile decision-making while new technology - including AI, Automatic and Autonomous weapon systems - seek to remove the 'man in the loop'. What is more, the context in which this is all happening is one of shifting and eroding traditional organisational boundaries with a new generation of followers with different values and expectations, while endeavouring to harness the huge potential of diversity found in British society.[4]

The current challenges are undoubtedly significant, but what about the next twenty years? The 2017 RUSI Land Warfare Conference offered us a glimpse into the future; how that operating environment might change - and how quickly. Horizon scanning is essential if the Army is to develop leaders capable not only of coping with future challenges but of turning them to our advantage. What those challenges may include and their implications for leaders are summarised in the following:[5]

- *Change: Change is constant, increasingly multi-dimensional and will become capable of unhinging even medium term strategic plans. It will affect all levels of leadership and will drive re-rolling, ethical repositioning and the integration of new technology.*

- *Disparate Influences: Leaders will become agents for change as the need to adapt emanates from an increasingly disparate spectrum of influences. These influences may include: climate change and the scarcity of resources; social responsibility and accountability; identity; and the expectations of the next generation.*

- *The Unthinkable: Major unexpected events will derail trends and fundamentally affect the missions of organisations and the way they do business. Organisations and their leaders will need to anticipate the unthinkable, keep learning and be capable of reinventing themselves.*

1 Ulmer, Walter F., Jr., Military Leadership into the 21st Century: Another 'Bridge Too Far?', Parameters, Spring (1998) p 21.
2 RUSI Land Warfare Conference, 27-28 June 2017.
3 Many commentators have written about this, but a particularly interesting perspective is offered in Nik Gowing and Chris Langdon Thinking the Unthinkable: A New Imperative For Leadership in the Digital Age, an interim report for the Chartered Institute of Management Accountants, (2016). The report can be downloaded at www.thinkunthinkable.org
4 This diversity includes, but is not limited to: age, gender, sexual orientation, thinking styles, learning styles, psychological types, culture and ethnic background.
5 For more on some of the themes identified here, see Peter Hawkins, Tomorrow's Leadership and the Necessary Revolution in Today's Leadership Development, Global Research Report, Henley Business School (2017) and Building the new leader; Leadership challenges of the future revealed, HeyGroup (2014).

*Soldiers from the Royal Artillery assemble and fly the Desert Hawk 3 UAS (Unmanned Air System) over Salisbury Plain during a training exercise. The technology revolution will fundamentally impact on all aspects of our lives and leaders must be mindful of the challenges it brings.*
*Photo: Corporal Si Longworth RLC, Crown Copyright*

- **Recruitment:** *Talent will remain at a premium and so the leader's need to spot it, attract it, develop and utilise it will become more vital than ever before. The gig economy, holding a portfolio of jobs, frequent switching between employers (and even careers) and the premium placed on work that provides personal fulfilment and adds broad value, will become the norm.*

- **Technology:** *The technology revolution will fundamentally impact on all aspects of our lives. Leaders will need to lead through this while being mindful of its manpower implications and the need for frequent technological upskilling. This revolution will increase the possibility of being 'disrupted into oblivion' as old organisational processes and business models are destroyed even as they are being rebuilt on new technology platforms.*

- **Stakeholder Collaboration:** *Leaders in the future will*

*need to partner an increasing number of stakeholders and collaborators in order to find solutions to problems. These partners will be held in a collection of diverse networks which will require careful leadership if their benefits are to be realised.*

- **Globalisation:** *All of the above need to be seen not just in the context of the UK but, increasingly, the world. Leaders will therefore need to have global awareness and take a global view if they are to be able to respond effectively to these challenges and prosper. They will need to lead ever more diverse groups (perhaps without authority) in a myriad of contexts and across national and cultural boundaries.*

CAL research suggests that these leadership challenges are as relevant to the civilian sector as they are to the Army. Indeed, over the last decade a rash of studies on the subject have highlighted corporate concerns about

how they may meet these challenges.[6] An IBM study, for example, revealed that the prime concern of 1,500 CEOs was 'the growing complexity' of their environments and that their organisations were ill-equipped to cope with it.[7] Yet while there seems to be consensus in this research that leadership excellence is vital if this complexity is not to become overwhelming, some have argued that leaders' complacency and unwillingness to tackle difficult issues has compounded the situation.[8] Some have even pointed to a widespread 'crisis of leadership' with William Deresiewicz declaring to his West Point audience:

> [F]or too long we have been training leaders who only know how to keep the routine going. Who can answer questions, but don't know how to ask them. Who can fulfil goals, but don't know how to set them. Who think about how to get things done, but not whether they're worth doing in the first place. What we have now are the greatest technocrats the world has ever seen, people who have been trained to be incredibly good at one specific thing, but who have no interest in anything beyond their area of expertise. What we don't have are leaders.[9]

At the heart of this judgement is a warning that organisations must develop leaders who recognise modern world challenges, but are primed and motivated to take them on. As such, while the leaders of tomorrow may look and even sound like those of today, they must be different in detail.

## THE LEADER OF THE FUTURE
Throughout the ages successful leaders have possessed what have been referred to as 'core' attributes (including enthusiasm, integrity, toughness, warmth, humanity and humility) and 'practical' attributes (such as physical and moral courage, selfless-commitment, boldness, self-confidence, drive and tenacity).[10] Yet while these attributes are enduring, the aforementioned future challenges demand that the Army moves towards refining its leadership doctrine to reflect the need for specific new leader attributes that may include:[11]

- **Intellect:** *The capacity for thinking, reasoning and understanding which should include an ability to engage with conceptual and strategic ideas. It also places an emphasis on open-mindedness, asking the right*



Pictured is a studio shot of a civilian and serviceman shaking hands. The leadership challenges faced by the Army and the civilian sector are similar in many respects and, facilitated by the Centre for Army Leadership, are sharing ideas and best practise. *Photo: Harland Quarrington, Crown Copyright*

---

6    *Full references to these studies can be found in Nick Petrie, Future Trends in Leadership Development, Centre for Creative Leadership White Paper (2014).*
7    *See Petrie's Future Trends in Leadership Development, p.7.*
8    *See Gowing and Lang Thinking the Unthinkable.*
9    *Deresiewicz, William, Solitude and Leadership, The American Scholar Essays, Spring 2010.*
10   *Adair, John, Effective Leadership, (London: Pan Books, 1st Published 1983) and also Army Leadership Doctrine, (Edition 1, September 2016) pp 19-25.*
11   *See Kemp, George O., Jnr, Leadership Competences: Putting it All Together, Counterpoints Vol 166 (2001).*

*Catterick Leisure Center Library hosts ex-serviceman and author Andy McNab who gave a talk about literacy and education and how it helped him during his army career. The Army grows its own leaders and developing them is in its organisational DNA, but there is always room for improvement.* Photo: Corporal Gabriel Moreno, Crown Copyright

*questions and the facility to assimilate new knowledge, learn from experience and to exhibit the wisdom to access the expertise of others when required.*[12]

- ***Creativity:*** *The confidence to use one's imagination or original ideas to be inventive. Creativity allows leaders to better confront the challenge of uncertainty, constant change and ambiguity as it offers novel ways to solve problems. Leaders should encourage creativity in individuals and build a creative culture.*[13]

- ***Emotional Intelligence:*** *An aptitude to recognise and manage emotions in oneself and others. Empathy with individuals and partners in a range of situations and environments develops trust and encourages positive behaviours.*

- ***Personal Awareness:*** *An ability to recognise one's own strengths and weaknesses, to empower, devolve decision-making and develop a team of talents. It should incorporate a drive for self-improvement and taking ownership of personal development.*

- ***Control:*** *A constant desire to explore new ways to act and be proactive in driving change. It should encompass the ability to ask difficult questions, set direction, direct the behaviours of others, influence events and achieve the desired outcomes.*

- ***Resourcefulness:*** *The capability to build effective multi-level partnerships, coalitions and teams inside and outside the organisation to get things done. This demands a desire to collaborate across boundaries - national, age, culture, organisation, department, function - and to lead increasingly diverse teams while understanding what motivates its members.*

---

12  *CGS has said, 'What we need to do as an army, is to place intellectual rigour at the heart of our decision-making… We have to have that if we are genuinely going to be able to form the future. We have to have it in order to determine innovative and imaginative solutions to tomorrow's challenges.' General Sir Nicholas Carter, RUSI Land Warfare Conference, Chief of the General Staff's Keynote, 29 June 2016.*

13  *CEOs in a 2009 IBM study named creativity as the most important skill for the future leaders. See Petrie, Future Trends in Leadership Development, p. 9.*

## IMPLICATIONS FOR LEADERSHIP DEVELOPMENT

If these attributes need to be developed, how might it best be done? It is a vital question for a recent study asserted that in the corporate sector '[m]ost CEOs do not think they have adequate and effective leadership development to meet their organisation's future challenges.'[14] This is not true in the Army, however; partly because we have a far more positive culture of leader and leadership development than is found in many businesses, but also because the need to grow our own leaders and develop them is in our organisational DNA. As a consequence, the Army instinctively provides time and resources for development - particularly for officers - which alongside the encouragement of life-long learning is viewed with considerable envy across the civilian sector. Even so, we must ensure that our programmes are kept relevant in content, tone and style for the next generation of leaders. So, what is essential to Army leadership development if it is to remain fit for purpose?[15]

- **Linking Vision to Development:** *Having set a vision, the strategic leader needs to communicate it, explain it and outline the followers' role in achieving it. The vision needs to be supported by senior leaders promoting exciting, achievable and challenging short-term goals integrally linked to achieving medium and long-term goals. The attainment of these goals should become a focus for leader and leadership development programmes.*

- **Managing Leader Talent:** *Having identified the required attributes and competencies required of leaders to face the challenges of the future, 360-degree appraisal should be used to discern the attributes and competencies of its leaders and, more generally, the 'openness of their minds'. The appraisal findings should form the basis for the selection and development of leaders with those not displaying the required sets being found roles and appointment more conducive to their talents. As a consequence there is a need to better understand how leadership potential can be woven into the 'Talent Passport'.*

- **Refocussed Development Courses:** *As part of the on-going review of career courses in both the officer and soldier space, we need to ensure that both participants and stakeholders have a role in course design and that courses better support the needs of the individual and are linked to outside leadership qualifications. There must be clear distinction between leader development aimed at individuals and leadership development focussed on collective and collaborative leadership. Activity should be built around stimulating experiences focussed on real problems so that potential solutions can be identified and the participants assisted to think and act in new ways. Courses need to begin the process of change and establish processes that will survive contact with daily pressures in the work place.*

- **Career-Long Learning:** *Education and leadership development should be career-long and might include non-technical creative courses as well as external placements. Leaders also need to be career managed in a suitably sensitive and flexible system determined to make the best use of their talents, skills, knowledge and experience. Development should not only be conducted formally on courses, but also informally through engagement with peers, line managers and organisations such as the CAL.*

- **Evaluation of Leader and Leadership Development:** *There should be evaluation of the separate elements of the leader/leadership development programme as well as the blended aspects of the whole leadership journey. The success of leadership development should be measured by reference to changes in competencies and behaviour in the individual and the achievement of organisational goals. The impact on leadership culture and collective leadership should also be assessed.*[16]

## WHAT WE DO WELL - WHAT NEEDS TO ENDURE?

Regular re-assessments of how we develop our leaders is vital in a rapidly changing world, but we must never lose sight of what we already do well. Although the CAL has identified areas for improvement, its research indicates that the current generation of Army leader continues to be exceptional and that the Army is well placed to meet the leadership challenges of today and tomorrow. Importantly, there is evidence aplenty of 'senior buy-in' valuing Army leadership development programmes that involve work on real problems, taking action, and learning

14   Hakwins, Peter, *Tomorrow's Leadership and the Necessary Revolution in Today's Leadership Development*, p 27.

15   See Tourish, Dennis, *Developing leaders in turbulent times: Five steps towards integrating soft practices with hard measures of organisational performance*, Organisational Dynamics, 41 (2012) 23-31, Hakwins, *Tomorrow's Leadership and the Necessary Revolution in Today's Leadership Development*, and Petrie, *Future Trends in Leadership Development*.

16   Nik Gowing and Chris Langdon wrote: 'The core leadership challenge is how to lead a company and government departments through the speed and nature of fundamental change that threatens the very conformity which has allowed the current leadership cohort to qualify for the top. Yet it is the same conformity which blocks the kind of systematic and behavioural changes [required].' See *Thinking the Unthinkable*, p 5.

*Children take part in an RAF Youth & Stem Programme event as part of a showcase of Science, Technology, Engineering and Mathematics (STEM) activities marking the start of the RAF100 Centenary. The next generation of leaders will be confronted by a myriad of challenges. Photo: SAC Charlotte Hopkins, Crown Copyright*

as individuals and as a team. What is more, collective training such as CAST, CATT and CT3 exercises also offer leader and leadership development activity of an intensity and effectiveness seen in the very top end civilian programmes - even if those taking part do not realise it! It is also worth emphasising that the Army is excellent at developing high potential and systemic organisational understanding by moving high potential staff (currently officers only) between areas as they shadow senior leaders.

Altogether, there is a good news story to be told about British Army leadership, but we cannot afford to rest on our laurels. The *2015 Leadership Review* has led to a number of initiatives that have, or are in the process of, refreshing how we develop our leaders and improve our leadership - but we must continue to put resources and time into them. The desire to progress can also be seen in the establishment of the CAL, which provides a body that thinks about and asks questions of Army leadership. It acts as a professional champion for leader and leadership development, harnesses civilian research, supports the Army's leadership Soldier-Scholars and shares good leader development practise from both within the Army and with other sectors. The CAL also acts as the guardian of our new Leadership Doctrine, produced to provide a body of knowledge based in research and practise. Within it, the *Leadership Code* provides a reference point for conduct and a mechanism to ensure the institution can be held to the highest standards. In effect, *the Code* translates our proven values and standards into leadership behaviours. The net result is a significant step forward towards supporting leadership excellence, but more needs to be done.

## ROOM FOR IMPROVEMENT?
Leadership does not stand still and the Army must keep pace, so what can be done better?:

- ***Through Life Leadership Development Coherence:*** *Leadership Development courses need to be more coherent and based on adapting an evidence-based body of knowledge that better reflects evolving practices, doctrine, experience and individual needs. They also need to be even more closely focused on problem solving based in real-world challenges and on helping leaders to develop the attributes, skills and behaviours that they will require in the future. The combination of the CAL sponsored 'Leadership Coherence' and 'Thinking Skills' Working Groups are a recognition of these needs, but the question remains as to whether there should be a specific through-life leadership programme rather than merely leadership content bolted on to existing career courses.*

- ***Soldier Leadership Development:*** *The leadership content of the Soldier CLM needs to be better structured. It is currently being reviewed to address the need for non-commissioned leaders to be better equipped for future challenges, provide soldier leader development to the same standard as is currently the case for officers, and to include an enhanced ethical leadership content. Leadership is the Army's unique selling point and while we make much of it in the officer space, this valuable practical skill remains a relative after thought in the soldier offer.*

- ***Leader Mentoring:*** *There is room for improvement in leader mentoring and immersive leadership development*

within units. This could be done, for example, by utilisation of CAL outputs and include attendance at the 'Speaker Series' (and using the training recommendations that follow each talk), using CAL articles, papers and research as training tools, and supporting online writing and publishing to enable peer support.

- **Enhancing the Leader Network:** *The 'network of leaders' needs to be further developed to enable peer-mentoring. Informal military writing and self-generating networks such as the BrAIN should be encouraged and the Army should create a system that allows leaders to offer themselves as mentors.*

- **Developing high potential leaders:** *Secondments for high potential leaders and a talent management programme for soldiers (which now exists within IDev under co-ordination of SO2 External Placements, but is generally only for officers) needs to be enhanced. While the WTE system moves high potential officers to leader development posts - including MA appointments - a similar system does not yet exist for senior soldiers.*

- **Feedback mechanisms:** *The establishment of practical multi-dimensional feedback mechanism would prove advantageous as it is not tied to formal reporting and is genuinely anonymous. Senior officers already have access to such a tool, but Personnel Capability are working to create a MODNet-accessible online 360 feedback facility for all personnel.*

- **Personalised leader development journey:** *Leadership development needs to be personalised and based on*

an individual's strengths. The Army's partnership with Henley Business School is now aligning officer leader development with a world-class academic institution, which provides new perspectives and a more bespoke approach. This offers an opportunity to make the most of experiential learning through the 'Personalised Leader Portfolio' linked to Higher Education accreditation. As yet, there is no equivalent for soldiers.*

## CONCLUSION

Every generation believes the challenges it faces are more demanding, difficult and complex than ever before -but that does not mean that they are insurmountable.[17] We should take strength from the exceptional British Army leaders from the past who have thrived in situations that were undoubtedly complex and complicated. These inspirational individuals from our common history combine to form the immensely strong foundation on which our leadership is built, and on which we will continue to build. What we do, how we do it and the responsibilities we all have demand that we continue to think deeply about leadership, stay relevant and strive for improvement. We do suffer from the occasional high-profile leadership failing - each one offering a disproportionate adverse media response that damages our reputation - but there is no 'leadership crisis' in the British Army. We are the gold standard for leadership in the UK and remain a bench mark for best practice across society. Our leadership rests on strong ethical foundations that have stood the test of time and, above all, we are good at defining our leadership concerns and then seeking novel ways of solving them.



*An Army Air Corps soldier armed with an LMG takes part in section attacks as part of a 3 week-long leadership course.*
*Photo: Peter Davies (MOD) Crown Copyright*

17   *Milley, General Mark A., U.S. Chief of Staff of the U.S. Army, speech at the RUSI Land Warfare Conference, 27 June 2017*

# The Third Sex: Gender Perspectives in Contemporary Conflict

**Colonel Rosie Stone DL**, 11 Signal & West Midland Brigade looks at how servicewomen, The Third Sex, can be better utilized within defence engagement operations and how they should be an integral part of UK Defence planning.



*Sgt. Meredith Burns, the team leader of 2nd Battalion, 3rd Marine Regiment's Female Engagement Team, speaks to a local of Garmsir District, Helmand province, Afghanistan, about taking advantage of services offered by the local government, Feb. 26. **Photo: Sergeant Jesse Stence, U.S. Marines, Released***

In March 2010, U.S media headlines heralded the introduction of Female Engagement Teams (FET) to Afghanistan[1] and a new chapter in the 'War on Terror'. Military focus turned from the 'masculine' pursuit of Taliban fighters, to counterinsurgency (COIN) and a more 'feminist' war frame aimed at winning hearts and minds. The 'Third Sex' became a term applied to female soldiers, perceptually located between male and female, which allowed local men to engage beyond their socio-cultural constraints, thereby enabling greater military access to, understanding, and inclusion of the whole community. This article briefly explores, within the broader context of Female Engagement (FE), cultural perceptions of servicewomen and how their utility could be better operationalised to enhance UK Defence Strategy. It specifically looks at historical lessons from Afghanistan but touches on recent access to the Ugandan People's Defence Force (UPDF) peace support training for Somalia, and outlines three areas where the British Army could improve its delivery on gender perspectives in military operations, where gender is defined as 'the state of being male or female with reference to social and cultural differences rather than biological ones.'

## WHERE ARE THE WOMEN?

The character of conflict in a global context is changing; from conventional interstate warfare; through the Cold War era of espionage and deterrence; to the complexities of intra-state asymmetric and hybrid warfare, and non-state extremism. In January 2017 the United States National Intelligence Council (U.S NIC) report[2] focused on how 'the changing nature of power is vexing shared transnational issues'. It highlighted a chronically young population in Africa and Asia with marked gender imbalance, and the key role that women fulfil in the workforce. The NIC report coincides with a growing awareness of gender issues within the Defence and Security sector including the need for improved progress in Gender Mainstreaming and military coordination of effort for FE in contemporary conflict.

The UN Deputy Military Adviser in the Office of Military Affairs recently briefed an audience for the Commission on the Status of Women that it will trial Female Engagement Teams (FETs) in UN peacekeeping missions. Recent research[3] refers to a stealthy gender revolution impacting the world's militaries where 17 countries, approximately 9% of all the armed forces, have policies in place that allow women into all combat roles. The research indicates increasing numbers of servicewomen globally being defined and empowered as 'warriors' but concludes with the statement 'yet, for all this progress, cultural and sexual stereotypes persist.' There is evidence for this in the UK Armed Forces where progress on Women in Ground Close Combat (WGCC) and the development of a FE capability has been slow. The British Army has set a goal of 15% female personnel by 2020 but the figure stubbornly sits below 10% for Regular servicewomen despite 5 years of a major recruitment campaign. This suggests that the cultural perception of female soldiers needs to be addressed, internally and publicly if the 2020 goal is to be achieved. Doctrinally, *AJP-5* the UK Armed Forces planning guide, advocates 'Gender Perspectives' to be incorporated into operational mission analysis and concept of operations. However, the campaign execution guide *JDP-3* has no reference to this principle, does not list the role of Gender Advisor under key staff, and lacks guidance on gender issues or FE. This creates a disconnect between considering gender in conflict, and conducting gender aware campaigns. *JDN 4/13 Culture and Human Terrain* states 'The advantages of acknowledging and implementing a gender perspective in operations, is increasingly understood as contributing to the achievement of an enduring peace,' but the doctrine note does not provide content or direction on how implementation can be achieved.

From my research on gender dynamics and the role of FE in countering violent extremism, three recurring feminist themes have emerged from the initial literature review:

1   https://www.nytimes.com/2010/03/07/world/asia/07women.html Elizabeth Bumiller and a number of U.S journalists followed the narrative of USMC and US Army FETs through training and deployment, publicly documenting their progress and personal stories on the ground in Afghanistan.

2   U.S NIC 001-17 report Global Trends: The Paradox of Progress. The U.S NIC report is released every four years. Its aim is to conduct a major assessment of the forces and choices shaping the world over the next two decades and to encourage debate on important global issues.

3   https://fitribintang.com/2017/05/27/asias-women-warriors/ Asia's Women Warriors by Fitriani, Suresh & Matthews, Defence Review Asia, May 2017. This article analyses the internal and external cultural impact that opening up Ground Close Combat (GCC) to women has had globally. It refers to a 'stealthy' gender revolution that is taking place in the world's militaries and how female soldiers in national militaries that have opened up GCC to woman are perceived as 'warriors'.

*A female reservist from 4 YORKS is seen here providing medical assistance to a local villager in Uganda. She is part of a team of around 30 soldiers training members of the Ugandan People's Defence Force (UPDF) in the skills they will need if they are called upon to run future peacekeeping operations.* **Photo: Corporal Daniel Wiepen RLC, Crown Copyright**

- *The 'silence' of women in conflict, whether they are victims, enablers, or participants. International Relations and Defence Studies literature indicates that the female experience is often missing or narrated by a man. This is particularly evident in post conflict reconstruction where women are marginalised or excluded from the politically negotiated peace.*[4]

- *The persistent portrayal of women as victims. This narrative is ingrained in UN Security Resolution1325 that states the important role of women in the prevention and resolution of conflicts, peacekeeping, humanitarian response and post-conflict reconstruction. UNSCR 1325 is the source document for the global Women, Peace and Security (WPS) agenda, but its soft*

*image of women as victims or peacekeepers places a perceptional constraint on the role of female soldiers. Alexis Henshaw in an article for the London School of Economics Centre for Women, Peace and Security outlined the negative impact on long term stability caused by focusing on women as victims. Her research concluded that 'women are frequently agents of political violence, acting as supporters or combatants in the majority of contemporary armed groups'.*[5]

- *The concept of female soldiers as the 'Third Sex' with all the gender complexity that this identity entails in an already complex and dynamic security environment. There is a body of academic work on the 'militarisation of women', most prominently by Cynthia Enloe*[6] *who*

---

4  *Women and Militant Wars: The Politics of Injury by Swati Parashar 2014. Swati conducted research with female combatants in Sri Lanka and Kashmir. She identified that the female fighters were 'silenced' on their contribution to the military campaign in preference to the narrative of women as victims requiring militant protection. This subsequently led to their exclusion from peace negotiations.*

5  *Making Violent Women Visible in the WPS Agenda by Alexis Leanna Henshaw, LSE Centre for Women Peace and Security July 2017. Alexis focuses on the role of female combatants and post conflict transition. Her work supports Swati Parashar's research where she states that 'In some cases, there are documented instances of insurgent groups actively attempting to conceal the inclusion of women within their ranks.'*

6  *Maneuvers: The International Politics of Militarising Women's Lives by Cynthia Enloe, University of California Press 2000.*

*stated: 'Women in the military has never been an easy topic. It shouldn't be. Sexism, patriotism, violence, and the state - it is a heady brew.' This is a theme that is worth analysing further to understand how the cultural perception of female soldiers could be operationalised for DE activities and contemporary conflict - mining that seam between peace and war that General Sir Nick Carter spoke of at the CGS conference, 2018.*

## HISTORICAL CONTEXT - THE ROLE OF FETS IN AFGHANISTAN

JUNE 2010: On the outskirts of Paind Kalay, a small village in central Helmand, a joint patrol of Afghan Security Forces and Ghurkha soldiers was resting mid-way through its task and I was sitting on the ground, chatting with some of the Afghan soldiers. The conversation was light-hearted. They were interested in how I, a married woman, was in Helmand as a soldier and who was looking after my children. In return I inquired about their families. I did not realise at the time what an unusual personal exchange this was, though I realised that being in uniform had made it culturally possible. Later in the deployment during a firefight near Checkpoint Talaanda, the (female) Cultural Advisor and I were invited to the inner sanctum of a compound by the male head of the family. We spent over two hours sitting with the women and children drinking tea, sharing stories, and gaining a better understanding of local issues, hopes and fears. It was evident from this brief experience that the women ran the compound and I was struck by how little we had considered the influence of women as part of the military campaign.

Similar stories have been shared by U.S, Danish and UK servicewomen who were engaged with local communities and Afghan security personnel. In the context of rural Afghanistan, being a soldier is not a woman's role therefore servicewomen are neither female (because we are soldiers), nor male (because biologically we are women). The 'Third Sex' was used as a coping mechanism to enable direct collaboration with men who had constraints on conversing with women who are not related (non-mahram), but it also enabled access to women who are forbidden from interacting in any way with a man outside their family network. This implies an operational imperative in similar socio-cultural contexts to deploy female personnel, or lose the ability to interact with approximately fifty percent of the population.

The activities of U.S FETs have been more widely documented than their UK counterparts, although the true measurement of their success has been questioned.[7] Lack of a coordinated training and preparation package, poor integration into military planning, and low priority for commanders on the ground are all cited. However, the stories from the FET soldiers themselves provide evidence that the concept, if implemented correctly, is tactically sound. In February 2009 women Marines first set out to meet with Afghan women in Farah province to find out what their concerns and needs were.[8] The female Marines were 'to meet with Pashtun women over tea in their homes, assess their need for aid, gather intelligence, and help open schools and clinics'. The reality was that the majority of FET tasks involved security searches or biometric testing of women and basic intelligence gathering but the account of FET experiences over the next few years provides an interesting insight.
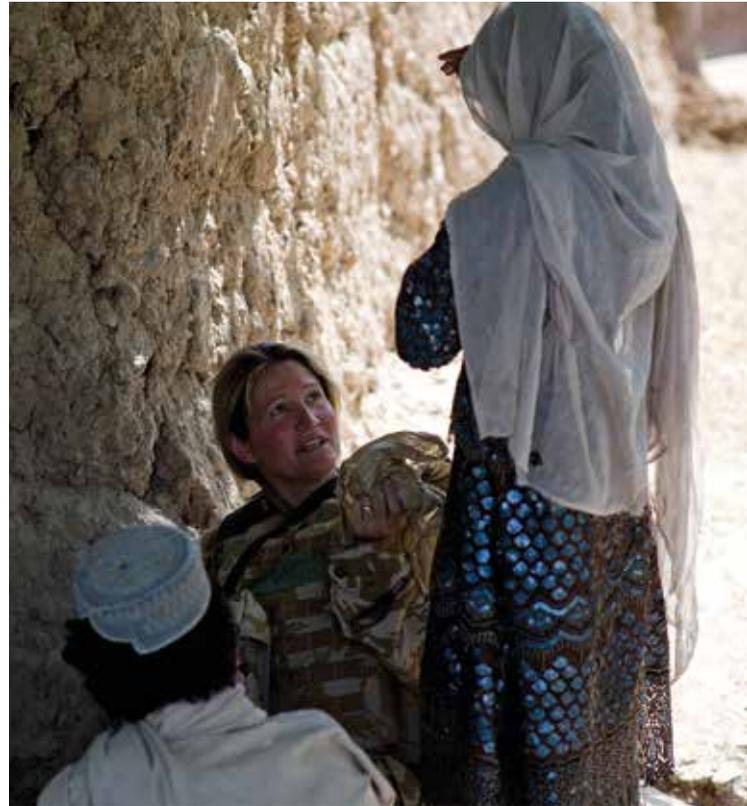


*Pictured is the author, Colonel Rosie Stone, engaging with the local Afghans in Helmand in 2009.* **Photo: Sergeant Ian Forsythe, RLC, Crown Copyright**

---

7   http://www.gsdrc.org/docs/open/hdq1186.pdf *Lessons from Female Engagement Teams by Brigitte Rohwerder 2015 is a useful assessment of the successes and failures of FET in Afghanistan which concludes with FET integration and employment recommendations.*

8   *The Gendering of Counterinsurgency in Afghanistan by McBride & Wibben, 2012.*

*Many Pashtun men, far from shunning American women, show a preference for interacting with them over U.S men. Pashtun men tend to view foreign women troops as a kind of 'third gender.' As a result, female servicewomen are accorded the advantages, rather than the disadvantages, of both genders: they are extended the respect shown to men, but are granted the access to home and family normally reserved to women.*

Anna Crossley, a UK FET officer commented, 'I was hot, dirty and dressed like a man but when I was invited inside a home I was always welcomed by Afghan women. It was a privilege to speak to them in their own language and experience their culture.'

Danish FET officers documented that patrols with female soldiers occasionally led to the men allowing women to listen and take part in conversations with International Stabilisation and Assistance Force (ISAF) personnel. They added that local men supported income-generating projects for women when they could see that these opportunities benefited the whole family. In a recent panel discussion on FE in Hostile Environments at King's College London, Major (Ret'd) Nicki Bass, who developed a FET programme for Herrick 11 posed the question 'Who was listening to the female voices? We included female engagement and focused on the non-kinetic environment right from the beginning, before deployment.' Looking to future operations she emphasised that we should not expect FE by default. 'Just because we have female soldiers does not mean we have a ready-made FET.'

## WHAT NEXT?

It has been identified that the character of conflict is becoming more geo-politically complex and that gender is a key but often overlooked factor in defence strategy. Consider how extreme gender dynamics, and the targeted application of FE was used by Daesh as it expanded its pronounced caliphate. From creating an online woman's magazine and attracting 'jihadi brides' via social media, to the capture and rape of



*Pictured is a soldier from the Female Engagement Team (FET) and the female Cultural Advisory (CULAD) in the Bazaar in Loy Mandeh Kalay, Nad-e Ali, Afghanistan.* **Photo: Sergeant Steve Blake RLC, Crown Copyright**

Yazidi women and girls, Daesh implemented a ruthless FE strategy to meet its needs. As the caliphate began to crumble in late 2017 its strategy changed from prohibiting women from fighting, to calling on them to become 'mujahidat', female holy warriors. Kathleen Kuehnast, Senior Gender Advisor at the United States Institute of Peace, has stated that gender roles can be instrumentalised and used to break down community very rapidly. She recommends 'Charting a New Course' in how we approach gender and conflict with respect to policy shapers, processes, and the extreme notions of men and women that are perpetuated through the media. Therefore, in contemporary conflict and for long-term stability, it is vital that the marginalised or silent voices of women are heard. The key to unlocking this narrative is FE and the effective deployment of female soldiers, particularly in cultural contexts where, as the 'Third Sex', they are essential in gaining access to the whole community.

The UK Government recently released the 2018 5-year *National Action Plan (NAP)* on the WPS agenda,[9] which should be used to inform the role of FE in UK Defence Strategy, and its four pillars of Prevention, Protection, Participation, Relief and Recovery is a useful framework to employ. The NAP received MOD input coordinated by the office of the Vice Chief of the Defence Staff, which is responsible for military focus on gender and policy development, with a caveat that current military doctrine and policy is not comprehensive enough with respect to WPS. It is therefore recommended that as the British Army continues its transformation under Army 2020 (Refine) there are 3 key areas to consider in operationalising gender perspectives, the role of FE and the future utility of female soldiers.

***Gender Policy and Implementation:*** Gender perspectives must be considered as an important operational Line of Activity and be definitively linked by doctrine and policy from the strategic to the tactical level. They should be included early in the planning cycle and properly integrated throughout a military campaign or DE task. It is disappointing to note that whilst the UN and an increasing number of national armies are developing or maintaining a FET capability[10], the UK dissolved the FET initiative post-Afghanistan. The post of SO1 Women, Peace and Security has recently been

created within Defence Engagement but we rely on a small number of Regular and Reserve Gender Advisors across a broad range of overseas commitments. In contrast, the UPDF is a relatively positive case study on gender policy, operationalising FE, and the deployment of FET. Interviews with male and female soldiers as they prepared for deployment to Somalia identified:

• *The UPDF adheres to the African Union Gender Policy. As a defence organisation it has fully implemented Gender Mainstreaming, with female soldiers serving in all combat roles and a Women's Directorate that; encourages female recruitment; provides reassurance of respect (with reference to issues around sexual abuse); and ensures equality and fair treatment of servicewomen. On operations FE is a recognised part of the campaign plan which focuses on outreach through medical support, force security (female searchers), and intelligence.*

• *The UPDF cultural perception of female soldiers is that they are equal (female officers are called 'sir') and vital enablers in countering the regional threat of violent extremism. Every soldier understands how important it is for female soldiers to be trained in specific engagement and intelligence tasks, and deployed into all areas alongside their male counterparts.*

• *FET capability has been an integral element of each Battle Group deployment to Somalia since its commitment to AMISOM in 2007. FET socio-cultural utility is applied beyond military service as [female] soldiers are encouraged to act as role models using their training and experience to help improve their own communities at home in Uganda. This has led to a rise in recruitment of women with approximately 20% of UPDF female.*

***Training and Development:*** Understanding gender perspectives and the impact of FE requires long-term investment in individual socio-cultural training and team development. It has been identified that cultural perception of servicewomen as a 'Third Sex' can be operationally advantageous, but as we learnt in Afghanistan there is a fine line between success, 'doing no harm', and failure. The British Army should examine good practise from Scandinavian countries that are

9    *https://www.gov.uk/government/publications/uk-national-action-plan-on-women-peace-and-security-2018-to-2022.*

10   *FET Capability. Norway has created the first all-female Special Forces unit 'Hunter Troop' in order to implement FE as early as possible in a campaign and several UN Peace Support contributing nations have now created FET capability. The Norwegian Centre for Gender in Military Operations (NCGM) runs NATO courses in Sweden to develop skills and knowledge from senior command to FET deployment at tactical level on the ground. https://www.forsvarsmakten.se/en/swedint/nordic-centre-for-gender-in-military-operations/*

recognised as leaders in gender awareness, U.S Cultural Support Teams, and other regional organisations such as the UPDF that have relevant operational experience. Good practise should then be used to create a career path with training and development that contributes to an agile Defence capability, and helps to attract and retain female soldiers.

**Collaboration:** The UPDF case study reveals that there is greater gender and cultural awareness that exists beyond the experience of western military organisations. Formalised collaboration in the UK with non-government and cross government organisations should be nurtured through networks, training events and joint overseas deployments. Global working partnerships that produce integrated multi-national and multi-agency FETs should also be considered alongside the UN trial of FETs in peacekeeping missions.

In summary, if a UK Defence force is operating in regions where women are present or involved in any or all of the guises discussed in this article, then the proposed key areas, as outlined above, need to be considered carefully and taken seriously. There needs to be more attention paid to the ongoing development of effective gender policies and the implementation of FE initiatives that are successfully employed in other defence forces, such as the UPDF. This will highlight a need for a more formal focus on future recruitment, training and development of women in UK Defence. There may then need to be a reflective period when our current cultural norms and our institutional practices can be analysed as we adjust to the social complexities of current, more collaborative, operational environments.

*U.S. Army Sergeant Lidya Admounabdfany writes down information from a local woman at the Woman's Center near the Zhari District Center outside of Forward Operating Base Pasab, Kandahar province, Afghanistan, Dec. 17, 2011. Admounabdfany is a member of 3rd Brigade, 10th Mountain Division's Female Engagement Team and is gathering information from women so the FET can distribute blankets and winter clothing to the women and their families.* **U.S. Army Photo: Specialist Kristina Truluck, Joint Combat Camera Afghanistan, Released**

# Suicide Bombing:
# An Increasing Threat to Western Military Success?

**WO2 John Hetherington**, NSC, looks at the phenomenon of the suicide bomber as a tactical weapon and examines its threat to Western Military operations.



*Suicide bombings in Iraq since 2003 have killed thousands of people, mostly Iraqi civilians, and arguably constitute a new phenomenon in the history of warfare. Suicide bombings have been used as a tactic in other armed struggles, but their frequency and lethality in Iraq is unprecedented.* Photo: Jim Gordon, Creative Commons Attribution 2.0 Generic Licence, Wikipedia

I s suicide bombing really a threat to Western military success? To find some answers to that question it is worth looking at the current open-source research on the subject of the psychology, employment and the effect of suicide bombers on military personnel. Perhaps the key question here is: how can Western militaries counter the suicide bomber at the tactical, operational and strategic levels? The use of suicide bombing worldwide has increased 100-fold over the last 35 years.[1] Today, it has become the defining terrorist and insurgent tactic. However, this phenomenon has not been that well understood within the military, where popular misconceptions about suicide bombers and bombing still prevail. This lack of understanding has led us to rely on outdated doctrines, undermining our ability to plan for, and respond to, suicide bombing at the tactical, operational and strategic levels.

Suicide bombing in its modern incarnation increased globally from its adoption as a tactic by Lebanese groups in the early 1980s, through copy-cat employment by Palestinian groups and the Tamil Tigers in Sri Lanka to its adoption by Islamist terrorists worldwide. The single biggest spike however, was its adoption by groups resisting the occupation of Iraq from 2003 onwards: more suicide bombings occurred in the first two years of the Iraq occupation than in all history before that date.[2]

It is the most lethal weapon in the terrorist and insurgent armoury, much more lethal than an average attack and considerably more lethal than a non-suicide IED attack. Action on Armed Violence's report on 2017 showed just how great the difference is: an average of 30 casualties per SIED attack with the next most effective being timed detonation devices causing c.8 casualties per attack - or
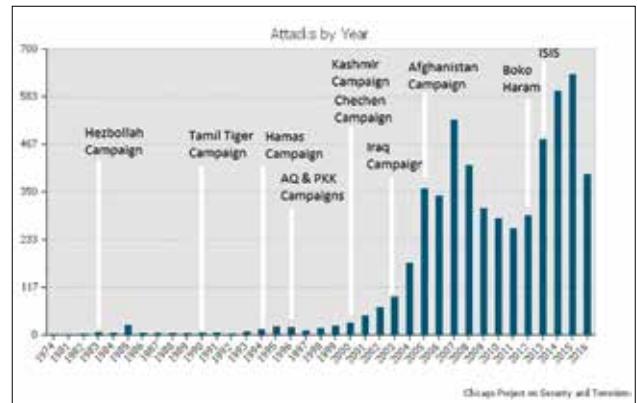


*Fig 1: Caption: In this diagram the figures only go up to June 2016, hence the apparent drop in that year*

about fourfold greater effectiveness.[3] It is also much more lethal against civilian targets than military. This held true for Palestinian attacks on Israeli targets[4] in which the average (mean) SIED attack on civilians caused 5 killed and 32.5 wounded compared with 0.3 killed and 2.4 wounded in attacks in military targets. In Iraq 2003-10, SIED attack on civilians caused 12.2 killed and 30.6 wounded compared to 2.5 western military personnel killed per attack (no comparative figures for wounded.[5] I suggest that this effect is a result of the human guidance of the IED reducing the complexity of the attack planning and the chances of something going wrong or the device being discovered and dealt with. I do not, however, know of any study into the precise mechanics of why this is. Suicide bombers also have an effective psychological dimension, particularly on troops with limited weapons as do IEDs, landmines and so forth.

---

1   I have never seen an analysis done of 'Why Lebanon'? My own opinion is that it was the first conflict where a deeply humiliated population with existing insurgent organizations encountered tactically overmatching opponents (Israeli and Western militaries) but there was sufficient equipment and expertise to construct effective IEDs). Otherwise excellent surveys such as J Sheehy-Skeffington's 'Social psychological motivations of suicide terrorism, A community level perspective' somehow forget that all parallels with insurgent groups prior to the 1950s are difficult because of the comparative lack of access to the materials which enable suicide bombing campaigns and force a reliance upon assassinations of specific figures.

2   Chicago Project on Security and Terrorism (CPOST). 2016. Suicide Attack Database (October 12, 2016 Release). [Data File]. Retrieved from http://cpostdata.uchicago.edu/

3   See AoAV's 2017 Monitor p.32 https://aoav.org.uk/wp-content/uploads/2018/04/Explosive-Violence-Monitor-2017-v6.pdf

4   See Benmelech & Berrebi: Attack Assignments in Terror Organizations & The Productivity of Suicide Bombers, 2007.

5   See Hicks, Dardagan, Bagnall, Spagat, Sloboda in Casualties in civilians and coalition soldiers from suicide bombings in Iraq, 2003-10 published in The Lancet: Vol 378, No.9794 03 Sep 11.

The Kurdish Peshmerga describe this effect well:

*First, they (ISIS) send in their suicide bombers in armoured Humvees. If you don't destroy them as they come up the hill - and you need a direct hit - they'll blast huge holes in the walls, because these are just massive explosions. Then, in the confusion of that, they send in their infantry and, behind them, the snipers. It all happens very fast: everything quiet and suddenly they are everywhere. The important thing is to stay calm, to pick your targets, because if you panic, you are finished. That is the problem with the Iraqi Army; they always panic. Azar - Kurdish Peshmerga fighter - Makhmour front - May 2015.[6]*

Suicide bombers, particularly those in up-armoured vehicles, give insurgents an ability to deliver large quantities of explosive onto a target, which is the concentrated essence of support fire. However, suicide attacks are much more effective against civilian targets, at least on the metric of casualties caused, by a factor of between 7 and 10.

### THE AIMS OF SUICIDE BOMBINGS

Strategically, suicide bombings are used as part of campaigns to end military occupations. Perversely, they may encourage an increase in the intensity of such occupations but that is accepted in the short-term. Tactically, suicide bombers are sometimes used as a weapon of 'shock' (the Taliban typically used them against gate guards prior to a conventional attack on a defended position; ISIS have used them to spearhead attacks or counter-attacks). Sometimes the suicide bomb is used as a means of assassination, but the vast majority are simply designed to cause mass casualties.

*In principle, suicide terrorism could be used for demonstrative purposes or could be limited to targeted assassinations. In practice, however, …suicide terrorists often seek simply to kill as many people as they can. Although this maximizes the coercive leverage that can be gained from terrorism, it does so at heavier cost than other forms of terrorism…coercion is the paramount objective of suicide terrorism.[7]*

### SUICIDE BOMBERS

A review of the research on suicide bombers - including the extensive researches carried out by Riaz Hassan[8], Robert Pape[9], Paul Gill[10], Murat Ismaylov[11], Martha Crenshaw, Claude Berrebi and Efraim Benmelech[12], and Jennifer Sheehy-Skeffington[13] amongst many others, and some careful reflection - allows us to dispose of certain popular myths about suicide bombers. Those researchers who examined the phenomenon in Palestine, Sri Lanka and Iraq during the occupation, found that they are not generally recruited from the youngest, poorest, least educated or psychologically ill. Many groups positively attempted to screen out unstable individuals.[14] Research has not yet identified any psychopathology amongst suicide bombers. However, anecdotally, the situation was different in Afghanistan with possibly 80% of suicide bombers employed there having some form of physical or mental injury or disability - this was also felt to be a reason for the comparatively low effectiveness of suicide bombers in that theatre.[15] Primarily, suicide bombers come from societies that believe that there are few or no other effective paths to resistance, either politically or militarily, and in that sense are deeply pessimistic. Leading scholar of Suicide Terrorism, Riaz Hassan, has summarized this as:

*Under such conditions, people react to perceived inferiority and the failure of other efforts by valuing and supporting ideals of self-sacrifice such as suicide bombing. Religiously and nationalistically coded attitudes towards acceptance of death from long periods of collective suffering, humiliation and powerlessness enable political organizations to give people suicide bombings as an outlet for their feelings of desperation, deprivation, hostility and injustice.[16]*

6    Anderson, Scott, *Fractured Lands: How The Arab World Came Apart*, Anchor Books, 2017.

7    Pape, Robert, *Dying to Win: The Strategic Logic of Suicide Bombing*, Random House, New York (2005).

8    Hassan,Riaz, *Life as a Weapon*, Flinders Journal of History & Politics (2010) (n.b. also a book, pub. Routledge, 2014).

9    Pape, Robert, *Dying to Win: The Strategic Logic of Suicide Bombing*, Random House, New York (2005).

10   Gill, Paul, *A Multi-Dimensional Approach to Suicide Bombing*, International Journal of Conflict & Violence (2007).

11   Ismaylov, Murat, *Conceptualizing Terrorist Violence & Suicide Bombing*, Journal of Strategic Security, Berkeley Electronic Press (2010).

12   Berrebi and Benmelech, *Human Capital & The Productivity of Suicide Bombers*, Journal of Economic Perspectives (2007).

13   Sheehy-Skeffington, Jennifer, DSTL, *Social Psychology Motivations of Suicide Terrorism*, Presentation to the 32nd Annual Scientific Meeting on Political Psychology (2009)

14   Although it is not known how effective this screening is.

15   Williams, Brian Glyn, *Mullah Omar's Missiles, A Field Report on Suicide Bombers in Afghanistan*, Middle East Policy Council, Volume XV, Winter, No 4

16   Hassan, Riaz, *Life As A Weapon, The Global Rise of Suicide Bombings*, Routeledge, September 2010

*Iraqi citizens attempt to salvage what is left of their store after the detonation of a Suicide Vehicle Bourne Improvised Explosive Device on April 20, 2007. Marines with 2nd Battalion, 7th Marine Regiment patrol after a suicide bomb damaged a market area that killed local Iraqi civilians near Forward Operating Base Riviera.* **Photo: Corporal Neill A. Sevelius, U.S. Marine Corps, Released**

I would recast this as saying that no society that believes it can win politically or militarily by conventional means has extensively used suicide bombers. Japanese Kamikaze attacks are a good parallel here: they only began on 25th October 1944 just before the US invasion of the Philippines, when the Japanese began to realise they could not possibly win the war conventionally. Given this as a base, the suicide bomber is also likely to have a deep personal sense of grievance or injustice, above that societal level. The personal injustice is meant literally here: a deep experience of humiliation, oppression or violence suffered by the suicide bomber themselves or by their close family or friends. Suicide bombers are usually 18-30 year old males with, according to researchers

Benmelech and Berrebi[17], the older bombers more likely to be used against bigger targets, to cause more destruction and be more likely to succeed. Female suicide bombers are comparatively rare, although not unknown, and more prevalent in some theatres than others (Nigeria, Russia and Turkey seem to have some of the largest percentages).[18] Palestinian and Islamic groups, with the exception of Boko Haram, employed female suicide bombers much later in their campaigns than males. Groups' employment of female suicide bombers reflects the originating societies' views on the participation of women in acts of violence more broadly, whether that be as a last resort (Islamist groups) or as co-equals (secular left-wing Kurds).[19]

17   Benmelech, Efraim, and Berrebi, Claude, *Human Capital & The Productivity of Suicide Bombers, Journal of Economic Perspective, Vol.21 No.3, Summer 2007*

18   *This information is derived from the Chicago University database: http://cpostdata.uchicago.edu*

19   *See Zedalis, Female Suicide Bombers, Strategic Studies Institute, US Army War College, (2004)*

Suicide bombers are not exclusively found amongst the religious - the secular Kurds and LTTE[20] have both used suicide bombers extensively. Where the community is religious however, the bomber may be amongst the more religious. This does not imply a long religious background for the individual involved, nor does it imply that the commanders within the recruiting and/or employing organization will be particularly ideologically-motivated.

Key gaps in the knowledge of suicide bombings concern the tactical techniques and equipment employed by the attackers and the same by the security forces, both in successful and unsuccessful attacks. A fascinating question, but so far unanswered, is how far the threat of suicide bombing does change security force tactical behaviour.

### SUICIDE BOMBING

Suicide bombing is mainly directed against countries that are broadly democratic, or at least with governments perceived as being responsive to public opinion.[21] A good example is that various Kurdish groups[22] composed of the same people fighting for the same cause used suicide bombers against *secular* Turkey but not against secular Iraq under Saddam Hussein.

Suicide bombing is directed against groups seen as sufficiently 'other' to the bomber. This is typically based on ethnicity or religion, although generalized support for the government may be seen as a proxy for both. The LTTE used suicide bombers against the Sinhalese Sri Lankan government but not against the co-religionist Indian Army, despite it carrying out thousands of more conventional attacks against them, including assassinating an Indian PM - and this despite the LTTE being avowedly secular. Suicide bombings in Iraq and Afghanistan are usually carried out against members of different religious sects or ethnicities; rather than being seen as Iraqi on Iraqi, they are seen as Sunni on 'crusaders' (if Western) or on 'Safavid crusaders' (i.e. Shia Persians, in this case meaning the Iraqi government).[23] Undifferentiated targeting of civilians from the bombers' own societal grouping is very rare.

### THE PSYCHOLOGICAL EFFECTS OF SUICIDE BOMBING

I don't intend to deal extensively in this article with the effects of suicide bombing upon the target society, but rather on the effects of suicide bombing on the society producing the suicide bomber, the insurgents or terrorists using the tactic, and the members of the security forces combatting them.



---

20   The Liberation Tigers of Tamil Eelam - Tamil Tigers: Best source is Pape, Robert A., *Dying to Win, The Strategic Logic of Suicide Terrorism*, Random House, New York, London.

21   See Pape, Robert A, *Dying To Win, The Strategic Logic of Suicide Terrorism*.

22   Information on the Kurds come from the author's analysis of actual suicide bombings including sensitive conversations with Kurds while serving on Op Shader.

23   War in Afghanistan (2001 - present), Wikipedia; https://en.wikipedia.org/wiki/War_in_Afghanistan_(2001-present).

By design, suicide bombers are hard to take prisoner. Taking prisoners has always been a risky business for both parties and there is no incentive to take the risk of letting a suicide bomber get close. As it is difficult to be sure which insurgents are or are not suicide bombers, this makes it much less likely that prisoners will be taken more generally outside of deliberate detention operations.

Given this, it is much less likely that insurgents will offer to surrender in the first place. A great example of this is the fake suicide vests that the terrorist who conducted the London Bridge attack wore, which effectively prevented a non-lethal end to the incident. US and British doctrine is also explicit on the point: where its personnel genuinely feel that a person may be a suicide bomber,



*After being treated and stabilized at Forward Operating Base (FOB) Farah, several of the victims from the suicide bombing that struck Farah City, Farah Province, Afghanistan, Nov. 20, 2009, were transported by ambulance to the Farah City Hospital for further care. The ambulances, which are owned and operated by the Farah Hospital, are narrow and can hold no more than two patients at a time. Several trips were made to accommodate all the patients and to ensure that they were given the best treatment possible.* **Photo: U.S. Air Force 2nd Lieutenant Karl Wiest, Released**

they are encouraged to open fire to preserve life and are considered to have acted reasonably even if this belief was subsequently proved to be incorrect.

All of the above is even more true of a suicide bomber using a vehicle: the security force options are limited to destroy or run away, especially in cases where the insurgent group will kill the bomber if they try and retreat, thus a dynamic is created where the insurgent force (not just the suicide bombers) are less likely to be taken prisoner or to offer to surrender. With lethal force increasingly being required, this increases the chances of civilians being accidentally killed. Overall, this is entirely to the insurgent group's advantage, as it increases the overall bloodiness of the campaign and helpfully reduces the intelligence and leverage of prisoners available to the security forces. To Western militaries and political establishments wanting to win relatively bloodlessly, this is a severe challenge. Furthermore, I would argue that Western military doctrine, based as it is on manoeuvrist approaches in order to avoid unnecessary attrition and break the enemy's will to fight, is hamstrung by opponents who really will fight in *situ* to the last man. At the operational and strategic levels, we might view this as the successful use of Delay as an operation of war. We and our local force allies may still win, but strategically the time taken (along with the money spent and casualties suffered) reduces our ability to fight the next campaign.

At a macro level, the use of suicide bombers also appears to increase the determination to fight in the society from which the suicide bombers are drawn. Research indicated that Palestinian suicide bombings increased societal support for terrorist violence and specific suicide bombings had quite high levels of popular support.[24]

This makes it more difficult for 'hearts-and-minds'-type approaches to work, by increasing the sympathetic distance between the bomber's society and that of the security forces. Where suicide bombing campaigns have stopped, this has never been because the society has been won over by the government's ideology and people-centric practice, whereas approaches based on military occupation, indiscriminate attack, collective punishment, security walls and political concessions have all worked

to some extent. Political democracy, institution building and targeted killing appears never to have stopped suicide bombings on its own terms. Arguably it *may* have reduced the level in Iraq post-2007, but that may have also been due to other factors (i.e. increased levels of occupation). Suicide campaigns are more violent than others even when compared to existing insurgencies in the same country. This may also be a factor in reducing support for the intervening nations within their own countries.

## 2017

2017 witnessed an increase in the already profligate use of suicide bombers by ISIS as an integral part of its tactics and strategy almost certainly helped by its ideological preparedness to use these operations.[25] The trends seem very likely to show a normalization of suicide bombing, so that more and more of its personnel will be used as suicide bombers - perhaps an echo of Japan's increasing reliance on kamikaze attacks during the final months of the war in 1945. The key point here being that the characteristics of the suicide bomber will change and less direct radicalization is required - the overall situation provides that radicalization. Put more simply, an increase in suicide attacks in the course of a conflict may partially be an indicator of strategic success. It has also seen a rise in the use of female suicide bombers, which perhaps chimes with the idea of their use as a last resort by some groups.[26]

## THE FUTURE

Where possible insurgents will continue to employ and develop this most potent tool in their armoury. In practice this will mean anywhere in which any societal group that considers itself oppressed to a sufficient degree and where there is an insurgent organisation with the means to recruit, train and equip volunteers from that society. This will not be limited to Islamic insurgencies and terrorist groups, but any society that feels itself to be oppressed and humiliated with little effective opportunity to change, including the use of more conventional tactics. It will not 'die out' as a tactic, unless these underlying conditions change: thus we can expect with some degree of confidence, for it to be a permanent feature of war and conflict in the 21st Century. It will fluctuate according to local conditions. Afghanistan[27] was an interesting example: attacks

24   Sharvit, Keren, et al, Palestinian Public Opinion & Terrorism: A Two-Way Street, Journal of Policing & Counter Terrorism (undated) & Gill, Paul, A Multi-Dimensional Approach to Suicide Bombing, International Journal of Conflict & Violence Vol1(2) 2007, pp.142-159.

25   Information Note 17/01 Daesh Defensive Operations is excellent for detail.

26   See the Institute for National Security Services website: http://www.inss.org.il/publication/report-suicide-attacks-2017-fewer-attacks-women/

27   Overton, Iain, 2017 could be the deadliest year of suicide attacks in Afghanistan on record – why is this happening?, AOAV; https://aoav.org.uk

reached a peak in 2007, declined slightly over 2010-13 as a result of diminishing effectiveness against coalition targets , rose dramatically in 2014 against ANSF after the coalition withdrawals, then tailed off to the lowest level since 2005 as the need to conduct suicide attacks declined in line with the changing military and political situation.[28] This probably reflects the lesser use of the tactical suicide bomb and the focus on more spectacular attacks, a reduced sense of humiliation in the anti-Western elements of society and less overmatch in the conventional fighting. Globally though, one might expect the previous dynamics to remain constant: an initially small number of attacks focused on high-value political and military targets, with the number increasing and the target-set becoming wider in line with increasing social acceptance and normalization of increasing levels of violence.

In addition to the straightforward human and economic losses caused, the suicide bomber will continue to challenge the preferred Western military strategies for victory. The suicide bomber will increase the number of civilian and host nation military casualties whilst simultaneously making it less likely that the insurgent or terrorist group will surrender or compromise its demands. As the current cultural expectation of western populations is that military intervention or support will reduce the level of violence, the suicide bombing tactic will indirectly cause severe difficulties for western strategy.

*The main reason the suicide terrorism is growing is that the terrorists have learned that it works...*[29]



*Combat medics work through the 'blood lab' at the Department of Combat Medic Training at Fort Sam Houston, Texas. The school has two 'blood labs' in which the students sharpen their skills as soldier medics. One lab simulates the scene of a suicide bombing in a market place, and the other simulates a bombing in an office building.* **U.S. Department of Defense Photo: Fred W. Baker III, Released**

---

28   *See Chicago University database: http://cpostdata.uchicago.edu*
29   *See Pape, the Strategic Logic of Suicide Bombing*

# Ruining Copehill Down

**Professor Anthony King**, provides recommendations on how to turn Copehill Down into a premiere urban training facility by deliberately degrading it.



*Armoured vehicles roll into Copehill Down, to provide cover as part of Exercise Lion Strike. Copehill Down is a UK Ministry of Defence training facility located on Salisbury Plain, Wiltshire, England. It is a 'FIBUA' (Fighting In Built Up Areas) urban warfare and Close quarters battle training centre where exercises and tests are conducted.* **Photo: Corporal Si Longworth RLC, Crown Copyright**

The British Army has now officially accepted that urban warfare is the most likely environment for any future conflict and it has begun to prepare for this eventuality through a series of initiatives. For instance, 1 Armoured Infantry Brigade has been designated as the Army's urban experimentation brigade. It is currently conducting a series of exercises and trials in order to improve the British approach to urban operations, among other tasks.

These developments are important. Yet, the energy that has been expended on enhancing urban capability has only highlighted a serious shortcoming in the Army's training estate. The Army's urban training facilities are inadequate for the exigencies of the contemporary environment that troops are likely to face. The fact that Copehill Down remains its best facility is an indictment.

Indeed, Copehill Down becomes something of an embarrassment when compared with the facilities that Britain's NATO allies have constructed in the last decade. The Americans have, of course, led the way here. The US Army's Fort Irwin consists of a large and complex urban area. In 2005, The US Marine Corps built an imitation town out of 13,000 iso-containers at their 29 Palms Training Area. Range 220, as it is called, is able to accommodate a full Marine Expeditionary Brigade. In 2011, The French Army opened *Centre d' Entrainement aux Actions en Zone Urbaine* (CENZUB) whose central feature is a complete modern town. Consisting of factory, metropolitan, suburban and estate areas, it is designed for the training of brigades. Also the Bundeswehr has recently opened its newest urban training area at Schnöggersburg. It is bigger and has more features than CENZUB including a tunnel system. Copehill Down pales by comparison with these facilities.

In order to achieve the goal of urban excellence, an urgent reformation of the British Army's training estate is plainly required. In the longer term, it must be hoped that the British Army will construct a major urban facility worthy of a professional twenty-first century force and capable of preparing a full brigade for full-spectrum conflict. Yet, in the meantime, short-term measures are required to ensure that the Army maximizes the utility of its current facilities.

Despite the current inadequacies, it is possible to be very optimistic here. The disadvantages of Copehill Down are evident. Yet, it also has unique strengths. It is a well-founded site, through which tanks and armoured personnel vehicles can be driven without restriction and from which live ammunition can be fired. Although there are not enough of them, its individual buildings, themselves well-structured, provide a diversity of challenges for training troops from every arm and service.

Copehill Down also has a decisive advantage over its comparators like CENZUB. After a recent demonstration in the village, a Commanding Officer was refreshingly honest with his soldiers: 'I know that Copehill Down is crap – but we have got to make the best of it'. Ironically, he highlighted not the weakness of Copehill Down but its greatest strength: its very poverty. It is vital that the British Army recognize and exploits Copehill Down's potential.

New urban facilities like CENZUB look impressive and they are excellent training venues. However, there is a major shortcoming with all of them. They are hopelessly sanitized. They are consequently completely unrealistic. The briefest survey of recent urban combat demonstrates that British troops will not fight in the pristine, empty streets and housing blocks that are found in CENZUB or, indeed, Range 220 but in squalid and bewildering ruins; it is instructive that one of the most useful pieces of equipment in Mosul was the bulldozer. Before military operations could even begin, coalition forces had to clear streets, choked with rubble and detritus.

It is here that Copehill Down offers the Army a unique opportunity. Precisely because the facility is now so old and dilapidated, the site can be re-configured and, indeed, deliberately degraded in a way that is impossible in apparently better facilities like CENZUB. There are three simple and relatively cheap innovations that the Army could implement with almost immediate effect that would turn an average training facility into one that is genuinely the premier site for company level urban training in Europe.

- **Rubble:** *Copehill Down is messy and can easily be made messier still. For instance, during 1 Mercian's recent Urban Dawn exercise, one of the streets was blocked with a series of mud and wire berms, which engineers were forced to clear with a Trojan vehicle. Suddenly, as the Challengers advanced down this filthy street, Copehill Down began to look something like the images from the ruins of Mosul or Aleppo. It would be possible to transform the whole of Copehill Down by filling its streets with heaps of rubble, which have to be*

*Troops and armour from 2nd Battalion The Royal Regiment of Wales and attached elements form up for a group photograph at CENZUB, France during Exercise Urban Warrior in December 2012.* **Photo: Corporal Mark Larner, Crown Copyright**

*negotiated in assault and exploited in defence. It would not be difficult or expensive to procure this material; any local council has an excess of the stuff. Rubble could be permanently dumped on the streets and left in place. Alternatively, a large rubble dump could be created outside the village (a small one already exists to the south by the carpark) that could then be bulldozed into the appropriate positions, in line with specific training requirements. At the end of any exercise this rubble could be cleared. The 'rubble-isation' of Copehill Down will transform its value as a training venue.*

- ***Iso-containers:*** *At present, Copehill Down is insufficiently dense; the houses are simply too far apart to imitate the kinds of streets in which British troops need to learn to operate. At present some iso-containers have been used at the western end of the village to increase the size of the facility. Copehill Down could be transformed by the aggressive exploitation of iso-containers, as the USMC's Range 220 shows. For instance, one of the most unrealistic elements of Copehill Down at present is the isolation of each building. Houses standalone surrounded by wide areas of grass and trees. These gaps could be filled in by the emplacement of new two-storey iso-containers structures, fitted with doors, window, stairs and mouseholes. These iso-containers would not look particularly aesthetically pleasing but they would multiply the problems for attackers – and defenders. At the same time, the iso-containers could be used to create a genuine shanty-town area on the edge of the village with tiny streets and densely packed buildings. One hundred cheap, easily procurable and judiciously positioned iso-containers would revolutionize Copehill Down.*

- **Tunnels:** Copehill Down lacks tunnels. This is a major disadvantage. All recent urban operations have involved extensive subterranean activity. There is no prospect of building an extensive tunnel system under the current village. It would be prohibitively expensive and structurally difficult. It is also entirely unnecessary. Instead of trying to create a tunnel system in the village itself, for training purposes, it would be perfectly adequate to construct a large and complex artificial sub-surface system in an area immediately outside the village. There are two inexpensive ways of doing this. Either, engineers could dig a network of shallow covered trenches, which imitate tunnels and through which troops could crawl or creep. Alternatively, the Army could procure a number of circular large or small concrete culverts that engineers could simply arrange into a complex configuration on top of the ground. Externally, these culverts would, of course, look absurdly unrealistic. Yet, once troops are inside these culverts, the fact that they are not actually sub-surface becomes irrelevant; they will be dark and constricting. Indeed, it might be possible to insert some culverts into the village itself running them over the surface into some of the buildings.

At present, Copehill Down fails to meet the British Army's requirements. To become genuinely proficient in twenty-first century urban combat, the Army needs a facility in which it can exercise and test a full combined arms brigade with all its enablers. Such a facility is, unfortunately, a very distant prospect. In the meantime, it has to make do with what it has. Fortunately, in Copehill Down, it has a facility which, with a few determined alterations, could be quickly transformed from its current status as an embarrassment into one of the very finest areas for company-level exercises in Europe. Defaced with rubble, enlarged by modified iso-containers and augmented by an artificial tunnel system, it would not look pretty. Visiting dignitaries would not be impressed by it as they are by CENZUB. Yet, to win ugly, sometimes it is necessary to train ugly too.



*The Secretary of State for Defence Rt Hon Gavin Williamson MP visits troops at Copehill Down training village where he was given a demonstration of Urban Operations from units of 3rd UK Division. He was given the opportunity to get into the heart of the action when he moved into a target building during the second assault. **Photo: Sergeant Mark Webster RLC Crown Copyright***

# The Problems of Modern Air Defence

**Lieutenant Patrick Hinton, RA**, looks at the British Army's current air defence systems and asks if we should be investing in more man-portable systems.



*Pictured are members of the Royal Dragoon Guards armed with MBT LAW Anti-Armour missiles during Exercise Iron Strike 2016 held at the British Army Training Unit Suffield (BATUS), Canada.* **Photo: Sergeant Mark Webster RLC, Crown Copyright**

The publication of the *Future Operating Environment 2035 (FOE 2035)* highlighted the challenge of meeting today's air threat. It states that, come 2035, 'technologies may stretch our ability to police international airspace and defend our sovereign territory from the air'.[1] Unmanned aerial systems (UAS) are available to buy from as little as £30; unidentified aircraft are able to bomb major cities with impunity; and thirteen nations are taking part in airstrikes in Syrian territory, often with differing objectives.[2][3] The role of policing this airspace falls in part to the UK's Ground-Based Air Defence (GBAD) systems. These are divided into Very Short Range and Short Range Air Defence (VSHORAD & SHORAD) capabilities. VSHORAD can engage up to 3 nautical miles (nm) and SHORAD reaches up to 10nm.[4] The rapidly changing face of the battlefield, as identified in the Strategic Trends Programme's FCOC, may mean that UK GBAD is not suited to contemporary threats.[5] The two weapons that the British Army employs, Rapier and High Velocity Missile (HVM), came into service twenty years ago, and replacing them will mean vast expenditure. Since then, the number and variety of aircraft in theatre has increased.

Man-portable air defence systems (MANPADS) offer a viable alternative. The cost and current scaling of British SHORAD and VSHORAD systems diminishes their utility. Reductions in defence spending mean that cheaper alternatives should be investigated. Accurate costing is problematic due to the way weapons are procured. Contracts take into account multiple systems, maintenance, life upgrades, and training aids. At the time of writing, £483 million had been paid to MBDA to develop a demonstration model of the Future Local Area Air Defence system (FLAADS), which is likely to replace Rapier. However, that cost represents the price to make the maritime version, known as Sea Ceptor, and importantly, 'does not include any production systems'.[6] A real contract could be expected to be around £3 billion in line with similar investments by other nations. France's Surface to Air Missile Platform/Terrain (SAMP/T) contract, which is a similar system to FLAADS, cost €4.1 billion.[7] The development of new technologies is an area where the Ministry of Defence (MoD) spends significant capital.

Armoured air defence platforms are also expensive. The Stormer variant of HVM is coming to the end of its working life. It is based on the aging Combat Vehicle Reconnaissance (Tracked) (CVR(T)) platform, which was selected as a carrier for HVM in 1986. The other variants of the CVR(T) are either out of service, or being replaced with the Ajax family of armoured vehicles, which offers a common platform much like CVR(T) does. There is no air defence variant, however.[8] All armoured vehicles are costly to run, and require a vast number of spares to be maintained in order to ensure rapid repair, as well as numerous other criteria as set out by the Defence Lines of Development (DLOD).[9] Armoured vehicles require such a large outlay that there is an expectancy they remain in use for a long period of time. The Stormer came into service in 1986 and is expected to last, at the very least, until 2020.

Technology is developing quickly, but bringing equipment into service is painfully, and perhaps even dangerously, slow. The Watchkeeper UAV programme is one example.[10] The contract for 589 Ajax vehicles, sits at £3.5 billion, producing a unit cost of £5.9 million.[11] No doubt such vehicles will be of significant utility. However, with the development of more effective protection to armoured vehicles better anti-armour weapons are developed. For instance, the arrival of explosive reactive armour spurred the creation of tandem warheads, as employed on systems like Javelin. In addition to this, a barrage of less advanced munitions can stop armoured vehicles by dislodging a track or making the ground around it impassable.

1    Ministry of Defence (MoD), Future Operating Environment 2035, Strategic Trends Programme, November 2014.
2    Reuters, Unidentified Aircraft Bombs Libya's Derna, 3 dead - witness, Reuters, 7 Feb 2016.
3    ABC News, Explainer: Who is Bombing IS Militants in Syria, ABC News, 6 Dec 2015.
4    MoD, Joint Air defence, Joint Warfare Publication, July 2003, p.2-7.
5    MoD, Future Character of Conflict, Strategic Trends Programme, February 2010
6    ThinkDefence, UK Complex Weapons – CAMM' ThinkDefence, http://www.thinkdefence.co.uk
7    French Senate, 2013 Defence Budget (in French), French Senate, 22 Nov 2012.
8    General Dynamics, Ajax: the Future of Armoured Fighting Vehicles, General Dynamics.
9    Ministry of Defence, Defence Lines of Development Analysis, Ministry of Defence.
10   Brooke-Holland, Louise, Overview of Military Drones Used by UK Armed Forces, House of Commons Library, 8 Oct 2015,
11   General Dynamics, Ajax: the Future of Armoured Fighting Vehicles, General Dynamics, http://www.generaldynamics.uk.

*A Stormer vehicle, part of the 1st Battalion the Yorkshire Regiment Battlegroup, fires a Starstreak High Velocity Missile (HVM) during Exercise Prairie Storm 3 in British Army Training Area Suffield (BATUS), Alberta Canada.* **Photo: Sergeant Mark Webster RLC, Crown Copyright**

A consequence of this high cost is the reduction in scale of UK air defence's equipment. At any one time, one of 16th Regiment Royal Artillery's batteries possesses no weapon systems due to the split between training and operational necessity. Moreover, the number of Rapier systems deployed on one task has fallen from 6 to 4. Equally, the numbers of Stormers held on readiness has fallen. These two realities go some way in showing the reduced utility of the UK's current GBAD capability. The *2015 Strategic Defence and Security Review (SDSR)* contains many references to cost saving.[12] As such, it makes sense to use weapons with a much smaller unit cost that can be upgraded and/or changed with ease. Indeed, the *FOE 2035* states that, 'Long-term equipment plans - with 10 to 20year development programmes for 30 to 50 year life cycles - may no longer be viable given the rate at which future threats will evolve'.[13] MANPADS, as a cheaper variant, have an advantage here.

To judge whether these developments are significant, it is worth examining the current air environment and the UK capability to meet the challenges it poses.

Theatres like Afghanistan, Syria, and Iraq demonstrate the complexities of today's air threat. Military planes and helicopters; civilian and contracted airframes; and UAS, all fly in the same space at the same time. Rapier, FLAADS, and Stormer will struggle to face some of the realities of modern war. Mobility is the watchword for current and future conflict. Whether in a conventional or non-conventional setting, fighting will take place on the move. Thinkers such as Liddel Hart emphasised the importance of mobility in future war.[14] The recent conflicts in the Middle East threw the spotlight on protection with the emphasis on shelter from RPGs and IEDs. Vehicles and personnel were burdened with more and more amour, reducing mobility, which in a conventional war is highly undesirable. Modern munitions can be brought to bear with incredible speed and accuracy.

Indeed, the current conflict in Ukraine demonstrates how UAS can provide the location and targeting of enemy positions by artillery 'within 15 minutes of the initial over-flight'.[15] As O'Sullivan and Miller note, 'the porous fluidity

12   HM Government, National Security Strategy and SDSR 2015, HM Government, November 2015.
13   MoD, Future Character of Conflict, Strategic Trends Programme, Febuary 2010.
14   Reid, Brian, Studies in British Military Thought: Debates with Fuller and Liddell Hart, (Nebraska, 1998).
15   Karber, Philip, Lessons Learns from the Russo-Ukrainian War, 8 July 2015, https://prodev2go.files.wordpress.com

*Starstreak HVM (High Velocity Missile) continues the development path of both Blowpipe and Javelin. It can be shoulder launched, fired from the Lightweight Multiple Launcher (LML) or vehicle borne on the Alvis Stormer APC which has an 8 round launcher (12 reload missiles can be carried inside the vehicle). Starstreak is designed to counter threats from very high performance low flying aircraft and fast pop-up type strikes by attack helicopters. Photo: MOD, Crown Copyright*

and speed of mechanised warfare and airborne firepower has extended the scope of a continuous engagement over time and space'.[16] This questions the utility of weapons systems that lack a high degree of mobility, such as FLAADS. It is based on the British Army's standard MAN truck platform and is designed to be installed in one place, such as an airfield. The Stormer is more manoeuvrable than FLAADS, but is not as able as other armoured vehicles in the Army's arsenal such as the Challenger 2. It is not able to keep up with them over rough ground. This raises doubts over its value in supporting an armoured battle. Future wars will depend on the ability to engage and then move with speed to another location. The use of static defence is becoming outmoded.

This is linked to the saturation of Surveillance and Target Acquisition (STA) assets on the battlefield. The ability to blend into the urban or rural landscape is crucial. The Stormer can spend time dormant; however, it must run its engines to charge its batteries. It will produce a heat signature, even if well-camouflaged. Thermal sheeting and a specially-designed exhaust go some way in reducing its thermal footprint but it is far from perfect.

On the other hand, Rapier's systems create a signature when running, and due to its trailer-based design, it is very difficult to camouflage them in any meaningful way. The Land Ceptor is better able to hide due to its vertical launch capabilities.[17] Nevertheless, on a MAN truck base, it is not a small bit of equipment. Even once static, it will take some time for its engines to cool down significantly enough to avoid emitting a thermal signature. And after that, its own sensors and inner workings will produce heat. Systems like Rapier and Land Ceptor that use tracker radars are susceptible to anti-radiation missiles such as Russia's Kh-31.

Whilst modern arms manufacturers will tout the ability of their systems to counter such a threat, it is only a matter of time until someone develops a missile that can defeat those systems. Each conflict has its own dynamics and can never be planned for with perfect knowledge. As such, systems with the largest degree of flexibility must be sought. This highlights the need for small and silent systems that can be quickly replaced or upgraded.

---

16   *O'Sullivan, Pat & Miller, Jesse Jr., The Geography of Warfare, (Abingdon, 2015), p.56.*
17   *Chuter, Andrew, UK Signs Deal for New Air Defence Missile, Defence News, 12 Jan 2015.*

MANPADS fit into this niche. Defence's current SHORAD and VSHORAD capabilities are costly, and there are not enough of them. They are also outdated and vulnerable in today's congested air operating environment as we've already seen. Are MANPADS, therefore the way forward? The New Zealand Army took delivery of '12 [MISTRAL MANPAD] launchers, 23 missiles, training simulators and logistic support,' in a contract worth $22.75 million.[18] A pittance in defence terms.

Indeed, the Federation of American Scientists produced research on the price of MANPADS on the black market with costs ranging from $5,000 to $250,000.[19] Whilst the British Army would not acquire weapons in such a way, it gives an indication of the low figures involved when discussing MANPADS. In these times of financial stringency, the principles of air defence are being compromised. One way of mitigating this would be to purchase MANPADS. Moreover, modern Surveillance and Target Acquisition (STA) equipment, be it thermal, optical, acoustic, or radar, is extremely effective. MANPADS have an incredibly small footprint, making them difficult to spot from either the air or the ground. They are also, largely, passive systems. Their signature can be hidden by a variety of means much more easily than the systems discussed above.

MANPADS are also incredibly mobile. They can be deployed in the light role, using quad bikes or a similar vehicle. France's light role air defence unit can deploy with only a Toughbook and an antenna alongside its weapons systems. The Fire Control Cell can receive a picture enabling the fire units to be informed about the current situation without the need for a huge relay station. The 35th Régiment d'Artillerie Parachutiste (RAP) uses the armoured vanguard vehicle (VAB) - a wheeled armoured personnel carrier - with its MISTRAL system loaded in the back, ready to be deployed when necessary. Heavier systems cannot be employed in such a manner due to their lack of speed and protection. Enemy STA systems would be able to identify them at distance and put countermeasures in place. Modern defensive aid suites on aircraft have the ability to detect a surface-to-air missile launch and then fire a weapon back at the source automatically. An immobile system would be destroyed quickly.



*A soldier from the Mixed Air Defense Artillery Regiment 2 locks onto a UH-1 helicopter during his unit's participation in Roving Sands '96, the US military's largest annual joint air defense training exercise. He is shouldering a FIM-43 Redeye Low Altitude Surface to Air missile. Photo: Staff Sergeant Regina Height, Released*

However, MANPADS can be moved swiftly within seconds of launch with a small signature, increasing their survivability. Utilising a theory being employed by the US Navy, the British Army could work to employ a doctrine that simply creates an 'unmanageable targeting problem for potential adversaries'.[20] Having a large number of air defence systems spread out over the battlefield, moving regularly, would lessen the enemy's targeting capability.

18   Pakdef, Mistral Surface-to-Air Missile System, Pakdef.
19   Schroeder, Matt and Buongiorno, Matt, Black Market Prices for MANPADS, Federation of American Scientists, June 2010.
20   Clark, Bryan, Peeling Back the Layers: A New Concept for Air Defence, Center for Strategic and Budgetary Assessments, 25 Feb 2015.

*Pictured is a member of 5 RIFLES armed with an NLAW Anti-Armour missile whilst on exercise in Estonia as part of NATO's eFP (ehanced Forward Presence).* **Photo: Lance Corporal Craig Williams, Crown Copyright**

*FOE 2035* highlights the challenge of increasing 'urbanisation' all over the world.[21] The fighting in Syrian and Iraqi cities shows how the urban environment can complicate operations. MANPADS can be moved into buildings and through alleys and streets in a way that larger systems simply cannot. Operating in a built-up environment is not straightforward. The difficulty of communications and ground protection are just two of the major hurdles to deal with, but MANPADS offer a degree of flexibility that simply does not stretch to other heavier types of platform. Major General Charles Callwell, discussing guerrilla warfare, said that highly mobile forces allow the exploitation of 'uncertainty'.[22] MANPADS are able to capitalise on this thinking. Building on the idea of increasing the number of weapons systems in an air defence fire group, the development of a constant air defended area, but by a fluid group of fire units, can be envisaged.

However, there are disadvantages to MANPADS. The principal one is their engagement range that currently reaches a ceiling of around 12,000 feet and a range of approximately 8 kilometres. Whilst the Stormer-mounted system reaches no more than this, FLAADS reaches out to around 25km. This range is increasing and further investment would extend it even more. A concern also exists over the fact that the stand-off distance of modern munitions exceeds that of MANPADS. However, this relies on the aircraft, or other ISTAR assets, first locating the system.

Using air observers to reduce radio and data traffic, and considering the passive benefits of MANPADS, there is scope to find ways to hide the capability from the enemy. It is vital to also consider the secondary effects of using MANPADS. The training bill would be significant, and it would be necessary to persuade pilots that an increase in such weapons systems would mean no additional risk to them. MANPADS cannot do the exact job of longer range systems, but they provide a vital role in layering air defence. They exist either as a last line of defence, or a preliminary one following a light role forced theatre

---

21   Ministry of Defence, 'FOE 2035', Ministry of Defence.
22   Bowdish, Randall, 'Military Strategy: Theories and Concepts', in Political Science Department - Theses, Dissertations, and Student Scholarship', (Nebraska, 2013), p.142.

*Flames light up the sky, after a U.S. Marine launches a PL-87 Stinger Missile at a flying drone at Onslow Beach on Marine Corps Base Camp Lejeune during the night fire portion of the 2nd Low Altitude Air Defense Battalion's live Stinger fire exercise April 16.* **Photo: Lance Corporal Cory D. Polom, Released**

entry. After this, more capable and longer range air, sea or land-based weapons systems can be used. MANPADS can be deployed quickly, and can be air-dispatched. This is very important when troops may need to be deployed with little notice. MANPADS can be on the ground in a matter of hours. They can also be used in conjunction with other systems in order to plug gaps in a defended area, or simply to enhance it. A number of capable systems exist now, which can be bought off the shelf.[23] As such, MANPADS should be bought to complement the UK's contribution to NATO's overall air defence capability. They cannot replace armoured and longer range, truck-based systems, but the advantages they offer are undeniable.

The British Army stands at the crossroads of its air defence capability and soon decisions must be made as our aging GBAD nears the end of its life. In these austere times flexibility is required to deal with new threats as they develop at an effective and reduced cost. General Sir Richard Barrons was recently quoted as saying that there is 'enough ground-based air defence to protect roughly Whitehall only'.[24]

The large air defence systems are not flexible and are therefore vulnerable to sustained bombardment as has been the case in the Ukraine and Syria. Moreover, if battles are forced into urban environments, units that only have access to armoured or trailer-based AD systems will be left wanting. The prevalence of UAS, and ability to bring massed fires to bear with ferocious speed, means that the ground battle needs to be fought by systems with a small signature and maximum mobility. All of this suggests a cheap, manoeuvrable, and passive alternative needs to be considered.

MANPADS fulfil these criteria. Their use is both viable as well as cost effective and thought needs to be put into how these systems can be deployed. Perhaps they could be placed into infantry battalions as the US Army has recently done? Whatever strategic decisions are made they are done so 'under partial ignorance'.[25] Defence must always be in a position to act pragmatically, which the greater proliferation of MANPADS would allow.

23   This is an important topic, but not one that is suitable here. There are many interesting discussions on the benefits of Commercial Off The Shelf (COTS) equipment, such as Jacques Gansler and William Lucyshyn, 'Jacques Gansler and Willian Lucyshyn, Commercial-Off-The-Shelf (COTS): Doing it Right', Center For Public Policy and Private Enterprise, http://www.dtic.mil/dtic/tr/fulltext/u2/a494143.pdf, September 2008.

24   Grierson, Jamie, UK Armed Forces 'Could Not Withstand Attack from Major Power like Russia, The Guardian, 17 Sept, 2016, https://www.theguardian.com/uk-news/2016/sep/17/uk-armed-forces-could-not-withstand-attack-by-major-power-like-russia,

25   Freedman, Lawrence Strategy, (Oxford, 2013), p. 500.

# AI: What Do We Want From It?

**Lieutenant Colonel Geraint Evans** explores the art of the possible in terms of what the British Army needs from platforms based on Artificial Intelligence, suggesting that further examination is required before jumping in.



The Dextrous Hand, the only commercially-available robot hand with all the movement capabilities of the human hand. This hand is now used by leading researchers to give their robot systems the full capability and flexibility of the human hand. *Photo: Shadow Robot Company Ltd, Released*

There exists a contentious belief military personnel could be replaced by autonomous fighting platforms based on Artificial Intelligence (AI), such 'killer robots' closing with and defeating the enemy.[1] Some may argue that is better than risking the lives of soldiers if technology can do the job instead, but is the argument so binary? Within the Army and Defence, the approach to applying technology has often been fragmented. This has previously led to a fixation on terms such as 'Big Data' and 'Cyber', with industry actively touting the underpinning technology before the Army fully understood the requirement for what it needed. That is not to say it is wrong to explore the use of AI, but it is germane to consider what we want within the technological art of the possible, not least because 'we tend to overestimate the effect of technology in the short run and underestimate the effect in the long run.[2]

## WHAT IS IN A NAME?

Some essential definitions are required; the overarching subject vernacular is extensive. There is first the word 'robot'. The *Oxford English Dictionary (OED)* refers to it as 'a machine capable of carrying out a complex series of actions automatically, especially one programmable by a computer.'[3] Think large-scale car manufacturing and you have the right idea. There is then the idiom 'autonomous robot', which is 'designed and engineered to deal with its environment on its own and work for extended periods of time without human intervention.'[4] That is analogous to the military term Remote and Autonomous Systems (RAS). If anyone is fixated on the 'killer robot' akin to *The Terminator*, then there exists the definition of 'a machine resembling a human being, able to replicate certain human movements and functions automatically.'[5] Also used extensively in discussions surrounding AI is the expression 'machine learning' (ML), which refers to the 'specific algorithms able to 'learn' from data they are provided and develop new ways to exploit it, without being explicitly programmed to do so.[6]

So what exactly is AI? The UK House of Lords Select Committee on AI itself states there is no universally accepted definition.[7] The UK government, in its *Industrial Strategy White Paper*, defines it as 'technologies with the ability to perform tasks that would otherwise require human intelligence, such as visual perception, speech recognition, and language translation.' Stuart Russell and Peter Norvig suggest it is a capability able to think and act *humanly*, whilst doing so *rationally*.[8] The OED pithily defines AI as 'the theory and development of computer systems able to perform tasks normally



*Pictured is a HARRIS T7 Bomb Disposal Robot equipped with high-definition cameras, lightning-fast datalinks, an adjustable manipulation arm and tough all-terrain treads, the robots are able to neutralise a wide range of threats. The MOD has ordered 56 robots due to be delivered to the UK and in service by December 2020. Photo: Lieutenant Barry Swainsbury, Crown Copyright*

1  Tegemark, Max, Life 3.0 – Being Human in the age of Artificial Intelligence, (London: Allen Lane, 2017), 110.
2  Doc Searls, The Intention Economy: When Customers Take Charge, (Harvard: Harvard Business Review Press, 2012), 257.
3  Oxford English Dictionary, 11th Edition.
4  Techopedia, [https://www.techopedia.com/definition/32694/autonomous-robot.
5  Oxford English Dictionary, 11th Edition.
6  See Expert System – Sematic Intelligence, http://www.expertsystem.com/machine-learning-definition
7  House of Lords Artificial Intelligence Committee, AI in the UK: ready, willing and able, Report of Session 2017-19 published 16 April 2017,https://publications.parliament.uk/pa/ld201719/ldselect/ldai/100/10005.htm#footnote-630-backlink
8  Russell, Stuart and Norvig, Peter, Artificial Intelligence: A Modern Approach 3rd Edition, (New York: Prentice Hall, 2009).

requiring human intelligence'.[9] Basically, AI seeks to imitate cognitive functions normally associated with the human mind, such as learning and problem-solving.[10]

## WHY MORALIZE?

The notion of AI is hugely emotive, as we are referring to something that could sit within the military 'kill-chain'. Some studies have suggested AI could one day develop at a rate humankind cannot match[11], making it 'superior' in cognitive terms and able to outmatch humans in many activities.[12] This was a claim supported by the late Stephen Hawking , his belief 'based on the ideology that *all* aspects of human mentality will eventually be realized by a program running on a suitable computer - a supposed 'strong AI.'[13] Today the Chinese *Sunway TaihuLight* supercomputer - as of November 2017 rated the world's fastest - is capable of 93 trillion calculations a second.[14] Is this the kind of thing Hawking feared?

Not necessarily, as faster computers do not simply make for strong AI. Even quantum computers - theoretically capable of significantly out-processing the conventional computers, though the technology for such machines is still evolving - 'are constrained by limits on what can actually be subject to computation (so-called computable functions).'[15] The human brain can undertake over 1000 trillion calculations a second at the functional level[16] (i.e. simply for the human body to work). Even so, the Chinese are attempting to develop the exascale Zhang Ting supercomputer capable of one quintillion calculations a second.[17] This puts it on par with the human brain processing at the neural level[18], or when it is seeking to solve complex problems.

Yet supercomputers take up vast space, consume lots of power and don't fit neatly inside our heads. In the Lucas-Penrose argument, the human mind is not a computer as conceived in technology terms, so trying to compare its abilities to one is nugatory.[19] The brain has, over thousands of years of evolution, wired itself to perform some tasks quickly and economically for the human being to survive, yet it undertakes other tasks, such as mathematical calculations, inefficiently (cavemen didn't need algebra). Even though our brains can store vast quantities of data, we're not wired to extract and use it in the same way as a computer. The crux of the argument is that our brains and computers are configured for fundamentally different purposes. That undermines - at least for now - the argument for strong AI and the belief 'it is possible….to construct a machine that has the same cognitive abilities as humans.'[20] The comparison in cognitive ability between humans and AI is one of the issues being investigated under Google's DeepMind 'Psychlab' project. One aim of this activity is to expose AI weaknesses and help developers improve them.[21]

## WHAT TYPE OF AI?

In many respects AI's potential is popularly conceived as 'strong', although it is possible some people overestimate the maturity of AI technology at present. Nonetheless, it has led to a cohort of scientists calling on the United Nations for a ban on the related technologies[22], fearful of what they could do. Russell classes this as 'being afraid of the super-smart robot'.[23] Yet put that in context. The ability of a computer to win at games such as Chess or the Chinese past-time Go are claimed as first steps towards strong AI. Even if Google's DeepMind AI platform AlphaGo is virtually unbeatable at playing Go by either human opponents or older versions of the capability (Google used ML to improve AlphaGo's performance[24]), that isn't the whole story. The platform is still learning within the bounds of Go as it is played, driven by the algorithmic parameters set by the DeepMind programmers. What AlphaGo does not do of

9    *Oxford English Dictionary, 11th Edition.*

10   *Russell and Norvig, op cit.*

11   *Bostrom, Nick, Superintelligence: Paths, Dangers, Strategies, (Oxford: Oxford University Press, 2014), 28-32.*

12   *Bishop, Mark, Fear artificial stupidity, not artificial intelligence, New Scientist, 18 Dec 2014.*

13   *Ibid.*

14   *Burgess, Matt, China's supercomputer simulated the Universe with 10 trillion digital particles, Wired, 31 July 2017.*

15   *Floridi, Luciano, 'The Ethics of Artificial intelligence'. In: Franklin, Daniel (Ed), Megatech – technology in 2050 (London, The Economist, 2017, 160.*

16   *The Thermodynamics of Brains and Computers, http://webhome.phy.duke.edu/~hsg/363/table-images/brain-vs-computer.htm*

17   *Burgess, op cit.*

18   *Brain Performance in FLOPS, AI Impacts, 26 Jul 15*

19   *Megill, Jason, 'The Lucas-Penrose Argument about Gödel's Theorem', The Internet Encyclopaedia of Philosophy, 24 Jan 18.*

20   *Ibid.*

21   *Barniuk, Chris, Virtual psych lab seeks flaws in digital mind, New Scientist, 10 Feb 2018.*

22   *See 'Elon Musk Leads AI Experts With Letter Urging UN to Consider Threat of Autonomous Weapons', Futurism.com*

23   *Russell, S., 'Should we fear supersmart robots?', Scientific American, Jun 2016, (No.314), 58–9.*

24   *Revell, Timothy, AlphaGo's AI upgrade gets round the need for human input, New Scientist, 18 October 2017.*
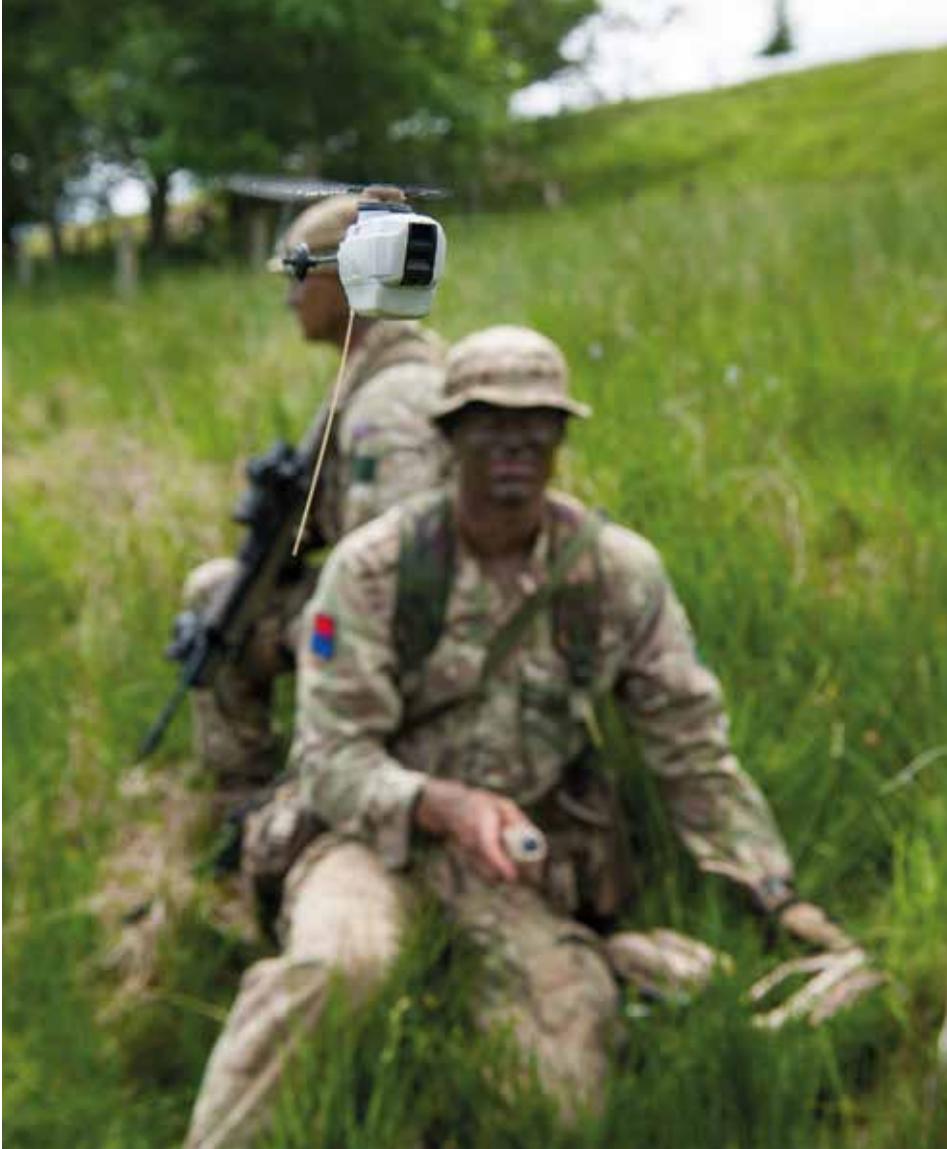
*Pictured are members of the Royal Regiment of Artillery during a two-week long exercise in the UK using Black Hornet UAV's to conduct river crossing surveillance.* **Photo: Stuart A Hill AMS, Crown Copyright**

its own volition is call an operational pause, take stock of proceedings and adapt its tactics or strategy based on new intelligence received. That is because humans still control how it will ultimately behave. *T3: the Rise of the Machines* isn't yet with us.

There thus exists an argument for 'weak' AI. Refer to the Sunway TaihuLight. It is fast but can't 'beat' a one-year old child relating to its environment. The child - when cold and hungry - has determined crying will attract its parents, who will tend to its needs. The child is sentient, its senses interacting with its surroundings; and computing the data it receives as much through instinct as 'logical' thought. AI platforms and RAS currently do not enjoy this degree of sensory connectivity in a truly autonomous capacity, making them inherently

'weak'. They may be able to respond to new data within programmed parameters, yet they do not have the level of self-awareness possessed by the one-year old child.

This is reflected in the *Moravec Paradox:* high-level brain functions such as reasoning and problem-solving can be modelled in computers, but low-level functional sensor-motor skills - based on millions of years of human evolution - are much harder to emulate.[25] In other words, difficult tasks can be made easy with AI; seemingly simple ones cannot. It is further supported by *Polyani's Paradox*; in essence 'human knowledge and capability rely on skills and rulesets……transmitted to us via culture, tradition and evolution'.[26] We cannot transmit everything we know to machines because we have learnt and hold that knowledge subconsciously.

---

25   Moravec, Hans, *Mind Children: the Future of Robot and Human Intelligence, Harvard: Harvard University Press, 199), 44-50.*
26   Danaher, John, 'Polyani's Paradox: will humans maintain any advantage over machines?', *Philosophical Disquisitions,*

Moravec and Polyani's positions aren't the only challenge to AI development, which can be explained with Freud's model of the psyche. He divided our brains into three components striving for dominance:

- **The 'id'** - *the primal animal brain and source of emotions, as well as allowing us to interpret the emotions of others. It is regarded as the font of human creativity and strategic thinking.*

- **The superego** - *this acts as a control mechanism on the id, based on the values an individual was raised with and their societal 'conditioning.'*

- **The ego** - *the rational mind, objectively analyzing and problem-solving. It lacks the power to act as a control mechanism, but is used by the id to further its objectives.*[27]

Ultimately, the human mind has elements existing in competition, something an AI platform or RAS must be theoretically capable of replicating. Yet referring to the Lucas-Penrose argument, it may be neither feasible nor expedient. Using Freud's model, AI can emulate the 'ego' and elements of the 'superego' based on the parameters that algorithm writers set and the operational data available. However, imitating the 'id' is problematic, especially when considering the raw emotions involved in warfare. Infantry closing with and engaging the enemy, bayonets fixed, draws upon very primal reactions in 'kill or be killed' scenarios. The instinct to survive on a personal level - and ensure the survival of one's comrades - is paramount. The challenge for AI, if there is the intent to have it replace soldiers on the battlefield, is to replicate the most primitive elements of what it is to be human.

## IS IT HUMAN GOOD, ROBOT BAD?

There has been automation and a degree of autonomous capability permeating our lives for years. The 'auto-pilot' capability on commercial aircraft is one example; AI powered driverless vehicles are well-covered in the media.

There is even a pizza-delivery company at the University of California, Berkley, that has taught its delivery robots to cross the road safely[28] (it now undertakes far more orders). The UK MOD is now looking at the use of RAS in the last mile of the supply chain to front-line units,[29] emulating US use of the unmanned K-MAX helicopter for resupplying troops in Afghanistan.[30] Yet the algorithms used aren't foolproof: share values may drop on Stock Exchanges because the algorithms used for trading have similar parameters and feed off each other, creating an automated self-fulfilling prophecy as exemplified in the 2010 Stock Market 'Flash Crash.'[31]

Civilian examples aside, many arguments concerning the use of AI in the military will gravitate back to the use of lethal force. US National Intelligence studies believe banning AI for ethical reasons is foolhardy, as it would not stop enemies developing it for asymmetric advantage.[32] Could we indulge 'killer robots'? They may be needed to deliver lethal force as their decision-making could be quicker - and more accurate - than a human's. The RAF's Brimstone missile system uses embedded algorithms to search for targets within a predefined area, determine what is valid and strike those positively identified.[33] If that is not possible, it detonates in a safe area. From a moral perspective, some 'human rights groups see the use of precision-guided weapons as essential to avoiding civilian casualties; crude unguided weapons are considered reckless and irresponsible.'[34]

The premise remains that AI or RAS can compute and discern threat streams faster than we can, being less prone to cognitive error although that is not guaranteed as recent RAND research suggests.[35] Nonetheless there is still evidence to suggest they are also more resistant to 'scenario fulfillment', where the human operator may subconsciously fit events into a scenario in their mind, ignoring alternative interpretations and shaping their decision-making accordingly.[36] This is one of the reasons given to the US shooting down of an Iranian airliner in 1988. The US radar operators imagined they

27    Taken from The Empirical Future, Sigmund Freud and Artificial Intelligence, http://predictionboy.blogspot.co.uk

28    'Meals on Wheels get smart upgrade', New Scientist, 16 Dec 17.

29    See Innovate UK at ktn-uk.co.uk/funding/autonomous-supply –to-military-front-line-apply-for- contracts.

30    See Army Technology, 'Using autonomy to supply the last mile' at army-technology.com/features

31    See MIT Technology Review, 6 May 2015, https://www.technologyreview.com/s/512291/how-to-avoid-another-flash-crash/

32    See Greg Allen and Taniel Chan, Artificial Intelligence and National Security A study on behalf of Dr. Jason Matheny, Director of the U.S. Intelligence Advanced Research Projects Activity (IARPA), Harvard Kennedy School Belfer Centre for Science and International Affairs, Jul 17.

33    See 'Brimstone Advanced Anti-Armour Missile', Army Technology and 'Brimstone Air to Ground Missile', Air Force Technology.

34    Hambling, David, 'Letting human supervision robots kill without could save lives', New Scientist, 8 Nov 17.

35    Osoba, Osanda and Welser, William, 'An Intelligence in Our Image: The Risks of Bias and Errors in Artificial Intelligence', RAND Corporation, 6 Dec 17, https://www.rand.org/content/dam/rand/pubs/research_reports/RR1700/RR1744/RAND_RR1744.pdf.

36    See Ismail, Nick, 'What are the parallels between the human brain and artificial intelligence?', Information Age, 6 Dec 17.

*Pictured is a Bladerunner craft fitted with the UK's Maritime Autonomy Surface Testbed (MAST), an unmanned surface vessel (USV) based on the innovative BLADERUNNER hull shape, undergoing trials in the Tidal Thames.* **Photo: POA (Phot) Owen Cooban, Crown Copyright**

were being attacked and made the evidence before them fit that threat scenario.[37]

## DRONING ON

The march towards AI in the battlefield remains inexorable, yet whilst the use of drones in warfare grows, weaknesses in their remote control are being exploited. This has given rise to 'new tactical jamming systems with names like *DroneDefender* and *DroneShield*, designed to break the radio link between operator and drone.'[38] That point needs amplifying. For any AI, its essential technology and algorithms must be robustly protected in the electronic battlespace. At the same time, how do we get assured data to and from AI platforms or RAS? Humans need it in the battlespace, so logically AI and RAS will too - if the data fed too and from them is compromised. Then their utility is undermined. The very nature of AI capabilities creates vulnerabilities in our force composition and opportunities for enemy attack. We could use AI to augment our defences also, which will require a system of systems approach in understanding where the AI friction points and vulnerabilities lie, balanced against clear capability requirements.

If remote control isn't possible, increased autonomy beckons; Russia appears to be investing heavily here based on arms exhibitions covered in the media. The Izhevsk Radio Plant developed the 'mobile robotic complex', an autonomous platform developed to guard ballistic missile platforms, capable of detecting and destroying targets without human intervention (the US uses unarmed sentry robots called MDARS to guard nuclear sites)[39]. Kalashnikov have developed the *BAS 01G SORATNIK*, a seven-ton armored vehicle equipped with a 7.62mm machine gun (capable of being swapped with a 12.7mm HMG) and eight Kornet anti-tank missiles. Designed to support infantry, its developers claim it can function remotely up to six miles from the operator and with varying degrees of autonomy outside the electronic link. Its successor, the BAS 01G BM SORATNIK, will weigh up to 20 tons and include a 30mm cannon, Kalashnikov claiming it will be used in reconnaissance-strike roles.[40] Is the degree of autonomy such platforms are claimed to have currently feasible? Perhaps. The more salient point is the fact such autonomous capability is being pursued, playing to what is dubbed the 'AI arms race'.[41]

---

37   Hambling, 'Letting robots kill without human supervision could save lives', op cit.

38   Ibid.

39   Hambling, David, 'Armed Russian robocops to defend missile bases', New Scientist, 23 Apr 14.

40   Army Recognition, 'Russian company Kalashnikov is developing the Soratnik reconnaissance/combat robot TASS 82003173 [https://www.armyrecognition.com/weapons_defence_industry_military_technology_uk/russian_company_kalashnikov_is_developing_the_soratnik_reconnaissance/combat_robot_tass_82003173.html,

41   See Simonite, Tom, 'For Superpowers, Artificial Intelligence Fuels New Global Arms Race', Wired, 8 Sep 17.

The Russian approach raises an interesting point. The RAS discussed are vehicle-based, which may suit operations in open country. Yet what about urban environments where vehicle use is constrained and platforms more vulnerable? Do we instead explore use of aerial AI platforms? Or do we augment dismounted infantry, with AI producing something akin to the capabilities borne by the fictional Master Chief character in HALO (why deride ideas stemming from the minds of science fiction writers and game creators)? Someone operating on foot will be a lot quicker moving through buildings, which is especially relevant if one considers the potential for the growth of mega-cities in the future. How can AI be a force multiplier there?

If other militaries are well ahead with developing RAS to sit within their kill-chains, what is the solution to our ethical dilemma? The use of 'ethical governor software', pioneered with US government backing by researchers at Georgia Institute of Technology in Atlanta,[42] could allow AI and RAS to take into account rules of engagement based on established international law, for example. If a platform in the battlespace could not confirm a potential target as valid, it may determine it needed to get closer in order to take a further look, potentially vetoing the attack if necessary.[43] Yet just as it would be difficult to establish regulation for AI technologies, the same challenge would apply to ensuring all AI platforms and RAS adhere to a code of ethics - enforcement would be nearly impossible.[44] Sharkey goes so far as to argue that we should not actually seek to replace humans with RAS in those situations requiring 'moral competence and an understanding of the surrounding social situation.'[45] Here, the human stays firmly in the loop.

## DATA AS THE OPPORTUNITY SPACE

Perhaps we should consider a wider use of AI? Recently, the US initiated Project Maven, seeking to integrate AI and ML across data exploitation operations to maintain competitive advantage.[46] This is generating the term 'algorithmic warfare'. The Director for Defence

Intelligence Warfighter Support refers to it as 'the employment of big data analytics, AI, ML, computer visualisation and neural networks',[47] operating in tandem to get the most from vast data holdings. Such approaches are not infallible - research has shown AI can be deceived in imagery exploitation by manipulating pixels[48] - but the technologies used constantly evolve.

Human involvement in the 'traditional' manoeuvre spaces (air, sea, land, cyber, space and now information), is reliant upon manipulating data if activity is to be optimised or effective. Yet from an enterprise integration and exploitation perspective, UK Defence has often been behind the curve here. We should thus consider how we could use AI to optimise Intelligence, Surveillance and Reconnaissance (ISR) sensors, and consume the data they produce, to enhance decision-support. The first edition of *JDP04 Understanding* diagrammatically depicts the process[49] staff must follow, cohering and exploiting multiple information, ISR and knowledge sources from across physical, virtual and cognitive networks. Even if that requirement is not explicitly emphasised in the *JDP04* second edition released in 2016, it doesn't mean we don't have to do it. The growth in available data suggests that the technology 'edge' pursued in the Project Maven example is now even more important if we wish to achieve a position of information superiority or advantage. AI and ML could have a key role to play in 'on-boarding' data from ISR sensor to our communications system of choice, fusing, filtering and exploiting it at different points in the chain in order to alleviate operator overload and speed up the Observe-Orientate-Decide-Act (OODA) loop. It also doesn't stop there – any branch that could benefit from exploiting large data sets, such as in Logistics or Medicine, could benefit from the same technologies.

Can AI augment extant capability? Anyone having sat in an AFV traversing rough terrain at speed, and trying to manipulate operational data using on-board Information Communications Technology, will know a likely outcome

42  Deng, Boer, *Machine ethics: the robot dilemma*, Nature, 1 Jul 15, https://www.nature.com/news/machine-ethics-the-robot-s-dilemma-1.17881

43  Hambling, *Letting human supervision robots kill without could save lives*, op cit.

44  Tegemark, 116-118.

45  Sharkey, Amanda, 'Can we program or train robots to be good?', *Ethics and Information Technology*, 2017, https://link.springer.com/content/pdf/10.1007%2Fs10676-017-9425-5.pdf

46  US DOD Deputy Secretary of Defence, *Establishment of an Algorithmic Warfare Cross-Functional Team (Project Maven)*, 26 Apr 17 www.goveex.com

47  Lieutenant General John Shanahan In: Magnuson, Stew, *DoD Making Big Push to Catch Up on Artificial Intelligence*, National Defence Magazine, 13 Jun 2017.

48  Chirgwin, Richard, *Can you can get from 'dog' to 'car' with one pixel? Japanese AI boffins can*, The Register, 30 Oct 17.

49  UK Ministry of Defence, *Joint Doctrine Publication 04 Understanding*, (Shrivenham: Defence Concepts and Development Centre, 2010), 2-5.

is being sick on the keyboard. It is a natural reaction based on the enclosed environment, sense of motion and attempting to visually comprehend data under such conditions. Yet what if AI could direct the ISR sensor suite on an AFV platform to start optimising its activity, configuring data feeds to and from the AFV as the platform moves from rural into increasingly urban terrain? The same AI could determine when it was safe to broadcast and receive data - potentially from a city's 4G/5G network as a bearer of opportunity - deliberately keeping the electronic footprint of the platform minimised. Data filtered to the operator could be automatically made situation-specific and easily digestible.

However, someone must maintain AI platforms and RAS, upgrade them and write the algorithms. Timelines for fully embracing AI must be carefully planned for, as must our associated capability gap analysis and requirements setting. Furthermore, the Knowledge, Skills and Experience bill for Army personnel will be significant, something we must grow in parallel as it will take time and must be retained. It can't all be outsourced, not least because industry will need to be paid a premium for their efforts, whilst the post-Snowden landscape should have taught us that there are some critical activities that must be kept 'in-house' for very good security reasons. It is very possible, however, that we will remain encumbered by own our procurement constraints, coupled with extended arguments on the morality of using AI. Do our potential enemies have the same procedural or ethical dilemmas? In some cases obviously not, so in an AI 'arms race' such enemies may end up with comparative advantage unless we consider exactly what we want from AI, putting in place a resourced and approved plan for its delivery.

## CONCLUSION

The fact remains that AI and RAS cannot understand the complexities of a situation or the nuances of human behaviour stemming from our evolution. There is no pragmatic model of the whole human psyche for them to emulate, irrespective of the processing power and data storage made available. There are possibilities that may emerge when the full potential of quantum computing is realized, though that is not yet here and remains the subject of a separate debate. The decision facing the Army is if it wishes to pursue strong or weak AI in the near to medium term, noting that there are opportunities and constraints with regards to how and where it is applied.

Whilst AI discussions undoubtedly have a moral dimension, that alone should not drive the issue of our Army using it. Rapid technology development and its ramifications are here to stay, so shaping that continuum is non-discretionary for the Army: we can either choose to fall behind in exploiting AI, or we make a rational and informed decision as to the areas we could seek to use it to our advantage. The danger is if we downplay the technology aspect for moral reasons, we may find ourselves facing a strategic paradox, where the future we envision or hope for does not emerge, leaving us unprepared with the capabilities we choose and where our enemies could retain a significant technological vote.



*An Explosive Ordinance Device robot called Dragon Runner being controlled by students. The British Army launched its Year of Engineering at the Royal School of Military Engineering at Minley in Surrey, showcasing the breadth of Army engineering capabilities and opportunities to over 100 14-17 year olds from schools and colleges across the region.* **Photo: Corporal Dek Traylor, Crown Copyright**

# The Myths Surrounding Veterans

**Professor Vincent Connelly**, Department of Psychology, Oxford Brookes University, looks at the myths surrounding veteran post-conflict difficulties specifically examining why misleading information and erroneous beliefs still exist.

*A veteran of the Falklands war wears his medals at a memorial service for the 30th anniversary of the conflict.*
*Photo: LA(Phot) Dave Hillhouse, Crown Copyright*

The editorial by Holmes et al[1] published in the *British Military Journal BMJ 2013* on the myths surrounding the suicides of veterans of the Falklands conflict concludes that we should rely on 'sound statistics not misleading sound bites.' Building on this important contribution, we should recognise why misleading information and erroneous beliefs about veterans persist. We may also want to acknowledge that the minority of veterans who do have difficulties have certain distinctive behavioural features that contribute to this persistence.

Firstly then, why do misleading beliefs persist about veterans? Humans are 'cognitive misers' wherever possible taking shortcuts that enable potentially complex information to be processed in a simplistic and expedient fashion.[2] A common shortcut is where we causally link associated memories through intuition rather than by systemically processing information to more reliably infer causation.[3] Clearly this has adaptive benefits as we do not have to assess each new piece of information on its merits. However, heuristic processing can be prone to biases in recall and highly influenced by stereotypical information.[4]

Indeed there is a longstanding stereotypical belief that military service is psychologically damaging. A letter from 1881 states '…the nation treats its soldiers like oranges, that having sucked them dry, it throws them aside.'[5] While these reports may have had some validity in the past, more recent studies show that military service for most veterans is a positive boost to post-service life.[6][7] However, negative beliefs about military

service still strongly persist in the public arena.[8] Therefore, reports of high post-conflict suicide rates fit with commonly held stereotypical views of service experience (i.e., that it is psychologically damaging[9]) and popular beliefs about the immediate causes of suicide (i.e., prompted by psychological distress[10]), leading people to make strong intuitive connections between their beliefs about veterans 'damaged' in service and those veterans post-service psychological health. A further contributing influence is that events that are poignant and associated with death become easily recalled. This ease of recall leads the reported event to be perceived as more common than it really is.[11]

Furthermore, a set of perceived causal connections strongly fitting with pre-existing beliefs and stereotypes are subject to confirmation biases whereby disconfirming information (i.e., sound statistics) can often be rejected as they do not conform to the strongly held views of individuals.[12] This then would seem to be a plausible explanation for why 'misleading sound bites' about veteran suicides are more influential than 'sound statistics'.

Furthermore, while there is clear evidence that absolute statistical numbers of veterans who commit suicide, end up in prison or are homeless are very low, research does show that there is a veteran distinctiveness in these matters that could, arguably, also feed the confirmation biases around veterans. For example, while the rates of suicides in veterans are statistically lower than the

1    Holmes, J, Fear, NT, Harrison, K, Sharpley, J, Wessely, S., Suicide among Falklands veterans (Editorial), BMJ 2013;346:f3204
2    Kahneman, D., Thinking, fast and slow, London, UK, Allen Lane Penguin Books, 2011.
3    Chaiken, S., Heuristic Versus Systematic Information Processing and the Use of Source Versus Message Cues in Persuasion, J Pers Soc Psych, 1980 39(5), 752-766.
4    See Kahneman, D., Thinking, fast and slow.
5    Letter to Edinburgh Review dated 1881 cited in French D, Military Identities: The Regimental System, the British Army, and the British People, 1870 - 2000, Oxford, UK: Oxford University Press. 2005. p.253.
6    Iverson, A, Nikolaou, V, Greenberg, N, Unwin, C, Hull, L, Hotopf, M, et al., what happens to British veterans when they leave the armed forces? Eur J Public Health 2005;15:175-84.
7    Hurley, S, Helping or hindering heroes? UK Armed Forces Veterans Literature Review, Ministry of Defence, 2012.
8    Gribble, R, Wessely, S, Klein, S, Alexander, DA, Dandeker, C, Fear, NT., Are the UK Armed Forces understood and supported by the British Public? Report for the Public Perceptions Symposium. Kings College, London, 3 October 2013.
9    Ashcroft, Lord, The Armed Forces and Society: The military in Britain - through the eyes of Service personnel, employers and the public; 94% of 18-34 year olds thought it was common for Veterans to have some kind of physical, emotional or mental health problem as a result of service.
10   Joiner, T., Myths About Suicide, Cambridge, MA: Harvard University Press; 2010.
11   Kuran, Timur and Sunstein, Cass R., Availability Cascades and Risk Regulation, Stanford Law Review, Vol. 51, No. 4, 1999; U of Chicago, Public Law Working Paper No. 181; U of Chicago Law & Economics, Olin Working Paper No. 384.
12   See Kahneman, D., Thinking, fast and slow.

general population[13] there are differences in the pattern of suicide. Primarily, the age of suicide of serving and veteran members is statistically lower than in the general community.[14] Families tend to take longer to recover from the suicides of those who are younger and tend to look to ascribe more blame for such events.[15] [16] This makes for more salient and reportable cases in the press. The added emotional charge of the story strengthens accessibility of associative memories and feeds the confirmation bias further in the general public.[17]

There are also fewer veterans in prison than one would expect proportionately given the social strata of the armed forces.[18] However, those veterans that are present in prison tend to be there for more violent offences and as a group tend to be older - proportionately more than the rest of the prison population.[19] This again makes them a more salient population more readily noted by those dealing with offenders and so feeding a confirmation bias.

There are fewer homeless veterans than is commonly thought.[20] However, those veterans who are homeless tend to be older and homeless for longer compared to the rest of the homeless population.[21] This difference again makes for a more noticeable, homeless population of veterans.

Therefore, we can understand how misleading 'sound bites' captures the popular imagination. The stereotype of the 'damaged' veteran is entrenched because it matches intuitive individual beliefs about military service and is reinforced by the particular salience of those veterans who do suffer in terms of suicide, prison or homelessness. Thus, the salience of the suffering minority feeds the confirmation bias that keeps the old stereotype about the majority very much intact.

13    Defence Statistics (Health). Suicide and open verdict deaths in the UK Regular Armed Forces 1984–2012, Office for National Statistics: Statistical Notice. London, UK: Defence Analytical Services Agency. 2013.

14    Kapur, N., While, D., Blatchley, N., Bray, I. and Harrison, K., (2009), Suicide after leaving the UK Armed Forces: A cohort study. PLoS Med, 6(3), e26.

15    McIntosh, J. L., & Jordan, J. R., The impact of suicide on adults., In J. R. Jordan & J. L. McIntosh (Eds.), Grief after suicide: Understanding the consequences and caring for the survivors (pp. 43–79), New York, NY: Routledge, 2010.

16    Boelen, P, van den Hout, M, van den Bout, J., Cognitive-Behavioral Conceptualization of Complicated Grief, Clinical Psychology: Science & Practice, 2006;13(2):109-128.

17    Greifeneder, R., Bless, H. Pham, MT., When Do People Rely on Affective and Cognitive Feelings in Judgment? A Review, Pers Soc Psychol Rev 2011 15: 107-141.

18    Ministry of Defence, Estimating the proportion of prisoners in England and Wales who are ex-armed forces - further analysis, 2010.

19    Macmanus, D, Dean, K, Jones, M, Rona, RJ, Greenburg, N, Hull, L, et al., offending by UK military personnel deployed to Iraq and Afghanistan: a data linkage cohort study, Lancet 2013; 381:907-17.

20    Rhodes, D., Pleace, N., Fitzpatrick, S., The numbers and characteristics of homeless ex-service people in London, A Review of the Existing Statistical Data, York: Centre for Housing Policy, University of York. 2006.

21    Johnsen S, Jones A, Rugg J., The experiences of homeless ex-service personnel in London, York, Centre for Housing Policy, University of York, 2008.

*Pictured is a homeless British veteran near Princes Street, Edinburgh.* **Photo: Benjamin Brock, Creative Commons Attribution-Share Alike 3.0 Unported License, Wikipedia.**

We agree that concern about the psychological consequences of military service should be based on sound statistics but we should also be aware why 'sound bites' are much more believable for many. This may help to explain wider issues related to the military such as why many individuals in the UK hold the services in high regard but at the same time would never consider joining.[22] Despite the sound evidence that the vast majority of veterans do well [23], entrenched societal beliefs and the easy media 'sound bite' mean that the military will continue to be judged unfairly on how it prepares veterans for post-service life for a long time to come.

---

22   See Ashcroft, Lord. *The Armed Forces and Society: The military in Britain –through the eyes of Service personnel, employers and the public.*
23   See Iversen A, Nikolaou V, Greenberg N, Unwin C, Hull L, Hotopf M, et al. *What happens to British veterans when they leave the armed forces?*

# Risk Without Reward

**Major Andy Richards, JSCSC**, examines the flaws of the UK approach to operational risk and force protection from a combat arms perspective.



*Pictured is a 2 YORKS sniper, providing over watch security for the Afghan National Army Officer Academy (ANAOA) 10 year graduation ceremony, which was held at their Kabul facility. Photo: Lieutenant Colonel Humphris, Crown Copyright*

*It will be exceptional to win a battle without taking certain risks. It requires a nice judgement to decide what risks are legitimate and justifiable, and which risks are definitely not so. A commander who is not prepared to take a chance, and who tries to play for safety on all occasions will never reap the full-fruits of victory.*[1]

Field Marshal Montgomery of Alamein

One might assume that it would be folly for an army not to apply Field Marshal Montgomery's sage advice; ignoring it would surely cede the initiative to the enemy, negate the investment in the generation of capabilities and undermine the morale of soldiers. Yet in the minds of the Combat Arms cohort of Intermediate Command and Staff Course (Land) (ICSC(L) 13, that appears to be what they fear we will do on future operations. So what basis is there for these fears?

The concerns of these officers lie in the approach taken by the Army to operational risk[2] and Force Protection. It is an approach that has over the past decade paradoxically put our soldiers in danger through well-intentioned attempts to protect them; an approach that has placed insufficient emphasis on achieving operational effect, is at odds with the central tenets of our capstone doctrine[3]; and which threatens our credibility as an army.

To provide a starting point for why we have a problem in our approach to operational risk, consider these scenarios from Op HERRICK:

- *Sangin 2009: A multiple commander, well aware of the very high IED threat, considers the most effective mitigations. He concludes that avoiding IEDs entirely is the most logical option; to do so however, he will need to take unusual routes over difficult terrain, almost certainly including high compound walls. Aware that doing so carrying the mandated kit might restrict him to getting no further than 1.5km from the PB in a seven-hour sortie, he grudgingly accepts that he may be forced to stick to the high risk routes if his patrol is to achieve any useful effect on the ground.*



*Troops of 2nd Battalion The Rifles (2 Rifles) mounted a 20 hour operation to clear a safe route to Patrol Base (PB) Wishton in Sangin, Afghanistan.* **Photo: Corporal Russ Nolan RLC, Crown Copyright**

---

1   *Kite, B., 2016, Stout Hearts, The British and Canadians in Normandy, Helion & Company p274.*
2   *ADP Land Ops Para 6.6-2e Operational risk involves two areas: Risk to Force - loss of elements of the force or damage to its fighting power; Risk to the Mission – the risk that the mission will not succeed.*
3   *ADP Land Ops para 6.14 Mission Command…is not about encouraging recklessness or gambling, but about accepting errors in the pursuit of calculated risk-taking, boldness and initiative.*

- *November 2011: A 12-man patrol moves in the familiar single-file Afghan snake across the flat, open farmland on the Dashte fringe, approximately 1 mile north of the NEB Canal in Nad-e-Ali District. As they proceed towards the sanctuary of Patrol Base FOLAD, a single shot is fired at the rear man from approximately 200m. The round passes through his patrol Bergen before embedding in his OSPREY plate, knocking him off his feet.*

In the first vignette, we might ask why the patrol commander, clear on what he wanted to achieve, decided to adopt a tactically unsound option, pushing his men into a high-threat area; also whether he was achieving the Reassurance effect that should be the object of the majority of patrols in COIN operations, or was he simply focussed on avoiding an Improvised Explosive Device (IED) strike? In the second, the reader may ask why a multiple commander, trained at our peerless Infantry Battle School, chose to patrol across flat, open ground in single file, when he was aware that the IED threat was negligible but the small arms threat high. These scenarios, based in the first instance on an ICSC(L) student's experiences on HERRICK 10 and in the second from the author's own sub-unit on HERRICK 15, serve to highlight some of the failings generated by the current approach to the consideration of risk and the resultant often inflexible Force Protection[4] measures which follow.

These failings include: the use of unbalanced risk assessment tools; a failure to adequately consider or quantify the second-order consequences flowing from well-intentioned steps to address particular, very apparent threats; and a tendency to apply blanket measures across a theatre. If the vignettes above are taken from Op HERRICK, the concerns they raise over our approach to risk remain pertinent, not least given the aspiration to send increasing numbers of our personnel into potentially ambiguous situations, evidenced in the introduction of the Specialised Infantry Battalions (SpIBs). If we cannot in future demonstrate Montgomery's 'nice judgement', then we will continue to both unwittingly endanger our soldiers whilst hindering them in delivering operational effect, ultimately diminishing our credibility with partners and potential adversaries whilst reducing the utility of the military as a foreign policy tool.



*Soldiers file away after disembarking a Royal Air Force Chinook helicopter during Operation Banbarac 3 in Afghanistan.*
*Photo: Staff Sergeant Mark Jones RLC, Crown Copyright*

---

4   *AJP 3-14 Allied Joint Doctrine for Force Protection defines Force Protection as: Measures and means to minimise the vulnerability of personnel, facilities, equipment, materiel, operations and activities from threats and hazards iot preserve freedom of action and operational effectiveness thereby contributing to mission success.*

## THE VIEW FROM GROUND LEVEL

To articulate in more detail the problems with our approach to risk as perceived at the tactical level, we can consider some of the responses of the 62 Combat Arm officers who replied to a questionnaire posed to ICSC(L) staff and students from Courses 13A and 13B. The questions asked for yes/no answers but also invited comment.

The first question asked respondents to consider whether they believed that the Tactics Techniques and Procedures (TTPs) taught by OPTAG were advisory or mandatory; two-thirds assumed the former. Two interesting points can be drawn from the responses to this question. Firstly, the lack of an emphatic answer suggests that in the first instance we are failing to provide clarity during training as to where and when theatre-specific TTPs should take precedence over those that appear in generic low-level doctrine, such as Platoon Tactics.[5] Secondly, there was a near universal consensus amongst those who offered comment that TTPs were fundamentally sound as a means of mitigating the particular threat against which they were generated. On the latter point, it must be noted, however, that in the *Op HERRICK Aide Memoire* [6], the particular threat on which almost all TTPs were focussed was that from IEDs. With one-third

5   *Inf Tac Doctrine Vol I Pam 3.*
6   *AC71901 LXC Op HERRICK Aide Memoire v9 dated Mar 12.*

of respondents assuming that TTPs were mandatory, one can understand why for many, including perhaps our NCO in the first vignette, regardless of the specific local threat, patrolling in configurations designed solely to counter IEDs became the default; or as one respondent damningly noted: *'The fear of IEDs overcame the requirement for basic soldiering.'* Further highlighting how ingrained this mind-set has become, a full sub-unit within the author's battalion on a post-HERRICK Ex WESSEX WARRIOR was observed moving in daylight over open ground in single file.[7]

Respondents were then asked if they ever felt that adherence to TTPs or FP direction increased risk to their soldiers or was a factor in causing casualties - 56% replied in the affirmative. This begs the question: why would such a high proportion of respondents feel that by following direction or teaching intended to protect them, they will be exposed to an increased risk of harm? Herein lies the paradox of Force Protection; a well-intentioned drill or piece of direction may mitigate the obvious threat it is intended to counter, but increase the threat from another source.

Examples of this paradox offered by respondents included: soldiers too encumbered by Combat Body Armour (CBA) and Electronic Counter Measures (ECM) to effectively return fire, adhere to the basic principles of patrolling[8], or close with insurgents in contact.[9] More examples included an increase in attacks on a Patrol Base (PB) where the decision had been made to halt offensive patrolling in a bid to reduce casualties; the requirement to utilise unarmoured vehicles to replace unusable Protected Patrol Vehicles (PPVs); and the requirement to reduce the number of soldiers deploying on strike operations to ensure full ECM suites could be carried, even in areas of low IED threat.

Respondents were then asked whether they could recall particular instances where they would have wished for greater freedom to decide on the level of risk they were able to take - 63% said yes. Unsurprisingly, many of the positive comments focused on a desire to take risk on the use of Combat Body Armour (CBA) and ECM, two obvious areas that have a significant impact on tactical mobility. The introduction of the VIRTUS system may lessen the desire of commanders to take risk on the wearing of the former; the carriage of ECM is however

more difficult to address, but is an area where blanket FP direction does appear counter-productive.

Of particular relevance to the SpIBs, numerous comments related to interactions with partnered forces, and frustration at the negative impact on the effectiveness of mentoring resulting from UK FP direction. This included loss of momentum imposed on ANA units by their slow-moving mentors; the inability of mentors to be alongside their charges as a result of the constraints of ECM bubbles; and awkwardness in engagement with locals and relaxing ANA/ANP personnel due to the requirement to wear CBA to mitigate the green-on-blue threat. Of particular concern was the requirement for a number of respondents to contravene FP direction in an attempt to fulfil their role; in making these judgements, they were aware that had casualties been sustained, they would have been held to account for decisions that would not have been fully understood by those removed from the immediate situation.

The final question was alluded to in the opening paragraph:

> *Looking to the future, do you have any specific concerns regarding the potential impact of FP measures and the appetite to delegate risk on the ability of the Combat Arms to fulfil their mission?*

86% replied in the affirmative. One might hope that an Army would emerge from over a decade of continuous operations as a finely tuned instrument, with a commonly shared sense of how to conduct tactical activity. Instead, in the minds of those most intimately exposed to the dangers of operational soldiering, we appear to be losing our way; fixating on single threats, ignoring second-order consequences and disempowering the man on the ground.

## WHERE ARE WE GOING WRONG?
The crux of the concerns articulated above lies in our approach to determining threats, risks and the response to them. It is therefore necessary to define the terms and consider where we are missing the mark.

- **Threat:** *This can be defined as 'a person or thing likely to cause damage or danger.' In military terms, it is considered to be a function of an enemy's capability and intent (and opportunity). It is therefore an assessment*

---

7    3 SCOTS EX WESSEX WARRIOR, Jun 13.

8    The principles of Reassurance Patrols articulated in Pam 3A Inf Pl Tactics COE Additional Annexes are: Mutual Support, All Round Defence, Depth, Deception.

9    p2 of the Op Herrick Aide Memoire exhorts readers in bold to "Pursue the enemy relentlessly".

*of what an adversary may attempt to do based on their assets, their aspirations and the opportunity presented to them in space and/or time.*

- **Risk:** *Defence, through JSP 892, defines this as an uncertain future event that could affect the Department's ability to achieve its objectives.[10] It takes it to be a neutral occurrence, which will have a cause and an outcome, for good or bad. The Army's capstone doctrine takes a less balanced approach, defining it as: a possibility of a negative outcome in relation to the force or mission.[11] Setting aside the consideration that the slant to the Army's definition of risk may in itself represent a significant problem in our approach to the subject, both sources inform us that risks should be considered through an assessment of the likelihood of an event occurring against its impact. In the military sphere, this will often, if not always, be linked to the potential actions of an adversary (the threat).*

*Once a risk has been identified, a response must be chosen. Within Defence, this will fall into one of the categories offered by the '5Ts'[12]. This response will generally attempt to reduce the likelihood of the risk event occurring (control); make the impact less severe (mitigation); or achieve both effects. The response will be based on our risk appetite and attitude; on our willingness to 'risk' a negative outcome, or simply 'take a chance' as Montgomery puts it.*

On the face of it, this appears straightforward; why then are we getting it wrong? The answer lies in an overly-centralised approach to defining and acting upon threats and in a failure to properly grasp the relationship between threat and risk.

Consider how we determine threat. If this is based on a calculation of an adversary's capability, intent and opportunity, at what level should we make the calculation and for what geographical area? At the strategic level,



*A 2 YORKS Foxhound, Light Protection Patrol Vehicle provides over watch security for the Afghan National Army Officer Academy (ANAOA) 10-year graduation ceremony. The Kabul Security Force is the only British One Star command in Afghanistan and the Kabul Protection Unit is its only manoeuvre unit.* **Photo: Lieutenant Colonel Humphris, Crown Copyright**

10    JSP 892 Risk Management Pt 2 (V1.0 Jul 15) p28.
11    ADP Land Ops Ch 9A para 9A-02.
12    Terminate, Treat, Transfer, Tolerate, Take the Opportunity

threat can be assessed by: reviewing the assets (and their laydown) available to a hostile state; making some assumptions as to their political aims; then considering the current geo-political environment. Having done so, consideration of possible uncertain events in relation to the interplay of the potential protagonists will allow an assessment of risks to be made. This can then be used to inform planning and decision-making.

Doing this at the tactical level within a theatre is more challenging. As the adversary is broken down into smaller groupings to be considered by locale rather than wider theatre, the effort required to assess the threat elements of capability, intent and opportunity exponentially increases. By dint of decreasing scale, these three factors can also change very rapidly in any given location. At this level, making a credible assessment of threat to then determine risk and therefore inform decision-making is likely to be much more difficult. Whilst specific threat intelligence may often be passed down the chain of command, routinely at the lower levels the best analysis tool is the gut instinct of the man on the ground, reliant on his knowledge, skills, experience and instinct for survival. In his decisions, multiplied by countless others like him, lie the building blocks that ultimately determine strategic success or failure.

The importance of this is not lost in our doctrine; it is the basis for the philosophy of Mission Command, which rightly recognises that the best means of achieving success in the chaos of conflict is to empower subordinates down to the lowest possible level, bound together by a shared understanding of the superior intent.[13] Unfortunately, when push comes to shove, we appear unable to trust the judgement of the man on the ground. Why is this so?

Superficially, the British approach to FP appears robust; *AJP 3.14 Force Protection*, informs us that casualties are a reality of military operations, and that attempting to avoid them totally may prevent mission accomplishment.[14] We are told that a pro-active approach capable of pre-empting and countering the actions of adversaries is required[15]; indeed *to be effective, FP requires a core policy that has the flexibility to allow the operational forces to develop standards and procedures to meet individual, specific needs.*[16]

Regrettably, this flexibility does not occur in practice. For the UK, Force Protection threat assessment and direction is rooted at the operational level, ignoring the earlier point that within a theatre, the determinants of threat (adversary capability, intent and opportunity) will vary widely. Whilst tactical commanders may request specific and clearly bounded waivers from higher headquarters, these are the exception. Lamentably, as a rule, our PJHQ-directed Force Protection direction attempts to apply a 'one size fits all' approach to each theatre.

This brings us to the failure to grasp the relationship between threat and risk. The sum of the risk facing a commander on the ground will be a factor of the various threats faced and of other less kinetic drivers of negative outcomes. It might therefore follow that addressing one particular threat should reduce the overall risk. In practice, however, this will not be the case if in doing so we *increase* another threat - the example of C-IED drills raising the threat from Small Arms Fire (SAF) being a case in point. Herein lies a significant problem; whilst any sensible soldier will be aware of this paradox, it is very difficult to provide quantitative evidence to prove that such a course has indeed raised the *overall* level of danger to our soldiers. Worse still, the difficulty in generating firm evidence is exacerbated in an era where commanders tend increasingly to rely on data rather than the traditional soldier's 'finger-tip feel'. Ensuring that we avoid raising our level of risk through steps taken to reduce specific threats is a difficult juggling act, best determined by those in closest proximity to the risk. So why would we decide that an HQ thousands of miles from an operational theatre should be best placed to determine how an OC can best minimise risk?

The answer is likely to be that of varying perceptions of, and appetite for risk at different levels in the Chain-of-Command.[17] Whilst an OC might be willing to tolerate the risk of losing a number of his men to achieve a specific mission, those operating at the military strategic level may be more concerned at how those casualties might be reported in the media or in Parliament. Neither viewpoint is wrong; they simply reflect differing perceptions and priorities. But is the concern that the man on the ground might not understand the bigger

---

13   *This is reinforced on p4-4 paras 13-16 of the 2017 Army Command Plan.*
14   *Para 0105b, p1-4*
15   *Para UK 1.1*
16   *Para 0105e, p1-7*
17   *ADP Land Ops Ch 6 Para 6.6-2 - Risk has different implications at different levels of ops with actions taken at one level potentially incurring risk at another…At the tac level, to judge what is appropriate, comds need to understand the risk appetite at the higher levels of comd.*

*Pictured are soldiers from the Light Dragoons with their Jackal 2 armoured vehicle during a training exercise. Jackal 2 is a high mobility weapons platform, with a unique air-bag suspension system allowing rapid movement across varying terrain. It is designed to protect personnel against roadside explosions and mine attacks (the chassis is heavier than its predecessor to give additional protection). British Army Photo: Crown Copyright*

picture a credible argument? And do we overplay our fears of the reaction back home?

It is absolutely right and proper that as a subordinate should clearly understand his superior's intent, so must he understand his appetite for risk. But can a superior clearly articulate his risk appetite if it is based not on the specific threats likely to face his subordinate and on a thorough consideration of second-order consequences, but on an ethereal assumption of how casualties might be reported at home? Rightly or wrongly, at the tactical level there is a sense that our senior officers tend to assume that our politicians would not understand the paradox of FP; that they would not accept the advice of military professionals if they were told that the obvious solutions to protecting our soldiers are not necessarily the right ones. Consequently, rather than attempting to clearly and robustly explain that logical FP measures as proposed in the media may result in increased casualties (difficult to quantitatively prove), we appear to default to the easy option of adopting obvious solutions and closing our eyes to the second order consequences that must be managed by soldiers such as the ICSC(L) 13 cohort.

To recap the problem before considering some potential solutions: we are in a position where officers from the Combat Arms feel that when deployed in the future, they will be forced to operate in a manner contrary to both extant tactical doctrine and to the tenets of Mission Command; where they will be constrained to the point where their ability to achieve operational effect is severely limited, or where doing so will force them to operate counter to policy without the backing of the chain of command. This is a consequence of an overly centralised and illogical approach to threat and risk assessment; to a failure to robustly explain the realities of soldiering to politicians and the public; and to a tendency to respond to specific threats in a binary manner without proper consideration of hard to quantify second-order consequences.

## WHAT SHOULD WE DO ABOUT IT?

Addressing the concerns raised above will not be easy; it will require a cultural shift and the unpicking of an approach to operations that has become ingrained during the TELIC/HERRICK era. At the highest level, we must accept that the benchmark gauge of success on operations lies in the end state achieved in a theatre, not in our assumed ability to limit casualties. The woeful image of our soldiers confined to an airfield in Southern Iraq being mortared almost at will by an unfettered enemy should serve to remind us of this point. In enabling us to achieve operational success, we must ensure that at all levels those in uniform make a concerted effort to explain to politicians and the media why in protecting our soldiers we may be required to adopt counter-intuitive approaches; and also reinforce the fundamental point that when soldiers are deployed in conflict zones, casualties will occur. Given how low Defence appears on the radar of the average Briton, we may find that the country has a greater than expected tolerance of casualties amongst our professional and often remote armed forces.

Within the military, we could address most of the concerns of the Course 13 cohort by demonstrating a greater willingness to apply our own doctrine. If our FP policy states that we should afford the *flexibility to allow the operational forces to develop standards and procedures to meet individual, specific needs*[18], then we should do so down to the lowest possible level. We must accept that Mission Command exists for a reason, and that the successful application of the Manoeuvrist Approach depends upon a willingness to judge and accept risks. This does not mean that we should abrogate responsibility and allow a free-for-all approach down to the lowliest NCO; delegation of decision making should remain commensurate with experience and trust. Generic FP advice should still be generated on a central basis to set a benchmark, albeit that this should be done by the theatre headquarters, not remotely from Northwood. Subordinate commanders should then have the latitude to decide when to deviate from this, and be prepared to justify their decisions, but safe in the knowledge that where hindsight might call their actions into question, the default chain of command position would not be to make them a scapegoat. Commanders would remain responsible for monitoring subordinates' behaviour; this would protect against the inevitable tendency of some individuals to default to minimal levels of protection for personal comfort. Getting this right could be reinforced through routine and mission-specific training in the moral and conceptual domains.

We must also become better at recognising the distinction between risk and threats, and in understanding the importance of the requirement to give due consideration to second-order consequences when grappling with the solution to particular threats. This requires a more holistic approach to risk, including where possible more thorough testing of new TTPs in a controlled environment at home, then data capture overseas. Accepting that the latter may be difficult, what is almost certainly required is a culture more comfortable with accepting that gut instinct will on many occasions offer as good a solution as any amount of clinical analysis of operational activity, and may provide a better sense of where the real risks lie.

---

18   AJP 3-14 para 105e.

*1st Battalion Welsh Guards onboard their Foxhound Protected Patrol Vehicles during a planning phase of a Mission Rehearsal Exercise in Wales. The Foxhound provides unprecedented levels of blast protection for its size and weight. It is an agile and versatile vehicle that will be a mainstay in the Army for years to come. Foxhound can protect against IEDs thanks to its v-shaped hull.* **Photo: Sergeant Paul Randall RLC, Crown Copyright**

Taking the steps proposed above will not be easy, for they run counter to the trends in our approach to operations since the end of the Cold War. Failure to take them, however, will undoubtedly have significant consequences for a shrinking organisation that seeks to leverage the professionalism of its people to remain a reference Army amongst often larger and better-equipped peers and adversaries. If we needlessly prevent our soldiers from achieving meaningful operational effect through ill-considered attempts to keep them safe, we will lose the respect of friends and enemies alike, whilst reducing the utility of our Army as a tool for the pursuit of foreign policy. And finally, returning to the ICSC(L) cohort who inspired this article, if we cannot convince our junior commanders that we value their judgement then the future of our organisation will be bleak indeed.

# Fixing NATO's Broken Windows - Reassurance as Deterrence

**Major Thomas Coker, RDG**, looks at Russian aggression in the Ukraine and believes that NATO's response, in addition to military strength, should also look to social psychologists for a whole society approach using soft skills as additional ways to counter the threat.



*Royal Welsh personnel from the NATO enhanced Forward Presence Battlegroup conduct urban training alongside their Estonian counterparts in the village of Varstu, south of Estonia. NATO troops attacked an abandoned block of flats occupied by an opposing force. Photo: Sergeant Siim Teder, Estonian Defence Force, NATO*

In response to Russian activities in the Ukraine, NATO has deployed four battle groups to the Baltic States (B3) and Poland. The stated aim of the deployment is to deter Russian aggression. This represents a relatively unsophisticated solution to discouraging what has been seen to be an extremely sophisticated, albeit arguably opportunistic, foreign policy approach involving all of the levers available to Russia, especially within the information domain. It is here that NATO soldiers find themselves in a complex situation that they are not well-trained for.

In the world of social media, our soldiers need to understand that their day to day activities and interactions with people potentially present a strategic opportunity for our adversaries through adverse media coverage. Our people need to not only be trained to win the military offensive, they also need to understand how to win the charm offensive. Commanders at the tactical level need to understand not just the importance of winning hearts and minds, they have to learn how to do it. It is therefore argued that, in order to ensure success, the NATO mission should look to social psychologists for some of the answers, and not just to traditional military tacticians. This brings us into the realm of General Krulak's Strategic Corporal[1]. However, in this scenario there is no firefight, there are no casualties to treat or homes to rebuild. The battle is in the news headlines and the 'Twittersphere' and it is where the British Army needs to be able to effectively harness the abilities and positive stories of our soldiery, to build resilience against false news or the inevitable mistakes that will be made then plastered all over social media by our adversaries.

## GERASIMOV 'DOCTRINE'

General Gerasimov, the Russian Chief of the General Staff, is credited with the creation of a new multi-modal, phased doctrine escalating conflict through several approaches including 'political, economic, international, humanitarian, and other non-military measures'[2] before the involvement of regular uniformed military. Gerasimov states that 'the role of non-military means of achieving political and strategic goals has grown, and, in many



*Image of a student at the Defence Cyber School at the Defence Academy, Shrivenham, which addresses specialist skills and wider education in line with National Cyber Security Strategy objectives. Photo: Hannah Baker, Crown Copyright*

cases, they have exceeded the power of force of weapons in their effectiveness'.[3] This is perhaps best illustrated by Arseni Sivitski, Director of the Centre for Strategic and Foreign Policy Studies, who effectively subdivides Gerasimov's stages into the following:[4]

- **Phase 1:** *Low level dissent emerges, amplified by information operations, political movements, and trade unions. This is largely imperceptible in a Western democracy with freedom of speech.*
- **Phase 2:** *Escalations of the above, leading to peaceful protests, overt civilian activity, international diplomatic and economic attentions.*
- **Phase 3:** *Start of conflict activities, from riots to armed insurrection. Opposition forces would start to influence the movements, with foreign agitators and organisers (little grey men) beginning to appear.*
- **Phase 4:** *Crisis. Military operations become overt, and plausibly deniable forces (little green men) begin to appear. Embargoes and international pressures are being applied. NATO Article 4 and 5 would be in scope here.*
- **Phase 5**: *Resolution. Full scale conflict has emerged, with the economy on a war footing and conventional military actions taking place.*
- **Phase 6:** *Restoration of peace. International*

---

1  *The Strategic Corporal in the Three Block War; Gen Charles Krulak; Marines Magazine, Jan 1999.*

2  *Foy, Henry, Valery Gerasimov, The General With A Doctrine For Russia; Financial Times; 15 Sep 17. www.ft.com*

3  *The Value of Science is in Foresight; Gen Gerasimov, Feb 2013; Voyenno Promyschlennnyy Kuryer, (Russian Military Journal). Translated by R. Coalson, listed in The 'Gerasimov Doctrine' and Russian Non-Linear War; M. Galeotti; In Moscow's Shadows blog; 6 Jun 14.*

4  *Extrapolated from The Belarus-Russia conflict through the lens of the Gerasimov doctrine; A Sivitski; 7 Mar 17; www.UDF.by.*

*General Valery Gerasimov, Russian Chief of the General Staff. **Photo: Ministry of Defence of the Russian Federation, Creative Commons Attribution-Share Alike 4.0 International License, Wikimedia.***

*intervention, or some other eventuality, sees the conflict come to an end.*

If this is to be taken as a 'doctrinal' approach, then the NATO response must be similarly complex and subtle. The military is comfortable in phases 4, 5, and 6 because it has extensive recent experience of these elements. Classic 'green army' skills and training for conventional warfighting are entirely applicable here. However, we now need to look to the lower end of the spectrum, Phases 1, 2, and 3, where softer skills will be essential. We must take into account factors outside the realms of a conventional military response - it must be a whole society approach - something that the green Army is inexperienced in delivering or analysing at either the strategic or the tactical levels.

The reality is that a military intervention into any NATO member state is not in Russian interests, as Russia could not support a lengthy campaign once the Alliance had mobilised. This is particularly true in the Baltic States (B3) and Poland, with the painful memories of the Soviet

occupation very much in evidence in their societies' collective conscious. Unlike certain areas of the Ukraine, there is little to no appetite for a change to Russian governance even amongst the ethnic Russian population due to the elevated living standards enjoyed by the EU member nations.[5]

The stated tasks for NATO's enhanced Forward Presence (eFP) Force is to 'enhance Euro-Atlantic security, reassure our Allies and deter our adversaries'.[6] Arguably, deter and reassure are two sides of the same coin, since to deter externally requires reassurance internally. The NATO troops must make sure that they not only are a credible military force, but that they reinforce the Alliance. NATO troops have been recently battle-tested in Afghanistan, Iraq, and across Africa. However, they are a military solution to a military problem. They are less well-equipped to address instability and unrest.

Were any efforts to be made to ferment rebellion in the B3 or Poland then the starting point for malign actors is far further to the left on Grerasimov's 'scale'. The Ukrainian

---

5    Barker, T., *Baltic states fear Kremlin focus on ethnic Russians, Financial Times, 02 September 2014. Also see supporting survey reports from Kivirahk, J., Integrating Estonia's Russian Speaking Population: Findings of National Defence Opinion Surveys, International Centre for Defence and Security, December 2014*

6    *Warsaw Summit, 2015; https://www.army.mod.uk/deployments/baltics/. This should have a date to show when accessed?*

tinder did not require much of a spark to ignite because the conditions were more favourable. Due to the strong societal bonds in the B3 and Poland, the same approach would be far more difficult, therefore one must consider how to counter the more subtle earlier approaches.

## MILITARY DETERRENCE

There has been a considerable divergence in approach across the NATO allies in how the mission has been approached. For some, the battlegroup is ready to 'fight tonight'[7]; for others it is a training mission for NATO forces to re-learn how to operate together. Ultimately, it is to reassure each other that the organisation is still relevant, and that they will still put their blood and treasure on the line for collective defence. Whatever the baseline understanding of the mission, the message is clear - NATO stands ready.

The openly acknowledged reality is that the eFP is a symbolic gesture. There is no question about what the military outcome would be if the Russian 1st Guards Tank Army were to roll across any of the borders of Europe. The four extra battle groups in the area would be a welcome but short-lived addition to the fighting power. They are not a military deterrent in their own right, but they are a statement - NATO stands together. The blunt effect of the eFP battlegroups has therefore been achieved by their deployment - international blood is now in the way of military columns. The next steps are the more subtle elements of the wider society approach. The presence of NATO troops has an approval rating of 88% amongst ethnic Estonians[8]; how do we ensure that we don't reduce that?



Pictured is a Challenger II MBT of Royal Welsh taking part in a winter exercise at the Estonian Defence Forces central training ground in Tapa. **Photo: Siim Teder, Estonian Defence Force, NATO**

7   *'Fight Tonight' is drawn from the US Force Commander, North Korea (Gen Vincent K Brooks)'s Command Philosophy and is increasingly being used in reference to readiness in both British and American militaries with regards to how responsive the force needs to be – literally being able to deploy for war at a few hours' notice.*

8   *Kivirahk, J., Public Opinion and National Defence, International Centre for Defence and Security (ICDS) Survey, March 2016, www. kaitseministeerium.ee*

*A British soldier with the Light Dragoons fires his 7.62-millimeter rifle at a range near the Bemowo Piskie Training Area, Poland, Feb 15, 2018. This soldier is a part of the unique, multinational battle group comprised of U.S., U.K., Croatian and Romanian soldiers who serve with the Polish 15th Mechanized Brigade as a deterrence force in northeast Poland in support of NATO's enhanced Forward Presence.*
*Photo: Specialist Andrew McNeil, NATO, Released*

## THE REALITY OF DETERRENCE IN A WESTERN-LEANING, HIGHLY DEVELOPED NATION

If the military power of the battle groups actually makes no real difference to the time that the 1st Guards Tank Army takes to reach the Baltic coast, then the success or failure of this deployment is down to perceptions. All the battle groups actually have to do to complete their deterrence mission is to reassure the societies of the B3 and Poland that they will stand with them, and that they are friends. This would be an effective counter to the early stages of the Gerasimov conflict scale. The Alliance will be strengthened if those nations perceive their security to be enhanced. If they see benefits arising from the presence of NATO troops, then they will be less susceptible to Russian influence against them. If there are no perceived benefits - if those soldiers, sailors, and airmen are set apart from society, are troublesome, or give cause for resentment - then microscopic cracks will appear. If these grow, then risks to the balance of societies could emerge. Bizarrely, the deployment to deter hostile activity and reassure host nations actually presents an opportunity for our adversary to achieve the opposite effects.

The battle groups cannot spend all of their time out in the field training. In the field they present a military force, in camp they can focus on the community aspect. Both of these fall into line with SACEUR's intent and main effort for activities – Strategic Communications. The latest buzzwords of STRATCOM and 'information manoeuvre' are shouted loud in the corridors of SHAPE, and national capitals; but what does that mean in reality?

## FIXING BROKEN WINDOWS

This is where we enter the realms of social science. If military deterrence is almost a quantifiable calculation in the form of hard science (I have X tanks against the enemy's Y tanks, which statistically means that I will win or lose), then deterrence in the form of reassurance can only be measured in qualitative terms.

In March 1982, James Wilson and George Kelling published an article entitled *Broken Windows*. The premise was an old one, that, 'if a window in a building is broken and is left unrepaired, all the rest of the windows will soon be broken. This is as true in nice neighborhoods as

in rundown ones. Window-breaking does not necessarily occur on a large scale because some areas are inhabited by determined window-breakers whereas others are populated by window-lovers; rather, one unrepaired broken window is a signal that no one cares, and so breaking more windows costs nothing. (It has always been fun.)'[9]

This is actually of greater relevance to NATO than the numbers of troops and tanks it deploys. The introduction of formed bodies of 1200 NATO troops will have an impact on the society of the host nation.[10] They will inevitably cause friction and problems in their host nation through social media or the actions of some of their personnel (often, doubtless, inadvertently). That is the equivalent of breaking windows. What is important is how it is dealt with. How quickly can the troops fix those windows? What can they do, in conjunction with the host nation, to make sure that the consent for their deployment remains? Without addressing the issues caused by deployed troops over time consent will be chipped away. Of course, some traditional observers will scoff at the idea that consent could be lost for this deployment. They will criticise this approach as 'overthinking' - and they have done. It is not. By building trust and individual relationships the Troops will guard against that window breaking - the strategic building will stay whole and in good repair by their activities at the lowest level.

Philip Zimbardo, a Stanford psychologist, had earlier experimented on the broken windows theory.[11] He parked matching cars in the Bronx and Palo Alto (an expensive area in California) with the bonnets up and registration plates removed. The car in the Bronx was quickly vandalised and set alight. The car in Palo Alto sat for weeks until Zimbardo himself took a sledgehammer to it. People then rapidly began to vandalise the second car. This is exactly what will happen to the NATO troops' reputations if the windows are not repaired. The fact that they have deployed to permissive societies does not mean that things will stay that way. They must do everything that they can to ensure that the windows stay unbroken, and that they are engaged in the process.

The rise of social media has meant that the military has become more exposed to the world than ever before. Krulak's Strategic Corporal[12] has expanded in influence and exposure. No longer is a media team needed around the corner, they simply have to exist in cyber space. A single action by one of our people, positive or negative, can have a strategic effect when rebroadcast and amplified by social media. With the freedom of communication in the modern world any opinion, well informed or not, can be given voice. How then do we ensure that individual low-level negative acts by some soldiers don't creep into the headlines and undermine the overall mission? This is a bigger risk if one accepts that the presence of NATO personnel will rapidly become old news, and that this is when resentment and window-breaking may creep in.

## SAFE AND CLEAN NEIGHBOURHOODS

The shift that this deployment is likely to go through in terms of popularity is analogous to urban decay. This is where social science can teach more lessons. In the 1970s, the State of New Jersey introduced the safe and clean neighbourhoods scheme as a result of an increase in public fear of crime. One of the central pillars of the scheme was to get police officers out of their cars and onto the streets, increasing their public profile. This actually made them less able to respond quickly, but it made them better known in their communities. Five years after the start of the programme, crime had not reduced in the areas where officers were on foot patrol, but the residents believed that it had. Secondly, those residents had a better opinion of the police than residents in neighbourhoods with fewer foot patrols, and the officers had higher morale than those in patrol cars.[13]

The implications for the deployment are obvious. Our soldiers do not need to be on foot patrol, but they need to be a presence with a human face. They need to be integrated in communities - to be respected and part of the fabric of life. That is a 'soft effect' that can be measured by qualitative sentiment and social science, and not easily by quantifiable (hard science) assessment. The only way to ensure the macro-effect of bolstering

9    Wilson & Kelling, 1982, Broken Windows, The police and neighborhood safety, The Atlantic, http://www.theatlantic.com/doc/198203/broken-windows.

10   Estonia has a population of 1.4 Million, therefore the NATO deployment represents a close to 1% increase in itself before the demographic implications of over 90% being males aged 18 - 35.

11   Zimbardo, P.G., 1969, The human choice:Individuation, reason, and order versus deindividuation, impluse, and chaos, Nebraska Symposium on Motivation, 17, 237-307

12   Gen Charles Krulak;Ibid

13   Wilson & Kelling; 1982, 1. Ibid.

(or at least not damaging) societal cohesion is to make sure that our soldiers are equipped to deal with the micro-events in day to day life - interaction with the local community and ensuring their welcome. We need to build our community engagement abilities, and better understand how to engage with different societies. None of this is alien, it is simply human interaction, but the Army needs to be comfortable with this.

If one is to accept that the Gerasimov doctrine has weaponised social approaches, more defensive measures have to be identified in order to be truly effective in countering them. The fighting spirit of the military needs to remain strong and it should never change, but the military also needs to be more comfortable with accepting input from the human sciences. Broken windows are one element, and there are many more ideas that are directly applicable to the mosaic of conflict. We just have to be flexible enough to see the opportunities, not the threats. Taking the time to read into some basic sociology will stand our commanders in far better stead to take on this next mission.

> *Just as physicians now recognize the importance of fostering health rather than simply treating illness, so the police - and the rest of us - ought to recognize the importance of maintaining, intact, communities without broken windows.*[14]

*Snipers from the British Army are experts at blending into their environment. These men are based near Tapa in Estoni a as part of NATO's Enhanced Forward Presence battlegroup.* **Photo: NATO TV, NATOChannel Copyright.**

---

14   *Wilson & Kelling; 1982, 9. Ibid.*

# The United Kingdom and Europe: The Geopolitics of a Post-Brexit relationship

**Dr Geoff Sloan**, University of Reading, argues that Sir Halford Mackinder's vision that geopolitics can provide guidance is just as relevant today as it was 100 years ago.



*Royal Air Force supports the French Air Force by providing heavy air lift capability for disaster relief efforts in the Caribbean. The equipment was loaded onto a RAF C17 at Évreux-Fauville Air Base, west of Paris. The C17 aircraft from 99 Squadron, based at RAF Brize Norton helped in the transporting of heavy plant machinery to the island of Guadeloupe in the Caribbean.* **Photo: Corporal Babbs Robinson RAF, Crown Copyright**

It can be argued that a singular failure of the recent referendum campaign in the United Kingdom, which can be attributed equally to both sides, was the absence of any attempt to articulate the nature of Britain's geopolitical relationship to Europe. By geopolitics I do not mean its current form of usage: serving merely as a synonym for international strategic rivalry. Instead classical geopolitics is a confluence of three subjects: geography, history and strategy. The reason why geopolitics can provide guidance in practical matters is because it doesn't obey the artificial boundaries of disciplinary knowledge; it requires synthetic thought to address policy problems and issues. Furthermore, the problems and issues themselves do not respect those boundaries: neither do the solutions.

The British thinker who mastered this synthetic approach and whose ideas have much relevance to a post Brexit geopolitical vision for Britain was Sir Halford Mackinder. He was that rare beast in public life: a polymath. Not only did he set up the School of Geography at Oxford, but also the University of Reading in 1926. He was also British High Commissioner to South Russia between 1919 and 1920. He was also a member of the House of Commons. Between 1910 and 1922 he was elected and served as a Scottish Unionist MP for a constituency in Glasgow.

In 1902 he published a seminal book titled: *Britain and the British Seas.* In it he articulated a geopolitical relationship between Britain and Europe that has a real pertinence at present given the result of the referendum on 23rd June 2016. The geographical starting point of this relationship, he argued, was the south-east coast of England. This area was both proximate to and opposite of what he called the 'linguistic frontier of Europe'. This was a confluence between what he termed the 'Teutonic and Romance peoples'. Both influences had shaped Britain. He expressed it in the following way: *'To the Teutonic - Easterling and Norsemen - England owes her civil institutions and her language; to the peoples of the west and south, her Christianity and her scholarship.'* These two streams of influence had converged on Britain from the Rhine delta and the estuary of the Seine respectively.

Britain's relationship to Europe can be described as a geopolitical paradox. This paradox could constitute the foundation stone of a post-Brexit vision. Furthermore,



*Portrait of Sir Halford John Mackinder by James Lafayette (1853-1923), public domain, Wikimedia.*

no European leader has come close to recognising or acknowledging this geopolitical reality. Mackinder expressed it in the following way, *'Britain is part of Europe, but not in it.'* He argued that *'Great consequences lie in the simple statements that Britain is an island group ,set in an ocean, but off the shores of the great continent; that the opposing shores are indented; and that the domain of the two historic races come down to the sea precisely at the narrowest strait between the mainland and the island.'* This analysis still has much explanatory power one hundred and fourteen years later.

Yet it would be unrealistic not to acknowledge that much has changed in the relationship between Britain and Europe since 1902. Given the importance of trade with Europe, it could be suggested that if Mackinder were alive today he would have taken into account the pertinence of these economic facts. Mackinder's understanding of this geopolitical relationship between Britain and Europe reveals the two qualities that are at its heart: mutability and paradox.

He understood that it was not until the Tudor epoch that the English Channel became an effective strategic boundary. Before then *'London was more closely connected on the tideways with Paris, Flanders, and the Hanseatic cities than with Scotland or Ireland or Wales'*. There was also recognition of the manner in which geography has a conditioning effect on other types of relationships. It is not based on the abuse of geography, but on recognising the flow of the geographical grain. Mackinder, writing in 1890 declared: *'The course of politics is a product of two sets of forces, compelling and guiding. The impetus is from the past, in the history embedded in a people's character and tradition. The present guides the movement by economic wants and geographical opportunities. Statesmen and diplomats succeed and fail pretty much as they recognise the irresistible power of these forces.'* It is from this synthetic approach that a new vision for the relationship between the United Kingdom and Europe can be crafted, and new policy issues can be addressed.

*A Brexit rally takes place outside of Parliament.* **Photo: Bulverton, Creative Commons Attribution-Share Alike 4.0 International license, Wikimedia**

# Training the Afghan National Army: The Continuing Challenge

**Colonel Neil Unsworth** of the Directing Staff, ICSC(L), Defence Academy examines the factors that continue to affect the training of the Afghan National Army.



*An Afgan National Army soldier mans his position while his fire team conducts a clearing drill at the Regional Military Training Center in Helmand Province, Afghanistan, March 8, 2017. The soldiers are members of the ANA 215th Corps and will fight in one of Afghanistan's most contested provinces upon completion of their initial training.* **NATO photo: by Kay M. Nissen), Released**

*'In no other profession are the penalties for employing untrained personnel so appalling'*

General Douglas MacArthur

The Afghan National Army, in spite of the continuing financial and military support of NATO contributing nations, remains a fragile and under-performing force. Given that effective training is a key factor for operational success then the performance of the training institutions and regime must be questioned. Within the Afghan National Army that relates to the twin two-star training institutions; the Training, Education and Doctrine Command and the National Defence University, plus continuation training that falls under the direct responsibility of corps commanders. Looking at the factors that are responsible for the recent failings of Afghan National Army training that, in turn, continue to hamper success on the battlefield raises a key question. How can Britain best contribute to the NATO training mission with limited resources and influence Britain's legacy in Afghanistan?

In the British Army, the standard career pattern sees an officer gaining a breadth of experience in command appointments and on the staff, on operations and in training. The standard career pattern within the Afghan National Army means that there are effectively two armies: one that fights and one that delivers the staff function and training. Mid-ranking officers at training institutions have routinely been in post for five or more years and the vast majority have never seen combat. While this may be an accepted practice in some European armies, in Afghanistan the lack of shared experience is undermining the components of fighting power and detracting from success on the battlefield. This is an unfortunate situation given the proximity of combat operations and the fact that Directing Staff should be passing on current best practice. As General Kitson noted, Directing Staff need to *'..have had some field army experience of the subjects taught and… be able to inspire sufficient confidence in their students to carry conviction.'*[1] Instead, those who have gained a teaching post through good fortune or, most likely, good connections, set down deep roots and stay in place. Therefore, much of what is being learned in combat

never reaches the training world and those who teach lack both credibility and currency. Similarly, the eye-catching new Ministry of Defence building in Kabul is filled almost exclusively with staff officers who have only ever been staff officers, and staff officers in Kabul for that matter. A functioning lessons identified process could alleviate this problem but such a system is far from mature.

One of the problems with Afghan National Army training is what could be described as 'going through the motions' and accepting low standards in training. The problem does not lie with course design. The hierarchy of courses, their respective training objectives and instructional specifications more than meet the requirement. The problem lies both with a sense of ownership (the Training Needs Analysis and resulting Training Objectives are almost universally the work of NATO officers) and with delivery. What seems to matter is that a course takes place, is opened with a fanfare and closed with great ceremony. What is actually taught and how much is absorbed by the students routinely appears irrelevant and awkward questions are never asked, even in private. At the most simplistic level, marksmanship epitomises this problem. Target effectiveness is rarely assessed now that NATO advisors are not present on a daily basis. Instead, what counts is simply that the rounds have been fired and a practice conducted. It is very hard to believe that the general staff is genuinely taken in. It follows, therefore, that this is an understood and accepted behaviour. One explanation is that they do not see the real value of the training and conduct it to please Coalition senior advisors and, in turn, continue to secure resources.

Corruption affects the training sector as it does the rest of the Afghan National Army. In the most basic way, it directly hampers training and morale by consuming vital resources: uniforms, ammunition, fuel and rations. Linking to the previous paragraph, well-connected junior officers exist in a rarefied world; moving between outer-offices and overseas courses rather than gaining front line experience. NATO needs to apply greater scrutiny when offering places on United States and European commissioning courses. This could, at least, ensure that those officer cadets attending are suitably competent even if they gained their place through nepotism.

---

1   Kitson (1989), p.108.

*Afghan Army personnel at the Afghan National Army Officer Academy in Kabul undertake a blindfolded weapons assembly exercise, using the American M16 Assault Rifle during their final exercises before graduation. Currently the emphasis is on training the ANA instructors so that they will be able to continue training other recruits in the future.* **Photo: Captain Craig Miles, Crown Copyright**

Another problem is their employment on return to Afghanistan; ensuring that they go off to do the job they have been trained to do, namely platoon command on operations. Often, with enough money or the right relatives, a place in a training organisation can be obtained to avoid operational deployment. It is a commonly held view that using one's own money to gain an advantage is not corruption; corruption only encompassing misuse of *government* funds. Common corrupt practices within training establishments include the purchase of certificates without having completed the respective course, sale of fuel, rations, uniform and equipment, control and renting of water wells. Corruption, as defined by such organisations as Transparency International, will always be part of everyday life in Afghanistan; it would be naïve to think otherwise. However, what is important is to drive down the instances where such behaviours have a direct and damaging impact on training and, in turn, operational effectiveness.

There is a widespread belief that the key to success lies with technologically advanced equipment or, at least, the kudos of owning such equipment overrides military sense. Officers who cannot read a map or use a compass frequently lobby for the issue of global positioning systems. Those who have never ventured to patrol by moonlight demand night vision devices. This attitude has been fostered rather than discouraged by defence contractors seeking new and lucrative opportunities. A prime example is the move to buy expensive electronic targets for small arms practices when few Afghan soldiers can yet group and zero effectively on a wooden target.[2] This is just one area where standards have declined in the absence of daily mentoring. Most infantry soldiers graduating from basic training remain illiterate, unable to shoot accurately, have little grasp of fieldcraft and are afraid of operating at night. At a higher level, the overwhelming majority of kandak, brigade and corps commanders cannot yet read a map. Bearing this in mind, it becomes clearer why fires and infantry

2   *The concept of zeroing of personal weapons remains widely misunderstood. Weapons are routinely passed from one soldier to another, sometimes resulting in a soldier using several different M16s during a single day.*

manoeuvre are rarely integrated and why units are uncomfortable operating beyond sight of major roads. With hindsight, it would not be unreasonable to conclude that NATO lifted off 'level one' mentoring too early but it must also be considered that a break had to be made at some point in order to avoid permanent dependency. There was always going to be a difficult and extended period of transition.

The philosophy of Mission Command is taught at training institutions[3] and publicly promoted as the way the Army operates. In practice, the style of command is profoundly different and shaped by the authoritarian regime in which it exists. What dominates is a restrictive, centralised command style that stifles initiative and imposes long delays on decision-making sometimes with deadly consequences. The personal signature of a general is required to authorise the most mundane activity, typically dealt with by NCOs in the British Army. Middle-ranking officers, especially kandak commanders, often have good ideas for training but are not empowered to translate them into action. In fact, they are frequently demoralised, believing that it is pointless to make recommendations up the chain-of-command. This is likely to continue while the highest ranks are held by former Mujahedin and Soviet-trained officers. The danger is that these behaviours are inherited by the next generation and the cycle perpetuated. To quote ADP Land Operations:

> *Success demands a command philosophy which enables the rapid identification and exploitation of opportunity to match strength against vulnerability and harnesses the disciplined initiative of all forces.*[4]

Mission Command as a philosophy must continue to be taught on all command courses, for NCOs as well as officers, but most importantly, mission command needs to be 'lived' by the commanders. It is an area where Britain can make an impact disproportionate to cost, through continued investment at the Afghan National Army Officers' Academy for the next generation of leaders and strategic leadership courses run by the Defence Academy to influence the current cohort of generals.



A U.S. Army and Afgan National Army non-comissioned officer observe a fire team's techniques while clearing a building at the Regional Military Training Center in Helmand Province, Afghanistan, March 8, 2017. U.S. Army soldiers from Task Force Forge fill a critical role as advisers to the ANA 215th Corps as part of the NATO Resolute Support mission.
*NATO photo: Kay M Nissen, Released*

---

3   *Specifically the Afghan National Army Officers' Academy and the Command and Staff Academy. Both institutions fall within the command of the Marshal Fahim National Defence University.*
4   *ADP Land Operations (2016), p.6-1.*

Another fundamental problem is that most Afghan officers, including generals, do not understand the difference between individual and collective training. More than one soldier undergoing individual training is routinely referred to as 'collective training'. It is likely that the problem has been exacerbated by regular misinterpretation from English. There are pockets of progress but most units are uncomfortable with the concept and fear that it will reveal leadership failings in a way that individual training does not. The problem is also linked to a view that training, which takes place at the beginning of a military career does not need to be repeated. Consequently, valuable training opportunities for collective training are often squandered when troops are brought out of the line. In today's Afghanistan, combined arms training really means the integration of fires, artillery and air-delivered, with infantry manoeuvre. Considering the absence of collective training and stove-piped command structures, it is unsurprising that combined arms training does not take place.

Training is an activity viewed as the realm of professional trainers and not the responsibility of every commander. Once trained as Basic Warriors and posted to operational units, valuable individual training opportunities are also wasted. Instilling the drive in officers and NCOs to take responsibility and continuously train those under their command is a serious hurdle to overcome. General Montgomery's first action on taking command of the 8th Army in 1942 was to issue a training memorandum that stated *'…it is necessary for all commanders to clearly understand the requirements for battle; then organise our training accordingly'*.[5] To be fair, for some units, training does not take place simply because there is no respite from combat. The lack of a functioning operational readiness cycle prevents units and sub-units being withdrawn from the line for leave and training. This was at least recognised in Helmand in late 2015 where Field Marshal Slim's view that *'if troops are to be trained, they must be pulled out of the fight, even if only for a month'*[6] was applied during the reconstitution of 215 Corps.

It is widely accepted that one of the prime challenges for the Afghan National Army is to improve the standard of leadership. Poor leadership remains evident at all levels and is manifested in various ways; professional incompetence, chronic indecision, selfishness,



*Two advisers from Task Force Forge demonstrate how to clear a room during security operations training at the Regional Military Training Center in Helmand Province, Afghanistan, 2017.*
*NATO photo: Kay M Nissen, Released*

nepotism, cowardice and simple absence. It is interesting to note, as the British Army continues to embrace the concept of Values Based Leadership, how these traits contrast with the selected values of courage, integrity, selfless commitment, discipline and respect for others. To be fair, one can find many inspirational characters within the Afghan National Army with a mind to care for their subordinates and to fight for a cause other than personal gain. However, without tribal or political connections, many are unlikely to receive the necessary support or ultimately attain any position of real power.

5   *8th Army Training Memorandum No 1, 1942.*
6   *Slim(1956), p.43.*

What emerges is that failures in leadership, inextricably linked to corruption[7], remain at the heart of the problems affecting Afghan National Army training. The most pressing requirements are to free up training opportunities through the implementation of an effective operational readiness cycle across the country and an inculcation of the importance of individual, collective and combined arms training as a continuum. It is a problem that requires engagement at the highest level. The remaining problems require an altered leadership approach with a fundamental change in command philosophy. They are, therefore, unlikely to be resolved in the short term. What is clear is that an enduring commitment to delivering effective leadership training must be maintained if the situation is to improve. While some traction can undoubtedly be gained with the current generation of senior leaders through strategic leadership courses, substantial change is unlikely to occur until today's cohort of company commanders reach

general officer rank. Steady, sustained commitment to delivering effective leadership training from commissioning, through command and staff courses to senior leadership will be a critical factor if the Afghan National Army is to become a fully effective, professional force. British support at the Army Officers' Academy, from Royal Military Academy Sandhurst and the Defence Academy will remain an important component of this and, in turn, Britain's legacy in Afghanistan.

## BIBLIOGRAPHY

- *Army Doctrine Publication (2016) Land Operations*
- *Kitson, Frank (1989) Directing Operations (London: Faber & Faber)*
- *Montgomery, Bernard (1942) Training Memorandum No 1 (8th Army)*
- *Slim, William (1956) Defeat into Victory (London: Cassell & Co)*

---

7   *As judged by Western standards.*

# The SOE and The General Service Corps

**Captain Dr Dominic Selwood GSC**, provides a brief history of the SOE and the role played by the General Service Corps (GSC) and compares it to the role of the GSC today.



*The workshop of the Demonstration Hall © IWM (HU 61060)*

When Sherlock Holmes was introduced to the world in the 1887 novel A Study in Scarlet, his home at 221B Baker Street did not physically exist. The street numbers did not go that high. Nevertheless, ever since, the name Baker Street has been synonymous with him.

However, for a period of five years from 1940-45, 'Baker Street' meant something very different within the UK intelligence community. A clandestine organization operated there - first from its headquarters at 64 Baker Street, and then gradually from most of the buildings on the street's west side. Its existence was so secret that only a select few ever heard of it.

Among those who did know, it was simply referred to as 'Baker Street' or 'the Baker Street Irregulars'. Sometimes it was also 'Churchill's Secret Army' or 'the Ministry of Ungentlemanly Warfare'. Its official name (although it never had a letterhead, badge, or postal address) was the Special Operations Executive, or SOE.

The SOE was the UK's clandestine irregular warfare unit, tasked with guerrilla insurgency, sabotage, and subversion behind enemy lines. Its mission was highly controversial: to 'set Europe ablaze', in Churchill's words to its first head. And that is exactly what the men and women of the SOE did, with the General Service Corps being a key part of the story.

## RECRUITMENT

For many, the journey into the SOE began in a small hotel room at the down-at-heel Hotel Victoria off Trafalgar Square, or the St Ermin's Hotel backing onto St James's Park. There, in spartan rooms often with only a rickety table, two chairs, and an exposed lightbulb, candidates were skilfully interviewed by SOE's recruiters. Many of the potential candidates thought they were coming to straightforward meetings about war pensions or other humdrum matters. But before long, those who were thought suitable were asked if they were prepared to serve their country behind enemy lines doing extremely dangerous work.

## FOUNDATION OF THE SOE

The SOE was a brand new body, formed in direct response to Hitler's stunningly successful 1940 military campaigns. Hitler had blitzkrieged his way across Western Europe in weeks. Luxembourg fell in one day, the Netherlands in four, Belgium in eighteen, and France in forty-three. British military and intelligence chiefs knew that the UK may well be next.

Their eventual solution for defending the UK relied on many skills and capabilities. One that was identified, but not available, was the ability to sabotage and interrupt Hitler's activities on the European mainland.

Creating the right organization to do this became an urgent priority, and in the end the government pulled together three existing units to knock into one. They were: SIS Section D, already charged with irregular warfare by non-uniformed personnel; War Office Section MI R, also focused on irregular warfare, but for uniformed forces; and Foreign Office Section CE (or EH, after its head- quarters at Electra House on the Embankment), tasked with propaganda and political warfare. The SOE emerged from this pooling of skills at a meeting of the coalition War Cabinet on 22 July 1940. It was explicitly mandated to be the UK's specialist insurgency capability, with a remit 'to coordinate action, by way of subversion and sabotage, against the enemy overseas'.

SOE's first head was the Minister of Economic Warfare, Hugh Dalton (Labour). He was an Etonian and a graduate of Cambridge and the LSE, who had served with distinction in the Royal Artillery during World War One. Casting around for precedents of successful insurgent organizations, he alighted upon the IRA from the era of the Irish War of Independence (1919–21), and modelled the SOE closely on it.

## THE GENERAL SERVICE CORPS

The personnel recruited into the SOE came from all walks of life: members of the aristocracy, convicted criminals, non-British nationals, communists, and countless others who would not have found a place in the traditional military. It was also an explicitly equal opportunities organization, with women given key roles alongside men, and an openness to recruits of all sexualities. It had little time for 1940s social conventions, and its sole goal in recruitment was to find the people who would be most effective in damaging the enemy. Some of their recruits had seen military service, others were civilians. All of them needed highly specialist training in guerrilla warfare.

*An ATS FANY Motorcycle Messenger sits on her motorbike as she receives her instructions from a FANY Corporal at the ATS MTC training centre, Camberley © IWM (D 5721)*

For a range of reasons, including the need to provide a cover, it was decided to put them all into uniform. The women joined the First Aid Nursing Yeomanry (FANY), an all-female paramilitary organization formed in 1907. The men joined the General Service Corps, which had been in existence since 1914 for all specialists who were not part of any traditional regiment or corps. Part of its explicit function was to provide a uniform and cap badge for those whose activities required a degree of anonymity, and that is exactly what the SOE needed for its men who did not already have a military affiliation.

### SOE TRAINING
The SOE's head of training and operations was a Highlander, Colin Gubbins (later Major-General Sir Colin Gubbins). Drawing on collected wisdom from combatting the IRA and T E Lawrence's guerrilla achievements

against the Ottoman Turks in the desert, Gubbins prepared two manuals on irregular warfare: *Guerrilla Warfare* and *The Partisan's Handbook*. These became the SOE bibles.

To train the recruits, Gubbins set about requisitioning country houses from Scotland to the New Forest. In the privacy of these secluded grounds, SOE agents were schooled in everything from blowing up bridges to silent killing. So many country homes were partially converted into these guerrilla training schools that SOE earned the nickname 'Stately 'Omes of England'.

Instructors came from the military and intelligence communities. For instance, at the 'finishing school' training centre at Beaulieu in the New Forest, one of the instructors was Kim Philby.

*An M.C.R.1 set with receiver, battery, plug-in coil units and Bakelite headphones © IWM (COM 691)*

### 'Q-GADGETS'

Famously, SOE produced bespoke equipment, gadgets, papers, and uniforms for use in the field. The most famous workshop was Station XV at the Thatched Barn in Borehamwood, with display rooms and a satellite workshop in a set of private galleries at the National History Museum. Another was Station IX, a large complex of workshops and laboratories at the Frythe, a country house near Welwyn. The devices they developed included exploding rats, bicycle pumps, and tins of fruit; cameras inside cigarette lighters; shoe-laces containing saws; and even a document carrier with a concealed lid fitted with a left-hand thread that it was hoped the logical Germans would never discover as it required twisting the 'wrong' way. The mastermind behind these tools and weapons was Charles Fraser-Smith, who called all the covert devices 'Q-gadgets' after the decoy Q-ships used by various navies in both world wars. Ian Fleming - who worked in Naval Intelligence and acted as a liaison officer with SOE - immortalized him as 'Q' in the James Bond books.

### ACTIVE OPERATIONS

The SOE's initial focus was sabotage, espionage, and reconnaissance in occupied France, where they trained and supplied the resistance, and disrupted German supply lines and communications. The work was perilous, and very many of the operatives were captured and murdered. Of the 470 deployed into France, one in four did not return.

Unsurprisingly, the SOE soon began focusing on other theatres where they could hurt the enemy, and were notably active in Albania, Belgium, Greece, Italy, Japan, and Yugoslavia. It also branched out its bases, establishing satellites in Cairo, Algeria, India, Ceylon, and New York, with a special section in the Far East known as Force 136. It even trained stay-behind teams in the UK to conduct an insurgency if the country ever fell to a Nazi invasion.

As well as running the French resistance, it had many other success stories. A notable mission was OPERATION GUNNERSIDE in February 1942, in which the SOE destroyed the heavy water plant at Vemork in German-occupied Norway, halting the Nazi's nuclear weapons programme. The SOE later judged this to have been the most successful sabotage operation of the war.

Another was OPERATION JEDBURGH during the 1944 Normandy landings. SOE teams cooperated with the OSS (predecessor of the CIA), Free French and Dutch and Belgian elements to sabotage German armour, supply lines, communications and power supplies that could threaten the allied forces in the invasion zone. Eisenhower later commented that these highly successful sabotage activities played 'a very considerable part in our complete and final victory'.

The SOE also focused on Germany. OPERATION PERIWIG was a disinformation campaign designed to

*Members of the Maquis and British officers in the Queyras Valley, August 1944.* **IWM**

create the impression of a large anti-Nazi resistance network in Germany, with the aim of wasting the German security apparatus's time and effort in hunting for ghosts. It was a highly complex operation, involving sophisticated fake radio traffic, bogus planted documentation placing fake material on corpses, and sending agents into the field.

Assassination missions were also sanctioned. The most high profile was OPERATION ANTHROPOID, in which two SOE-backed and trained Czech agents blew up and killed SS-Obergruppenführer Reinhard Heydrich, Himmler's right hand man, head of the Reichssicherheitshauptamt (Reich Main Security Office), and one of the architects of the Final Solution.

### WIDER RELATIONS

Despite its successes, the SOE was not warmly welcomed by everyone. SIS was concerned about covert UK activities abroad, especially ones that could destabilize the environments in which its people were gathering intelligence or running agents. The RAF was also not always thrilled, and questioned the use of their planes and pilots for missions they sometimes viewed

as hare-brained. However, as they had the approval and affection of Churchill, the SOE was given the protection and cooperation it needed.

### POST WAR

As rapidly as a need for the SOE had been identified in 1940, so the end of the war brought a realization that the SOE was now surplus to requirements on its existing scale of 13,000 personnel. After a brief power struggle, in January 1946 it was absorbed into SIS along with some of its people.

The SOE's reputation, however, lived on in popular memory. 'Q' was not the only SOE character that Ian Fleming immortalized. In his memoirs, he confided that F F E Yeo-Thomas, an SOE officer codenamed 'White Rabbit' by the Gestapo, had been his inspiration for James Bond.

There is a memorial to the men and women of the SOE on the Albert Embankment:

Today, the uniformed corps to which so many SOE personnel belonged still exist. The FANY continues to support the civil and military authorities as a uniformed service tied to the British Army. And the General Service Corps remains the home for an increasing pool of specialist reservists with niche expertise and skills required by the increasingly complex environment of modern defence.

*For biographies of some of the members of the GSC who served with the SOE, see the booklet The General Service Corps: A Guide for Specialist Reserve Officers.*



*Westland Lysander Mark IIIA (SD), V9707 'G', of No. 148 (Special Duties) Squadron RAF, surrounded by partisans after landing at a field near the town of Cortemilia, south of Asti in northern Italy, to evacuate three wounded partisans to the Allied-held area.* © *IWM (NA 25412)*

# The German Logistic Failure in Operation Barbarossa

**2nd Lieutenant Robert Abernathy RLC** looks at the failure in the planning of the German Army for Operation Barbarossa.



*Operation Barbarossa, June-December 1941 (HU 5065) A German machine gun post in a slit trench in a street in Kharkov, October 1941. Copyright: © IWM 205401079*

The Wehrmacht is a source of unending fascination to the British Army. Pithy aphorisms dubiously attributed to Erwin Rommel are common features in presentations at RMAS, while the *Fall Gelb*[1] campaign is given as the example of manoeuvrist thinking in the War Studies curriculum. However, the mystique of the Wehrmacht's tactical achievements obscures its many grievous failings at the operational and strategic level of war. In no campaign are these clearer than in Operation Barbarossa. Given that Barbarossa foundered at the very gates of Moscow, the campaign has been picked over for decades by historians and enthusiasts looking for the poor tactical decision that caused it to fail. However,

when considering pre-invasion planning, especially the logistics plan, it becomes clear that the campaign was doomed long before Army Group Centre was hurled against the Moscow defences.

The British Army recognises five Principles of Logistics: Foresight, Agility, Co-operation, Efficiency, and Simplicity.[2] Yet German logistic planning for Barbarossa fulfilled none of these principles. They failed to anticipate both the scale of the Soviet reaction and the poor state of the Russian transport network; they placed excessive reliance on horses at the expense of motor transport; there was
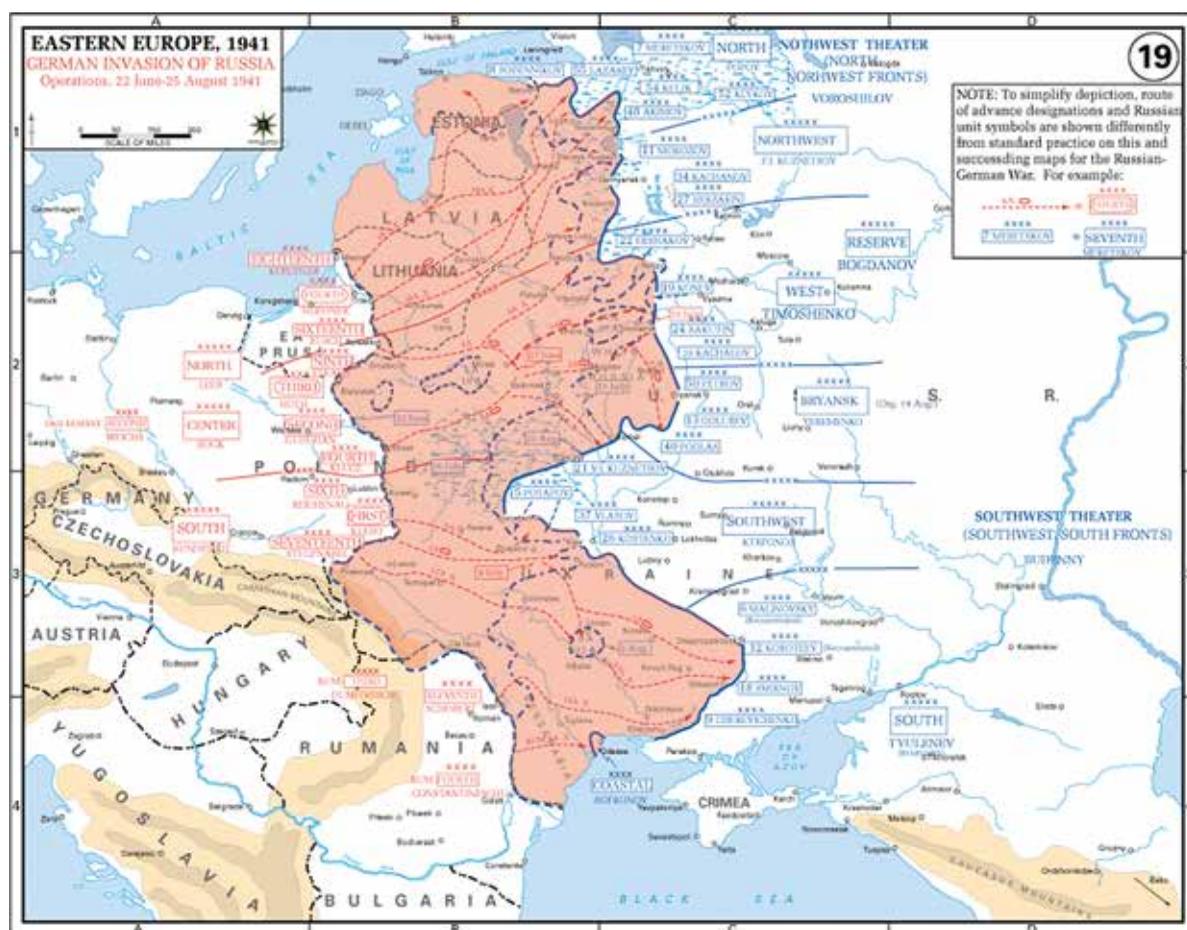


*Map 1: The opening phase of Operation Barbarossa. Image, The History Department of the United States Military Academy, Released.*

---

1   *Fall Gelb (Case Yellow) was the codename for the invasion of France and the Benelux countries in 1940.*
2   *RLC Doctrine Branch, Royal Logistic Corps Operational Handbook (Ministry of Defence, 2007), pp. 1-4-16.*

*German horse-drawn supply wagon negotiating a river crossing in Russia, summer 1941. Copyright: © IWM 205086168*

very little cooperation with Axis allies or even between German staffs; and their reliance on both horses and requisitioned civilian transport to redress the shortfalls in their supply chain created a grotesquely-inefficient logistic system that inevitably collapsed in the Russian mud season and winter. All of these planning failures can be traced to the sense of racial superiority that permeated the entire Nazi state. They saw the Slavs as a backward people and could not see them as being capable of launching dynamic counterattacks, nor even conducting partisan activity in defence of their homes, and their hubris brought their schemes to naught.

## FORESIGHT

Foresight is defined as *the ability to predict and circumvent critical logistic constraints to the Commander's freedom of action*.[3] German planners at all levels operated on enormous assumptions that failed to consider the reaction of the enemy and paid little attention to the state of Soviet roads and railways. Where they were considered, they were inadequately resourced or dismissed as unimportant.

The concept of operations for Barbarossa assumed that the bulk of the Red Army would be destroyed west of the Dvina and Dnepr rivers, with major encirclements being formed at Minsk and Smolensk. This would be followed by an operational pause to rehabilitate, with the remainder of the campaign envisioned as a mopping-up exercise until the *Ostheer* [4] reached its final objective line from Archangel to Rostov-on-Don.[5] The assumption that the Red Army could be defeated early, and that it would grant the *Ostheer* an unproblematic 'logistics pause' to tidy up its lines of communication, was driven by the fact that the Wehrmacht's vehicle-based supply system was incapable of sustaining an advance further than 500 kilometres from railheads.[6]

The reaction of the enemy to the attacker having halted its advance should have been obvious to Barbarossa's planners. They made no allowance for a Soviet counteroffensive and so saw their plans completely derailed when five Soviet armies launched a series of counterattacks against the Smolensk encirclement from 23-31 July 1941.[7] Not only did this week of fighting severely

---

3   *RLC Doctrine Branch, 2007, p. 1-5.*
4   *Literally translated as 'Eastern Army'.*
5   *Kirchubel, Robert, Atlas of the Eastern Front, 1941-45 (Oxford: Osprey Publishing, 2016), pp. 18-9.*
6   *Stahel, David, Operation Barbarossa and Germany's Defeat in the East (Cambridge: Cambridge University Press, 2010), p. 132.*
7   *Kirchubel, 2016, pp. 26-7.*

attrit German divisions trying to hold the *kessel*[8], it also denied them the opportunity to reconstitute formations that were exhausted after six weeks of fighting: far from being permitted a 'logistics pause', the defensive fighting around Smolensk consumed exactly the same amount of supplies as offensive fighting, just in different commodities.[9] Older officers compared the attacks to the trench warfare of the First World War, with one significant difference: German divisions, designed for a war of movement, lacked the transport capacity to supply the volume of artillery shells necessary for positional fighting.[10] This inability to support the infantry at the front told itself in a steady flood of casualties that slowly attrited Army Group Centre.

The supply situation was made worse by the roads. German planners admitted that the Red Army would have to be destroyed west of the Dvina-Dnepr line because the Soviet road network deteriorated dramatically east of Smolensk.[11] However, the transport infrastructure in the western Soviet Union was *better* in only the most relative sense: of the 850,000 miles of roads in the Soviet Union, only 40,000 miles were hard-surfaced and suitable for all weathers.[12] Most roads were little more than dirt tracks which became rivers of glutinous mud after a summer downpour. These quickly became impassable quagmires to thousands of marching men, horses and vehicles. The roads were so bad that at one point it took the 7th Panzer Division two days to advance 90 kilometres.[13] When they dried, they became rutted and treacherous, ready to turn an ankle or break an axle, and kicked up great clouds of dust that choked man, beast and machine alike. Vehicles broke down at an alarming rate as engines suffered dust contamination.[14] POL consumption accordingly rocketed: it was discovered as early as June that the roads were so bad that one *Verbrauchssatz* (V.S.)[15] of fuel, assumed to be sufficient for 100 kilometres of movement, was in fact only good for 70 kilometres, if

that.[16] LVII Panzer Corps reported in August that its vehicles were consuming up to 30 litres of oil per 100 kilometres rather than the usual half-litre of oil.[17] Words like 'catastrophic', 'indescribable', and 'unmaintained' to describe Soviet roads abound in German records from only the first week of the campaign.[18]

A comparable lack of foresight was shown in the Germans' appreciation of the Soviet railways. This was a critical error given the distance they planned to advance: at distances exceeding 200 miles, railways were more efficient than trucks in almost every possible metric - they required less fuel, personnel, spare parts and maintenance relative to the payloads they could carry, while a double-tracked railway line had a lift capacity equal to 1,600 trucks.[19] Not only did the *Eisenbahntruppe* railway troops have to contend with the Soviet railway gauge being famously wider than the European standard, the Red Army destroyed tracks, signal boxes and railway yards as it retreated, making their job immensely more complicated than just re-laying track. Furthermore, Soviet locomotives were larger than German models and so could carry greater loads of water and coal. Accordingly, Soviet coaling and water stations were too far apart for the smaller German locomotives, while very few Soviet trains were captured.[20] While the 'logistics pause' at Smolensk recognised that the *Eisenbahntruppe* would need time to re-lay track and make some minor repairs, this was hardly sufficient to recreate an entire railway infrastructure. Army Group South's three field armies and one Panzer Group fought the Battle of Kiev at the end of only two railway lines, when German doctrine called for a minimum of one line per army.[21] During the defence at Smolensk, rail transport remained so poor that trucks often had to make trips all the way back to the pre-war border for desperately-needed supplies,[22] across the same dreadful roads that slowly eviscerated the *Ostheer's* vehicle park.

---

8    *Literally translated as 'cauldron', the German term for an encirclement.*

9    *Kirchubel, 2016, p. 16.*

10   *Stahel, 2010, p. 280.*

11   *Kirchubel, Robert, Operation Barbarossa: The German Invasion of Soviet Russia (Oxford: Osprey Publishing, 2013), p.45.*

12   *Stahel, 2010, p. 137.*

13   *Stahel, 2010, p. 214-5.*

14   *Ibid.*

15   *Literally translated as 'consumption rate', the amount of fuel required to move an entire panzer division 100 kilometres on roads, equivalent to 125,000 litres of petrol.*

16   *Forczyk, Robert, Tank Warfare on the Eastern Front, 1941-1942: Schwerpunkt (Barnsley: Pen & Sword Books, 2016), p. 65.*

17   *Stahel, 2010, pp. 334-5.*

18   *Stahel, 2010, pp. 155-9 passim.*

19   *van Creveld, Martin, Supplying War: Logistics from Wallenstein to Patton (Cambridge: Cambridge University Press, 2004), pp. 143-4.*

20   *Kirchubel, 2013, p. 73.*

21   *Kirchubel, 2013, p. 266.*

22   *Stahel, 2010, p. 333.*

## AGILITY

Logistic agility *provides the commander with the ability to respond quickly to the unexpected… remain effective under arduous conditions, be flexible in overcoming the unforeseen and adjust rapidly.*[23] The doctrinal component of the German logistic network failed to provide any of these, and nor did the physical component: German logistic agility was hampered by their excessive dependence on the horse.

Outside the panzer divisions, motorisation was spotty at best. An infantry division had an establishment strength of 942 vehicles compared to 1,200 horses,[24] and became even more dependent on animal transport before Barbarossa when Hitler arbitrarily doubled the number of panzer divisions. Consequently the infantry were forced to shed even more of their vehicles to equip the new divisions, while the shortfall was made up by procuring more horse-drawn carts.[25] The Wehrmacht effectively invaded the Soviet Union with two armies: one was mechanised, armoured, and fast, while the other, the great mass of the three million troops committed to the east, could travel no faster than the speed of marching men and draft horses, of which it had 625,000.[26]

This reliance on horses had deep implications for the *Ostheer's* logistic agility. Horses are incredibly slow in comparison to trucks: a pack horse's best pace is little more than five kilometres in an hour and is unlikely to be able to travel more than thirty kilometres daily.[27] Horse transport is also extremely inefficient: one 4-ton truck can carry the equivalent of approximately 42 pack mules, while approximately 10% of a pack lift will be required to transport fodder. A healthy horse requires 4.5kg of grains, 4.5kg of hay, 28.3g of salt, and up to 23 litres of water a day.[28] Transporting fodder alone therefore requires an immense logistic commitment. Finally, the horse is a surprisingly fragile creature. It is susceptible to colic caused by poor feeding, making foraging of limited utility. It can succumb to diseases contracted by, for example, drinking contaminated water. And while a truck can ford a river or be towed if it becomes stuck in mud, trying to drive a horse through similar terrain will soak the poor beast and increase its



*Waffen-SS motorcyclists lead a column of German troops during the advance into the Soviet Union, 1941. Copyright: © IWM 205260137*

susceptibility to hypothermia: within a year of the start of Barbarossa, fully half the *Ostheer's* horses had perished from either exhaustion or hypothermia in the winter in 1941-42.[29]

The deficiencies of horse transport became apparent within the first week of Barbarossa. Russia's climate in summer becomes subtropical, and horses became exhausted in the sweltering temperatures. The rate of advance required the infantry and their horses to conduct forced marches with very little opportunities for rest. Horses predictably collapsed dead from exhaustion.

---

23   RLC Doctrine Branch, 2007, p. 1-6.
24   Kirchubel 2013, pp. 73-4.
25   Stahel, 2010, p. 130.
26   Stahel, 2010, p. 118-9.
27   The Royal Logistic Corps Data Book (Ministry of Defence, 2012), pp. 20-3-4.
28   Ibid.
29   Kirchubel, 2016, p. 67.

Within two weeks, the 6th Infantry Division was reduced to using captured Soviet horses. As lines of communication extended, it became increasingly difficult to supply surviving horses with fodder, while neither time nor manpower were available to collect the immense amount of forage from Soviet farmland.[30] Far from agile, the German logistic network was effectively restricted to a single speed, and the frequent attempts to exceed this resulted in mass death of horses. The effect of this soon became clear around Minsk and Smolensk: the gap between the panzer groups and the infantry became so large that the Germans could not properly close encirclements. When the first encirclement at Minsk was nominally completed on 26 June, many trailing units of Army Group Centre's lead formations had yet to cross the frontier, while the panzer groups had already advanced over three hundred kilometres. This left the southeast side of the *kessel* incredibly porous: thousands of Soviet soldiers escaped to the south to become partisans.[31]

## CO-OPERATION

Co-operation between arms, with other services, and with other international partners is essential to achieving logistic effects.[32] Barbarossa was a coalition operation, with contingents from Italy, Finland, Romania, Slovakia, Hungary, and Spain fighting alongside the Germans. The vast majority of these forces were well below the par set by the Wehrmacht and co-operation with them was minimal. Romania was an essential springboard to invading Ukraine, but the Romanian Army was not formally briefed until just two days before Barbarossa was launched. The Romanian Army was a logistic nightmare of Czech, Dutch, French, German, Polish, and indigenously-produced equipment. Its soldiers were generally brave and resourceful, but incompetent leadership saw it lose nearly a third of its 325,000 men at the Siege of Odessa. They would have been better used for security duties. The Finns, too, laboured under the burden of an international mishmash of equipment, and



*German cavalry, trucks and a towed 37mm anti-tank gun advance through a Russian village in the Ukraine, 1942. Copyright: © IWM 205260132*

30    *Stahel, 2010, pp. 183-5.*
31    *Kirchubel, 2013, pp. 154-8.*
32    *RLC Doctrine Branch, 2007, p. 1-5.*

Finland's neutral status prior to June 1941 made Helsinki a spy capital. Thus they were excluded from serious planning until May. When the Finns had achieved their own territorial aims, largely recovering ground that had been lost in the 1939-40 Winter War, they made no effort to co-operate with Army Group North to complete the Siege of Leningrad. In all the allied armies, obsolescent weapons and lack of motorisation compounded logistic woes.[33]

Logistic co-operation between the Wehrmacht's arms was comparably poor. The Kriegsmarine came a distant third in German strategic planning, and so the possibility of supplying Army Group North through the Baltic ports after their capture was not properly considered.[34] Tactical co-operation between the Army and the Luftwaffe was better, and transport aircraft often flew emergency resupply runs to makeshift airfields only a few miles behind the front. However, a single Ju-52 could carry 1,600 litres of fuel, sufficient for five Panzer IIIs. To refuel an entire *kampfgruppe* therefore required twenty-five sorties, to say nothing of flights for other combat supplies.[35] Air dispatch could never replace ground lines of communication, and attempts to do so would have serious long-term consequences: during the defence of the *kessel* at Demyansk, which had been encircled during the Soviet winter counteroffensives, German troops were able to hold out for seventy-two days while being resupplied by 100 Ju-52 sorties a day. 60,000 tons of supplies were delivered before the *kessel* was finally relieved in late April 1942. However, the operation resulted in the loss of 265 irreplaceable transport aircraft, at a time when the German air industry was producing only 500 transports a year, and the effect was to convince Hitler that encircled troops could be easily resupplied by air. This would have catastrophic consequences at Stalingrad less than a year later.[36]

## EFFICIENCY

Efficiency *involves achieving the maximum level of support for the least logistic effort and making the best use of finite resources, transportation assets, and lines of communication.*[37] Sustaining the *Ostheer's* logistics

required a massive resource commitment in its own right. We have already seen the issues the Germans faced with maintaining horses in the Soviet Union, and their motor transport fleet was little better.

In German terminology, *Kleinkolonnenraum* (small column area) referred to transport that was organic to the divisions. The *Grosstransportraum* (large transport area) is somewhat comparable to the British Army's 'third line', the bridge between railheads and the divisions. The *Grosstransportraum* in 1941 was formed of only 9,000 men in three regiments, with only 6,600 vehicles, of which 20% were routinely undergoing maintenance.[38] This was clearly utterly inefficient to meet the logistic needs of three million men. To make an illuminating comparison, these vehicles had a total capacity of 19,500 tons to supply over 150 divisions, while in 1944 the Western Allies used 69,400 tons of motor transport to supply 47 divisions in France.[39] Observers of the European campaign will note that despite this spectacular bounty of vehicles, once their lines of communication extended beyond 450 kilometres the Allies were only able to sustain a major advance by one army group, and that was on the dense, well-developed road network of Western Europe.[40] Sustaining three army groups on an infinitely-worse road network inevitably proved to be beyond the *Grosstransportraum*.

The *Grosstransportraum's* capacity was somewhat boosted by requisitioned civilian and captured French trucks, but this meant that, having operated nearly 303 types of vehicle in 1938, by June 1941 the Army was operating over 2,000 different types of vehicle. The 18th Panzer Division alone operated 96 different types of personnel carrier, 111 types of truck, and 37 types of motorbike. This created a maintenance nightmare as quartermasters had to stock over a million types of mutually-incompatible spare parts.[41] One panzer battalion in Finland equipped with captured Hotchkiss tanks had to receive spares sourced from Gien in France. At least 22,000 tons of spare parts were shipped by rail to supply depots from June-August 1941,[42] but they often could not be moved to the front line: since many of

33   Kirchubel, 2013, pp. 81-9.

34   Kirchubel, 2013, p. 80.

35   Forczyk, 2016, p. 66.

36   Beevor, Antony, Stalingrad (London: Penguin Books, 2011), pp. 43-4.

37   RLC Doctrine Branch, 2007, p. 1-5.

38   Stahel, 2010, pp. 128-31.

39   van Creveld, 2004, p. 144.

40   Caddick-Adams, Peter, Snow and Steel: The Battle of the Bulge 1944-45 (London: Arrow Books, 2015) pp. 75-88.

41   Ibid.

42   Forczyk, 2016, pp. 111-3.

*A Panzerbefehlswagen Ausf H (Panzer III) command tank and motorcycles of General Guderian's 2nd Panzer Group, part of Army Group Centre, during Operation Barbarossa, summer 1941.* **Copyright: © IWM 205260142**

the trucks were requisitioned civilian models, they were not robust, four-wheel-drive models that could survive the rough, dusty roads of the Soviet Union, but ordinary two-wheel-drive vehicles. Predictably, they were soon falling out in droves, regularly bottoming-out and tearing out the oil sump or transmission, or wrecking their suspension.[43] Within the panzer divisions, 30-50% of trucks had broken down by September 1941,[44] while on a given day, the *Grosstransportraum* was able to supply about 70 tons of supplies to the motorised divisions; they required 300 tons.[45]

In order to push the Panzer Groups as far as possible in what was anticipated to be the decisive, early stage of the campaign, the tanks were festooned with jerrycans and trailers capable of carrying 400 litres of fuel.

Their turrets were crammed with twice the standard ammunition complement.[46] German doctrine required each panzer division to have four V.S. of fuel stockpiled before beginning offensive operations, sufficient for an advance on roads of 400 kilometres, though as we have seen, Soviet roads were so poor that one V.S. might be sufficient for only 70, or even 50 kilometres. Each panzer division's *Kleinkolonnenraum* had three fuel companies with thirty trucks between them that could transport a total of 75,000 litres of fuel, or 0.6 V.S. When this was exhausted, the panzers had to stop until they were resupplied by the *Grosstransportraum*, which as we have seen, was rarely sufficient to meet requirements and would have to be supplemented by air dispatch.[47]

---

43   *Stahel, 2010, p. 213.*
44   *Forczyk, 2016, pp. 111-3.*
45   *Stahel, 2010, p. 133.*
46   *Ibid.*
47   *Forczyk, 2016, p. 28.*

## SIMPLICITY

Simple logistic arrangements help ensure robustness and understanding. Simplicity can be enhanced through the use of common processes and the maintenance of control along lines of communication.[48] At this point it is tempting to conclude that German logistic arrangements were simple to the point of non-existence. We have already discussed the almost total lack of common processes, and the Germans had very little control over their rear areas, which further complicated their logistics. The genesis of this enormous Soviet partisan movement lies in Nazi Germany's racial policies.

to present itself as 'clean', the Wehrmacht was deeply complicit in Nazi war crimes. Wehrmacht policy echoed Nazi propaganda in emphasising the struggle against *Jewish Bolshevism*, which was seen to have 'stabbed Germany in the back' in 1918. Erich von Manstein's order to the Eleventh Army emphasised *the necessity of harsh measures against Jewry*.[49] Under the OKW's[50] Commissar Order, Jews, Soviet Commissars and partisans were seen as one and the same and were required to be executed on capture. Walther von Reichenau's infamous Severity Order emphasised thewar's racial character and legitimised the handing-over of captured Jews to the *Einsatzgruppen*.[51] Finally, the *Barbarossa Decree*, signed by Field Marshal Wilhelm Keitel, made it a crime



One cannot responsibly discuss the war in the east *uania, 28 June 1941. Copyright: © IWM 205231256* without reference to Nazi Germany's genocidal ambitions towards the Slavs and Jews. Despite post-war attempts

---

48   *RLC Doctrine Branch, 2007, p. 1-6*
49   *Beevor, 2011, pp. 14-7*
50   *Oberkommando der Wehrmacht, notionally the unified high command for the entire armed forces, in practice often bypassed*
51   *Literally translated as 'task forces', a euphemism for SS death squads responsible for up to two million killings during the Holocaust*

punishable by summary execution for a Soviet citizen to disobey a German soldier, and effectively exempted soldiers from punishment for war crimes committed on the Eastern Front.[52]

Consequently, the Soviet people had zero incentive to surrender or cooperate with German troops. The gap between the armoured spearheads and the marching infantry was such that Soviet soldiers bypassed in the initial invasion could not be taken prisoner. They instead melted into the Belorussian forests and marshes, creating an instant insurgency that denied the Germans any control of their rear areas.[53] This became institutionalised by Stalin's 3 July order to *foment partisan warfare everywhere… conditions in the occupied regions must be made unbearable for the enemy.*[54] The Germans' racially-driven brutality soon caused any sympathy to evaporate. Reprisals were meted out a rate of fifty or a hundred to one for every German wounded or killed in partisan actions, but this failed to cow the civilian population: the 110,000 older reservists mobilised for the security divisions and police battalions could not control 850,000 square miles of occupied territory. By February 1942, German efforts had reduced the partisan movement from 87,000 to 57,000 men, but within a year this had more than doubled to 120,000 men. As late as 1943 and the beginnings of the retreat, the German rear areas were still nothing like secure.[55]

## CONCLUSION

The Germans made only the most token of efforts in their logistic planning for Barbarossa. Their worst failing was their lack of foresight: they made no allowance for the deficiencies of the Soviet Union's roads and railways. However, even if they had, it is unlikely that they would have been able to do much about it owing to their supply system's structural deficiencies: they were over-reliant on horses which came at the expense of speed and agility, and attempts to boost their truck fleet with civilian vehicles only resulted in massive losses in vehicles through breakdowns.

Taking the Germans' issues with railways, horses, and trucks together gives light to just how inefficient their logistics system was: railways were the most efficient means of transporting bulk loads great distances, but

they neglected railway troops and were incapable of restoring them to the doctrinally-required capacity. They lacked both the numbers and quality of trucks to properly support their divisions, much less make up the railway shortfall, and attempts to do this slowly destroyed the truck fleet on the horrendous roads. Finally, the excessive reliance on horses made the whole system slow, unwieldy, unresponsive, and horribly vulnerable to disease even before the winter set in.

Co-operation between staffs and with their allies was minimal, and even when tactical co-operation, for example with the Luftwaffe, was good, it could not make up for the failures of the rest of the supply system. Finally, Nazi racial policy prevented them from predicting the effect of Soviet counteroffensives, or even the possibility of a partisan movement in their rear areas, which was intensified by their own criminal actions and only further complicated their logistics.
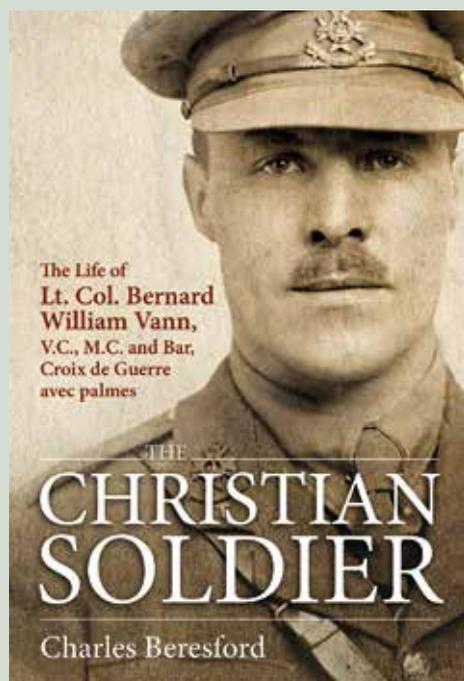
52   *Beevor, 2011, pp. 14-7*
53   *Stahel, 2010, p. 160*
54   *Stahel, 2010, p. 199*
55   *Kirchubel, 2016, pp. 262-4*

# THE CHRISTIAN SOLDIER: THE LIFE OF LIEUTENANT COLONEL THE REV BERNARD WILLIAM VANN VC, MC AND BAR, CROIX DE GUERRE AVEC PALME

## Charles Beresford

*Review by* **Dr Arnold Harvey**

Bernard Vann V.C. was one of about forty men who, with no military experience prior to 1914 beyond membership of school or university OTC, rose by 1918 to the command of a battalion on the Western Front. Formerly chaplain and assistant history master at Wellingborough School, he was also one of more than five hundred Anglican clergymen who served in the in the armed forces in the Great War other than as military chaplains.

Charles Beresford's biography is an impressive demonstration of how much there is to discover and reconstruct about the life of an individual who has left behind relatively little in the way of personal papers: no fewer than sixty-six newspapers, periodicals and annuals are listed in the bibliography, and twenty-one archives and manuscript sources. Vann himself, unfortunately, remains something of a conventional cardboard cut-out. One friend wrote after his death of his 'strength of personality' and 'the force of his convictions', and noted, 'He had no use for *"slackers"*, whether in games or in the line - but "slackers" in his platoon, his company, or his battalion were few, for he inspired all by his wonderful example of courage and energy.' Another friend - possibly a mere acquaintance - remembered his 'gay spirit' and 'merry laugh'. These are not much more than routine tributes. Perhaps the main interest of this book is not Vann himself but the contexts of his career.

The final chapter, *The Combatant Anglican Clergy of the Great War*, is the best thing so far published on this subject. Edward Gell, another priest who rose to battalion command, explained after he had resigned from the Army Chaplain's Department and applied for an ordinary commission, 'I am confident from a spiritual point of view I shall be able to do, in reality, much more, and without the handicap which I have felt during this war.' In fact, more Anglican priests served in the ranks in the

Royal Army Medical Corps, working as orderlies, than as officers commanding armed men: but Vann, like many combatant priests did not forget his clerical profession and often held services to give his soldiers Holy Communion. It seems probable that he and most other ordained officers took a view of their religion that placed more emphasis on the Sacraments than on pastoral work, and that this was reflected in their attitude towards the men they led. Overall, the devotion and dedication to service of frontline priests in the 1914-18 War, whether chaplains or combatants, shows the vigour of the Church of England on the eve of its mid-and late-twentieth-century decline.

Charles Beresford's book is less illuminating on the subject of the particular qualities that enabled civilian professional men like Vann to become successful battalion commanders in about the same time as it takes to get a bachelor's degree at university. Vann had the reputation of being completely fearless, though people who knew him 'remember his admitting to a haunting dread lest he should show any sign of the fear that so often gripped his heart with icy fingers.' Neither the reputation for fearlessness nor the suppression of all signs of fear were regarded as completely extraordinary in the British Army a century ago. He led from the front, and made good use of his revolver, and also of the riding crop with which he 'maimed' two Germans in the attack that won him his V.C.

Leading from the front might be more the job of a platoon commander however, not that of a company commander, let alone a battalion commander - one could see more of what was going on, especially on one's flanks, if one was a little way further back. It has to be said too that appointment to command a battalion in 1918, when even a battalion was only a small spoke in a vast military machine, by no means presupposed the kind of military

knowledge that in normal circumstances a lieutenant colonel could be expected to have after a couple of decades of soldiering and a stint at staff college: it is worth noting that the two officers who joined up in 1914 and commanded battalions by 1918 who stayed in the army and held key commands in the 1939-45 War, Bernard Freyberg V.C. (who actually went a step higher, to brigadier general, in the earlier conflict) and Arthur Percival, were both failures the only time they had sole responsibility for an important campaign.

It may be that Vann had a rare gift for making other men follow him: but at the level at which appointments to battalion command are made this is not the kind of thing that is particularly noticed, or if noticed, is taken for granted. In the end it seems he was promoted because he was on top of his job. There was an element of lottery even in this. When he got his battalion he had a double M.C., but so did the man who became his second in command, Major Victor Robinson: but Robinson, commissioned before the war, had been in the army twice as long as Vann.

Another aspect of the Western Front lottery was the chance of losing one's stake, and getting killed. *The Christian Soldier* is the story of a man who had to steel himself to face a class of scruffy boys when himself still a teenager, to face Aston Villa as centre half for Derby County, to face Oxford's hockey blues as right wing in the Cambridge team, and for the last three and a half years of his life to face death in the trenches: a man who did what he believed needed to be done. The impression of a personality fades in a hundred years; the example of what Bernard Vann did remains fresh.

# THE CAUSES OF WAR AND THE SPREAD OF PEACE, BUT WILL WAR REBOUND?

## Azar Gat

*Review by* **Christopher Fisher**
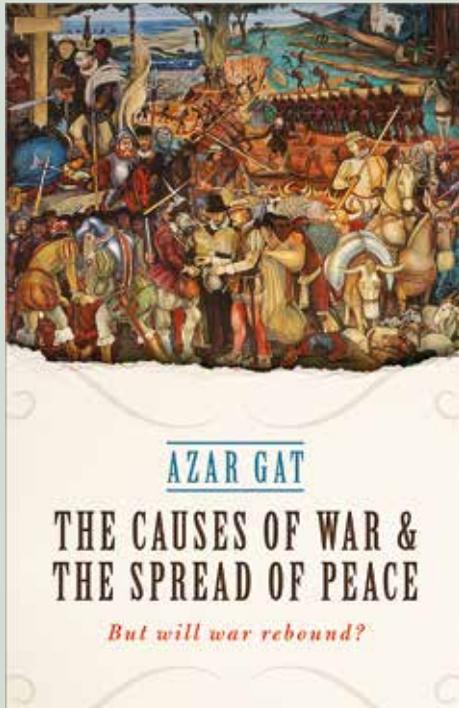
Oxford University Press,
Hdbk, £18.99
pp 320,
ISBN-13: 978-0198795025

A number of my friends have gone onto careers in Risk Management and Consultancy. It seems that there is something about this sector that encourages the gloomiest of outlooks: apocalyptic scenarios abound in an increasingly unpredictable and volatile world. Risk Consultants would do well to read Azar Gat's latest musings.

*The Causes of War and the Spread of Peace* is the latest in a line of thoughtful pieces of research including Stephen Pinker's *Better Angels* and Ian Morris' *War, What is it Good For*, that are frequently referenced throughout the work. Taken together they offer something of a counterpoint to the drone of doomsday merchants and (sadly) the popular press: horror sells and unspeakable horror sells unspeakably well. Gat, Pinker et al seek to put the litany of human violence in context by pointing out that whilst the world may be more violent in absolute terms, taken as a proportion of the exponential increase in population we are actually enjoying an unprecedented period of peace and stability.

Gat's particular angle (he first set out many of these arguments more broadly back in 2008) is in relation to war. A multi-disciplinarian he mashes together important contemporary research in psychology and anthropology with that of politics and economics to baseline what causes people to go to war. Gat's conclusions are startlingly simple and yet fresh. He rejects the 'quest for power' as a (primary) cause of war, instead asking why is it that people seek power in the first place? He seeks to unravel the age old question of whether humankind is naturally violent or whether war is a consequence of our social habits. Gat also tackles sexual violence not simply as an appalling consequence of war but as a cause.

*Causes* is very well written even if some of the arguments lack the kind of detailed quantitative evidence that made Pinker's book so important. It is also a highly entertaining read. Gat goes out of his way to undermine sacred cows in the fields of international relations and anthropology. With penetrating insight he strips back the foundational theories of some of the great theorists (Morgenthau, Waltz) arguing that whole canons of work that have followed have been of peripheral interest because the basic assumptions were wrong. Psychologists have collectively ignored whole swathes of data on premodern violence because it fails to meet modern definitions of warfare on a technicality. This is important because it challenges biases in the academic literature that we didn't even know were there.

*Causes* is by no means an idealist manifesto and Gat is clear to remind us that, despite human progress, the true causes of war are never far away. Yet, as Europe tears itself apart, a nuclear spectre looms over the Korean peninsular and violent extremism seems ubiquitous, this book will come as a useful reminder that although war and violence have been a part of human history as long as food and sex, that fact has not prevented the human race from flourishing. If indeed 'anarchy is what we make of it,' then perhaps we have not done such a bad job, after all.

# A HEAVY RECKONING: WAR, MEDICINE AND SURVIVAL IN AFGHANISTAN AND BEYOND

## Emily Mayhew

*Review by* **Major Sergio Miller**
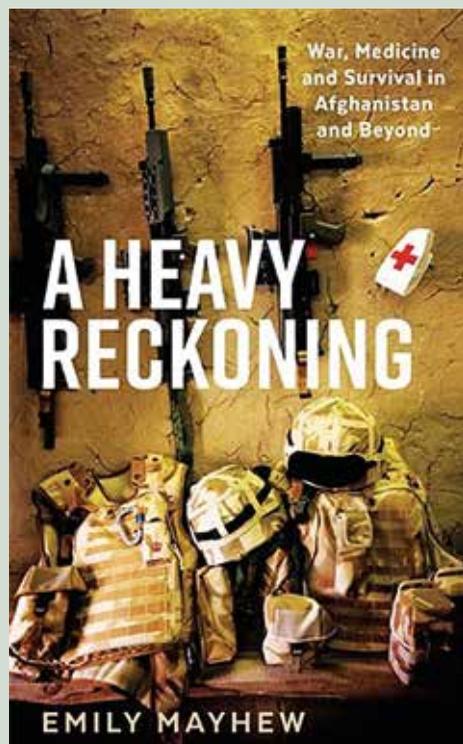
Midway through *A Heavy Reckoning*, Dr Emily Mayhew tells the story of triple amputee Marine Mark Ormrod's first day out of hospital. His family had prepared a dinner for him in the flat where they were staying in Birmingham. When he arrived in his wheelchair it was discovered that the chair did not fit through any of the doors and he was trapped in the hallway. He spent the rest of the evening talking to them through the too-narrow doors, in personal anguish. On a subsequent visit, he decided he would spend the night in the flat, rather than return to hospital, and sleep on the sofa. The effort it took him to cross six feet of carpet and lever himself on the sofa left him completely exhausted. It was his lowest point since he stepped on the IED that changed his life and the moment when he begged his comrades to shoot him.

Ormrod's personal Calvary - the journey that all the amputees have had to make and are still making - is the subject of this book. Mayhew is a military medical historian specialising in the study of severe injuries in modern warfare and the historian in residence in the Department of Bioengineering at Imperial College. Her position gives her unique access to a uniquely sensitive area of military injuries and she has written previously on medicine in the Great War.

At the beginning of the Afghanistan War, roughly 83 percent of severely injured casualties survived. By the end, 92 percent were surviving. These were predominantly the casualties of 'avulsive' blast injuries – the technical term for what happens to a human body in close proximity to a high explosive detonation. Armies have been blasting each other with high explosives for many decades, but Afghanistan added a twist to this story with the IED. The melancholy harvest of IEDs was 'the Afghan cohort', a members-only club of 'unexpected survivors'. The Great War left behind 41,000 amputees, but only a single surviving triple amputee. Afghanistan (and Iraq) left behind just over 220 amputees, including triple amputees and one quadruple amputee (curiously, Mayhew does not offer these statistics). The question is: have we got better at dealing with these human consequences of war?

The book is loosely organised on the journey made by casualties from the point of injury to recovery. Mayhew is plainly passionate and this is an emotive book (with a somewhat weak style: verb-less sentences lose their impact after a while). The pathophysiology of shock; the unknown long-term effects of Traumatic Brain Injury (TBI); the complexities of neuropathic and nociceptive pain (a lifetime curse for many amputees); all these are well described. The various stages of the medical chain are explained with sympathy and insight. There are surprising revelations - who knew that the UK manufacturer of modern prosthetics, Blatchfords, has been in business since the 1890s? Mayhew warns that post the Great War, many of the lessons learned were lost and had to be re-learned. Mostly, the book suggests, we may be confident that the same dilution of lessons will not happen this time round, but this depends on individuals championing the cause, and money. Funding should not matter, but one study has estimated that Britain's war amputees will cost the health and welfare systems £300 million over the course of their lifetimes.

Mark Ormrod features heavily in the book (the only other soldiers mentioned are Paratrooper Scott Meenagh and Royal Engineer Captain Dave Henson). This highlights a weakness in the book. Ormrod has already told his story in *Man Down*. Dave Henson has become relatively well-known, at least on television, thanks to the Invictus Games (which are not covered in the book). Ultimately, *A Heavy Reckoning* feels like a missed opportunity.

Mayhew is in a position most authors envy: someone with unique access to primary sources, documentary and human. Yet these are almost invisible. It is a surprise to reach the end of the book and find that not one of the medical units that served in Helmand is mentioned. You don't even learn how many amputees were generated by the war. The many statistics published by medical units over the course of the war (which this reviewer recalls from PowerPoint presentations) are not used. The treasure trove of data that Mayhew can probably access at Imperial College is not plundered. She mentions the patient diaries but very sparely quotes from them. In the entire book there isn't a single quote from a family member, or friend or partner. The surgeons and nurses remain unnamed ciphers (the no-names policy for security reasons is weak and unnecessary). It is perhaps not accidental that the most moving quotes are actually from the Great War, presumably derived from her first book.

Ironically, the most powerful pages in *A Heavy Reckoning* are in the introduction where one suspects Mayhew unburdened her mind. The section is introduced by a quote from Henry V. On the eve of battle, Williams, the Welsh Serjeant-at-Arms, warns the king that battle means 'a heavy reckoning', from which the book takes its title. When the din of battle is over, the field will be covered with 'all those legs and arms and heads, chopped off.' 'If the cause be not good', Williams reminds Henry V, he will face the heavy reckoning of the dead and maimed whose blood is their argument. This question - was it worth it -remains unanswered.

# THE KILLING SCHOOL: INSIDE THE WORLD'S DEADLIEST SNIPER PROGRAM

## Brandon Webb, John David Mann

*Review by* **Lance Corporal Ian Cashmore**
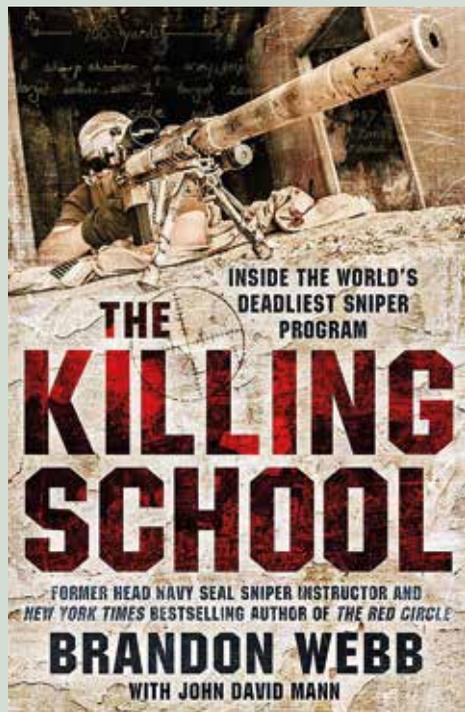
T*he Killing School* is an in depth perspective on the current sniper training school in America, but also delves into the previous versions that had been used by some of the most advanced branches of the American military, and moves into some of the most intense scenarios that make an addictive but haunting read. The book is based on four different individuals, not including the writer himself, as well as mentioning some of the more glorified personnel that have attended the course. The style of the narrative made it quite a challenge to follow but not impossible.

The most interesting part of the book was the training itself. Learning about the different requirements and mentalities to even attend some of the courses, before their amalgamation into the Killing School, gives the reader insight into what the individuals in question went through. The brief descriptions of some of the physically and mentally demanding lessons provide a clear outline to anyone aspiring to join such an elite program. There is a dimension to each of the programs that gives the reader a sense of the level of training, development and professionalism that these courses instil in their attendees.

Learning about certain concepts was also an eye opening experience. The basics of stalking, shooting and reconnaissance that are widely taught to most military personnel throughout the world are minute in comparison to the level of instruction described. Mentions to some of the most elite units throughout the world that provided ideas and concepts for the program, including the SAS and Olympic gold medallists, give the reader an insight to the development of the program that is famous for producing some of the best known snipers in American history; Chris Kyle of the film *American Sniper* and Marcus Luttrell of the film *Lone Survivor*. Both of these went through the Killing School as it is now known.

Something that all readers can take away from this book is a singular concept; reinforce a positive and not a negative response. This is explained as one man doing an action incorrectly and instead of being told what he did wrong the instructors rephrased the normal 'this is what you did wrong ' into ' this is how you should've completed it'. The ideology behind this is something that many people throughout many sectors of training, not just in the military, could adapt to and use in a very constructive manner.

Overall the book is a very enjoyable, if not sometimes difficult to read. Behind the scenes it looks into one of the most advanced courses in the world, and describes some of the most demanding and harrowing accounts of bravery and patriotism. Whilst giving the reader the opportunity to imagine the experience it also describes them in such detail as to make you think you had lived it.

# THE GREAT WAR & THE MIDDLE EAST - A STRATEGIC STUDY

## Rob Johnson

*Review by* **David Benest OBE**
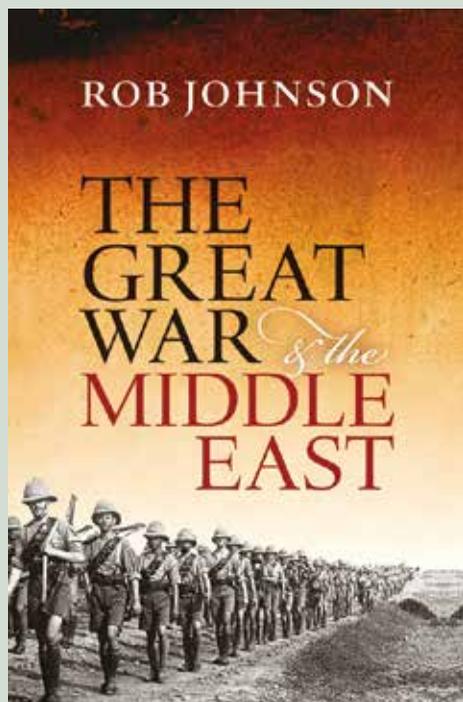
Attention both in 2017 and this year is, inevitably, on the Western Front from the British perspective, notably Passchendaele, the German offensives of early 1918 and then the 'Hundred Days', which led to victory. Little has been said concerning the Middle East and its ramifications for the entire British Empire. Rob Johnson sets out to correct this imbalance, especially over the ultimate demise of the Ottoman Empire at Mediggo, our excursion into Mesopotamia, now Iraq, Afghanistan and places in between such as Palestine, the Dardanelles, Gallipoli and Sinai. Other chapters go even further afield as regards Russia and the Caucasus and Sraikamus. Hejaz is much well known, courtesy of T.E. Lawrence's *Seven Pillars of Wisdom*. Johnson provides a valuable balance to this very British fetish with war 'heroes'.

Rob Johnson's account is, rightly, set at the political and strategic level, which is the only way it can all be understood, if at all - it is after all a massive and complex jig-saw. My interest has been largely focussed on Palestine and the Anglo-French agreements as to how a post-war situation might arise to equal benefit, not least the Balfour Declaration over Palestine and its consequences that are still with us in 2018, one hundred years onwards.

It would be difficult to headline particular commanders and leaders in this kaleidoscope but if any, it must be those generals who understood this warfare for what it was, were determined on achieving success at minimal

loss of life and were careful in doing as such, with attention to logistics as much as to tactical successes. The failure of General Charles Townshend (no relative of Professor Charles Townshend of Keele University) at Kut is an all too obvious example of the consequences of not adhering to such rather obvious thinking. Maude and Allenby immediately come to my mind as officers who really did understand the war they were fighting, Churchill perhaps less so. How fortunate for all of us that by the Second World War, Churchill was advised by Alanbrooke, a relationship that was not as apparent between the Prime Minister, Lloyd George and his own CIGS, William Robertson.

Rob Johnson covers this intricate ground with great aplomb and I wonder, might well have stolen a march on Professor Hew Srachan's own attempt at a definitive history of the First World War, of which so far, only Volume One has been published. Johnson's is in itself a terrific achievement both historically and also as a study into the interaction of politics and strategy, with many references to Carl Von Clausewitz. The relevance to today's Middle East is all too obvious. At least here we see the origins of so much that is now headline news.

# A LAB OF ONE'S OWN - SCIENCE AND SUFFRAGE IN THE FIRST WORLD WAR

## Patrica Fara

*Review by* **Lieutenant Colonel Penny Davies**
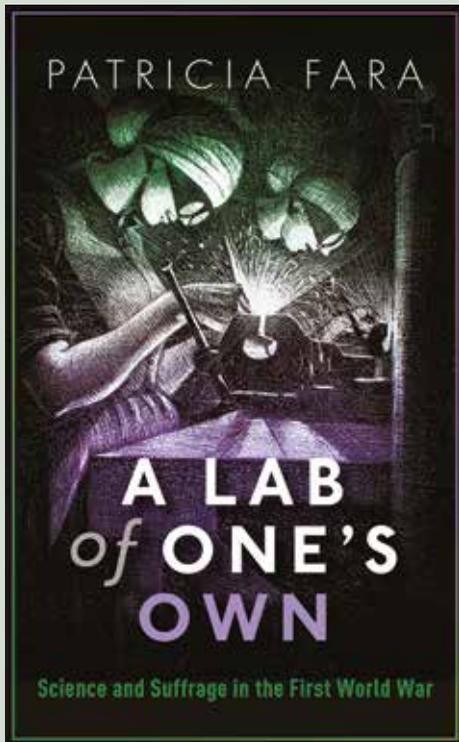
This year marks the one hundredth anniversaries of two momentous events, the end of the First World War and the Act of Parliament that gave women the right to vote. This book highlights the link between these events by revealing the political and scientific contribution of women to Britain's social and military history in the early twentieth century. The author, who is President of the British Society of the History of Science, argues that whilst women had been campaigning for equality since the mid-nineteenth century, the plight of Britain's working classes made emancipation for men and women more urgently felt in the years preceding the War. This led to new opportunities opening up as the nation moved towards 'militarization'.

The author shows that as Edwardian suffragists broadened their movement away from the plight of middle class ladies trapped by Victorian convention and towards a more equal society for all, the worlds of suffrage and science collided. Modernity and science went together. The British Army and Royal Navy were busy making themselves 'scientific' with advancements in experimental and war-related technologies such as the machine gun, radio communications and reconnaissance aircraft. Demonstrating their modernity, suffrage supporters allied themselves with scientific and technological progress.

The book wonderfully illustrates this with example of female scientists who thrived in this new environment, women such as Mabel Elliott the pioneering cryptologist, physicist and meteorologist Margaret Fishenden, leading organic chemist Martha Whiteley and Frances

Micklethwait who was among the first to study mustard gas. The War led to some recognition of brilliant women, such as biologist Dame Helen Gwynne-Vaughan who established the Women's Auxiliary Army Corps in France and was the first woman to be made a Military Commander of the Order of the British Empire. In a speech in 1918, even the King noted women's participation as most remarkable. However, the book notes also the quiet unrecognised contribution made by countless, nameless others, those engineers, mathematicians and surgeons who played active and important roles during the War.

In the final section of the book the author draws attention to the fact that whilst the Armistice marked the end of the War, 'winning the vote was not the end of the battle for equality'. As scientists came home and national unemployment figures rose, priority was once again given to male employment. Women discovered that many opportunities had been fleeting and were curtailed once the War came to an end. Moreover, women were to wait another ten years before they reached 'the suffrage goal' of parity with men, under the Equal Franchise Act of 1928. However Fara observes that perceptions of women's abilities and suitability for professional roles had changed forever and a higher proportion of women had university qualifications in science, engineering and medicine than ever. This book provides a vivid and fascinating account of a little understood period in the history of the women's suffrage movement and their remarkable contribution across all spheres of Britain's scientific, industrial and technological war effort.

# SAS GHOST PATROL: THE ULTRA-SECRET UNIT THAT POSED AS NAZI STORMTROOPERS

## Damian Lewis

*Review by **Lieutenant Colonel Simon Butt***
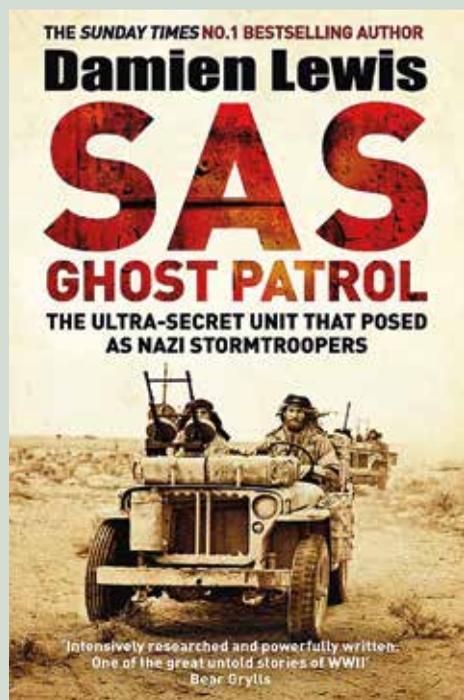
*'Intensively researched and powerfully written. One of the great untold stories of WWII.'*

*Bear Grylls*

September 1941: A lone figure stumbles out of the Saharan wastes - sun-blasted, famished and on the very brink of death. Dressed in ragged Afrika Corps fatigues, he is immediately taken captive by Allied frontline troops. But this, it transpires, is no German soldier … It is Captain Herbert Cecil Buck, a man who has just executed one of the most daring and epic escapes from the enemy. A fluent German speaker, Buck has dressed himself in a dead German officer's uniform and stolen a German jeep, bluffing his way through dozens of hostile checkpoints and crossing hundreds of miles of inhospitable desert, to escape.

Desperate times call for desperate measures. In this unique moment is born Buck's Great Idea: if he could bluff his way out of German captivity, surely an Allied unit - similarly attired and equipped - could bluff its way back in again … only with very different and darker aims in mind.

In autumn 1942, with the Allies reeling from defeat on all fronts, Churchill conceives of a mission as outrageous and desperate as it is seemingly impossible: with Captain Buck's exhaustively-trained unit in the vanguard masquerading as Nazi Stormtroopers, and leading an elite force disguised as prisoners-of-war, they are to attempt the most extraordinary bluff of WWII - to drive across German lines and penetrate deep into hostile territory, to strike at a Nazi stronghold the enemy believes is utterly invulnerable. Their ultimate aim - in addition to spreading murder and mayhem, and robbing bank vaults along the way - is to break into a German POW camp, freeing 18,000 Allied prisoners, who - armed and commanded by their liberators - will rise up in the Germans' rear.

This mission - the audacious and daring raid to re-take the Axis stronghold of Tobruk, in North Africa - was pure Churchill. A desperate attempt to turn the tide of Nazi victories, it would break every known and accepted rule of warfare. Buck's ultra-secret deception force - known as the Special Interrogation Group (SIG) - consisted of fluent German speakers, trained by German POWs, wielding German weapons, wearing German uniforms, and driving German vehicles flying the Swastika. They even carried letters from suitably Aryan-looking 'girlfriends' - in truth, volunteers from the WAAF. In spite of the incredible odds and the stakes, this subterfuge earned Churchill's absolute blessing. But perhaps of equal consequence were the seemingly impossible distances and physical terrain to be navigated. The mission would involve the SIG plus the SAS and Commandos - nicknamed the *pattuglia fanatasma* (the Ghost Patrols) by Italian forces - making the longest overland insertion in the entire history of Allied Special Forces. It would require a 3000 kilometre crossing of the sun-blasted, waterless, trackless wastes of the Sahara desert. Across the deathly Great Sand Sea the force would be led by the warriors of the Long Range Desert Group - the quintessentially British unit set up to navigate the vast Saharan wastes - so striking from a direction the enemy believed was impregnable.

What unfolded was an operation of daring, courage, tragedy and survival that remains unrivalled to this day, and which rightly became a foundation stone of Special Forces legend. Written with author Lewis's signature authenticity and dramatic verve, *SAS Ghost Patrol* is peopled by a cast of the utterly maverick and the extraordinary. In its quirky eccentricities, outrageous rule-breaking and ferocity, this is a story that could only be retold by a British Author. Damien Lewis has written a masterpiece with such panache and aplomb, it may read like the stuff of impossible myth or folklore, but every word is true, a superlative read.

# THE NEW MIDDLE EAST 'WHAT EVERYONE NEEDS TO KNOW'

## James L Gelvin

*Review by* **Lieutenant Colonel Matthew Murphy**
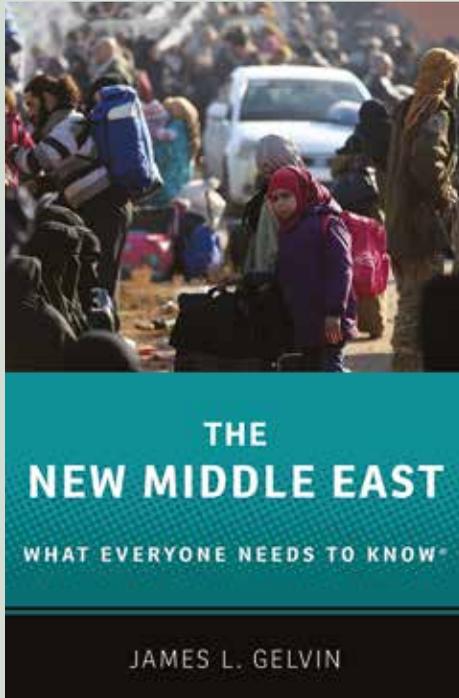
OUP USA (January 2018),
Pbk, £9.90, pp 208,
ISBN-13: 978-0190653989

In this short and accessible book, historian James Gelvin has skilfully captured 'what everyone needs to know' about the region.

The book is a precis of previous academic work on the Arab Spring written in a style that allows the reader to enjoy the assertive and at times journalistic tone to his rigorous analysis of this complex area. The core premise is a combination of reminding the reader of the historical and structural conditions in the Middle East region (more accurately Middle East and North Africas (MENA) described as the states of Levant, Islamic North Africa and the Arabian Gulf) and the events since 2011 that have fundamentally changed the imminent prospects of the various countries involved.

Most readers will be aware of the security importance of current states of MENA, particularly Iraq, Syria, Libya, but Gelvin also maps a journey through MENA state formation in the early 20th century, the ancient religious tension inherent in the great religion of Islam and how modern generations are demanding a voice within these developing societies. Through a very accessible question and answer style the reader is eased into the circumstances so pertinent today and likely to shape this vital region in the coming years. The rise and fall of ISIS is covered in sufficient depth after a chapter that puts the problems in Syria into context. Both chapters conclude with 'so what?' and 'what next?' sections that are compelling in their clarity and brevity.

Having covered the inevitable headlines, Gelvin cleverly returns to the deeply entrenched challenges of external influence, cultural norms and thus the challenging inter-relationship with partners. He concludes by reminding the reader of the very human dimension to security in the MENA region, agilely skipping around the human terrain and examining the basics of human existence, population movements, demographics, domestic economics and gender issues. In doing so he grounds the headlines previously discussed in the most enduring needs and desires of the diverse and growing Muslim population of MENA.

In summary, the book should be essential reading for any soldier or those fascinated by the contemporary security challenges of our time. It is easy to read, written in a style that is fun to engage with, based on a depth of research that remains compelling throughout and might just become a core text in preparation for a number of operational deployments both current and future across MENA.

# PREPARING FOR WAR: THE EMERGENCE OF THE MODERN U.S. ARMY, 1815-1917

## J P Clark

*Review by* **Gerry Long**
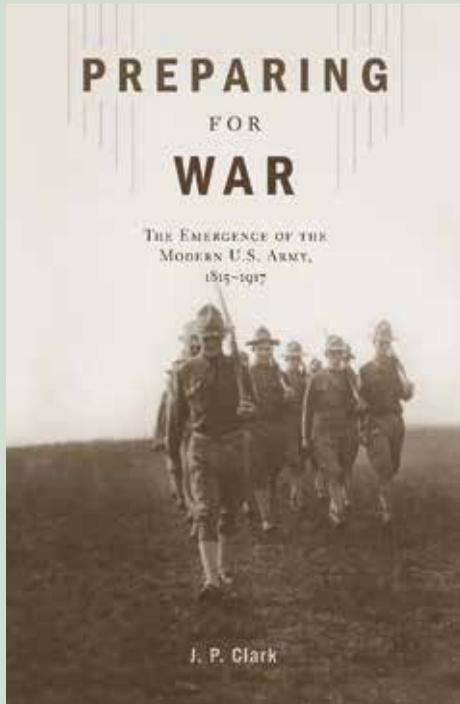
This perhaps could have been entitled - *From The War of 1812 to the Western Front* - as it follows that critical development of the US Army from a militia-based force; through the Frontier days up until the entry into the Great War. *In Preparing for War, The Emergence of the Modern U.S. Army, 1815-1917*, JP Clark provides a vivid narrative of how the US Army grew into a mature Western army. No mean feat when faced with considerable opposition not only from within its own officer corps but from politicians and public alike. Leadership was key, the names of Winfield Scott and George C. Marshall are the two bookends to this story, and their mentorship is still visible in today's US Army. This was, in the end, a difficult journey, sometimes made more difficult by America's own view of itself that was born out of the revolutionary 'citizen-soldiers' that often railed against the notion of the professional force structure. In many ways, the rise of America as a power on the global stage, is reflected in the development of the professional US Army.

The story starts with the Army post the War of 1812, which was a sorry excuse for an army. Characterized by poor leadership, the Army displayed the worst aspects of poor paternal supervision. If there is a hero in this book it is the likes of Emory Upton, both a brilliant and tortured soul. He is one of a few key figures in developing the inner culture of the US Army. Upton massed an extraordinary war record, within four years of graduating from West Point; he had risen to the rank of Major General. In the process, he had commanded at every level from battery to division, in all three principal arms, artillery, infantry and cavalry. However, he was no mere fighting General. He understood combat, in organizing and training both officers and men in its every facet, and was uniquely qualified to codify and institutionalize those lessons for the army, if allowed. Upton, like all visionaries found it hard outside of war to be heard and utilised. A Wingate-like figure; although highly thought of and having the ear of many of the key personalities, he

still struggled against the vested interests and the status quo. Upton could have been an American Clausewitz, but his writings and his vision never reached the maturity of the dead Prussian, and today is largely overlooked. His death by his own hand only makes his story even more symbolic of the inner conflict within the US Army as it grew into the modern day Roman Legion.

The US Army often found itself often at odds with itself over developing the training to achieve its aspirations; in numerous Frontier garrisons, it was left to the initiative of individuals to develop training and a vision for the army. All too often, these efforts received little official support. In turn as a whole, the US Army officer corps could be tagged with the sweeping generalisation, that although largely competent as a body, intellectually they rarely challenged the prevailing groupthink. This lack of intellectual vigour was reinforced by an American public nurtured on the myth of the 'citizen soldier' from the revolution, and the Union 'Volunteer' of the Civil War. This jingoistic confidence was reflected by each states' natural regional chauvinism, this emblematic shallow amateurism reach its peak in the opening months of the Civil War, and the body count at Shiloh and Bull Run can be laid at its doorstep. In time the US Army would turn to the Prussian-German model to solve its latent military wishful thinking, but this was a long way off. Indeed, for most generations the French provided the inspiration for military doctrine.

Much like the sun and the moon, it easy to imagine the US Army has always existed as we see it today; but the institution we see today rests on the mistakes and tragic lessons learned from a hundred years of trial and error. To understand the USA today you must understand the US Army. To all intents and purposes, the US Army is the new Prussian Army (although based on the Potomac), it has embraced German doctrine and Clausewitz as its own. But at the same time because

of its unique development the US Army has blended Prussia around the memory of the Civil War, especially the soldierly virtues espoused by the Southern States on how an officer should conduct himself; here it is Robert E. Lee who is the victor not Grant. Added to this is sense of the Great Republic and manifest destiny, a potent mix.

This is an excellent military history, and shows that the challenges of 1815 to 1917 were no less daunting than the ones we face today. If the USA is the new Rome, then it will adapt and last for a hundred (or even a thousand) years. If it does not, then this history will form part of its legacy.

# ATTACK ON THE SCHELDT - THE STRUGGLE FOR ANTWERP 1944

## Graham A Thomas

*Review by* **David Benest OBE**
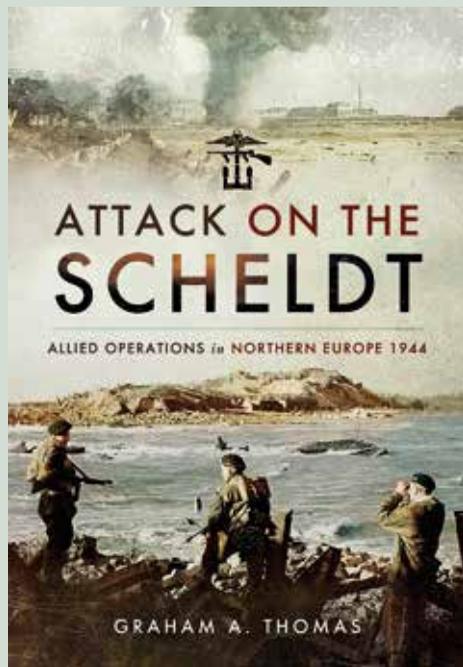
The focus of late 1944 on the Western Front has been largely upon the failure at Arnhem in September and then the Ardennes counter offensive, the so called Battle of the Bulge, in December. Yet, in between is a far less well known episode, which is the subject of this book by Graham Thomas, roughly covering the period September to November 1944. This involved some of the most difficult battles of WW2 over terrain that was to say the least, 'difficult' if not impossible and in dreadful weather. The aim was simple - to ensure that the huge port of Antwerp could be free for Allied use in its advance on the Ruhr - a major and all too obvious logistic necessity. Operations involved: the clearance of the south side of the Scheldt Estuary, Operation SWITCHBACK, between 6 October and 2 November; Operation VITALITY from 23 October; and Operation INFATUATE, the assault on Wallcheren Island. The fighting took place in intense conditions over some 85 days. Some 112,521 German prisoners were taken, whilst the Allies lost 12,873 killed, of which 6,367 were Canadian.

Unlike Normandy, this was in itself the apogee of Allied combined arms cooperation, with all options on the table, including the use of airborne forces - in the event,

abandoned - and especially amphibious operations. The lead throughout was with General Crerar's 1st Canadian Army, himself invalided out of battle and replaced by Lieutenant General Simmonds. There are very few accounts of all that took place and perhaps only R.W. Thompson (1958), Gerald Rawling (1980), Andrew Rawson (2003) and Richard Brooks (2011) feature in the past half century. In the historiography of Allied action in Western Europe between 1940 and 1945 these are but drops in the ocean. Graham Thomas has very successfully attempted to remedy this dysfunctional approach to military history and rightly so. Given the relatively small geographical area of the battles, perhaps not much more than a map square on the *Michelen Tourist and Motoring map of Europe*, I am surprised that this episode does not receive far more attention, not least that all three Services were involved repeatedly and with great success, not to mention the Belgians, Dutch, Poles and US.

The author's style is lucid throughout as might be expected of a former journalist turned Editor. In all, this is a most impressive account and should form the basis for many battlefield tours and staff rides to come.

**BAR 172**
SUMMER 2018