

Explaining the British Army's Strike Concept

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The British Army's new Strike concept has attracted much negative comment. But it is considerably more robust and well-founded than its critics claim, and it has the potential to offer infantry brigades the ability to march and manoeuvre under armour at far greater distances than is currently possible.

The British Army's new [Strike concept](#) has attracted an unusual amount of [criticism](#), despite an absence of details on which to ground such comment. Indeed, much of it seems based on the argument that because [the Ajax Armoured Fighting Vehicle](#) – one of the vehicles to be employed for its realisation – is somehow descended from the previous, less-than-successful [Future Rapid Effects System \(FRES\)](#) programme, Strike is conceptually flawed from the outset. Not only is there considerable confusion over the basic historical facts that underpin this argument, but it also risks corrupting a good idea – perception has a habit of becoming reality.

What is Strike?

In simple terms, Strike is neither FRES nor a Medium Force. The FRES programme [was intended](#) to 'meet the Army's long-term needs for new medium-weight armoured fighting vehicles', but Strike is about so much more than platform replacement and should be considered a highly deployable infantry force able to sustain movement, manoeuvre and long-range patrolling, under armour, for distances that a 'heavy' tracked force cannot match.

In the most common current forms of conflict, infantry mass is what delivers the proportion, precision and discrimination that policy demands. In other words, if politicians demand an army that can fight a war amongst the people, possibly in an urban setting, then infantry mass is a major requirement. Thus the key enabler for Strike is often described not as Ajax, but as the 'Mechanised Infantry Vehicle'

(MIV), because it is the internal volume of armoured personnel carriers that has, for about 80 years, ensured they remain the most flexible platforms across the widest number of roles, from the American M3 Half-Track to Britain's FV432 and beyond. Arguably the most unforgivable aspect of the FRES programme was a failure to place this simple fact to the fore. Had it done so, the British Army of today would be very different.

'Don't Start From Here' – What was Wrong with FRES?

In order to comment constructively on a concept that has yet to be clearly defined, it is useful to understand why Strike is now suddenly deemed to be 'the answer' for ground manoeuvre. So much negative baggage is related to the FRES programme that concluding that Strike is just another attempt to do the same thing is understandable. However, looking at the details might dispel this ill-informed view.

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Almost everything wrong with the FRES programme can be traced to the 2003 decision to [withdraw](#) from the Boxer Multi-Role Armoured Vehicle (MRV) project, originally a French,

German and British programme conceived in the late 1990s. At the heart of that decision was the requirement to deploy the vehicle inside a C-130 Hercules aircraft, which limited the vehicle to a maximum of about 19 tonnes and explicitly showed that the Ministry of Defence (MoD) wished to deploy a light armoured vehicle by air. There was some merit in limiting the size and weight of the vehicle, with the primary one being cost. If the new vehicle had achieved levels of protection exceeding those of the Combat Vehicle Reconnaissance (Tracked) CVR(T), AT105 'Saxon' and FV432, then progress would have been made.

In June 2003, the MoD stated that it was not possible to purchase such a vehicle off-the-shelf, although some would contest this claim. So, in June 2005, the MoD decided to drop the C-130 requirement because it was judged that by the time FRES was fielded, the Boeing C-17 Globemaster III or Airbus A-400M Atlas would be in service and the C-130 would not. It is worth noting that the decision to lease five C-17s from the US, as a stop-gap for the behind-schedule A-400M, was actually announced in 2000, before the UK cited the C-130 as a reason to leave the MRV project.

In addition, even quite crude modelling would have shown that both deploying and sustaining such a force by air was possible only at an extremely limited scale. Similarly, few are aware that it was entirely possible to load an FV432 on to a C-130, yet there was never any serious discussion of doing so, due to the obvious logistical challenges of sustaining such a tracked force by air once deployed into theatre.



A prototype of an Ajax Armoured Fighting Vehicle (AFV) on show in Wales, March 2016. The Ajax will be a mainstay of the planned Strike Brigades, which are intended to be able to move over a greater number of routes, with less impact and damage to roads, and with less mechanical attrition and loss over greater distances than a heavy force. *Image courtesy of Richard Watt/Wikimedia.*

This puts the common criticism that Ajax can be lifted only by C-17s into the same category of things that really do not matter. While it may well be possible to deploy the Ajax by air, there is no sound military reason to do so, bar a condition of extremis demanding some kind of demonstration.

Strike Is Not FRES

Nothing that has so far been said about Strike has anything in common with those things that arguably made FRES something to ridicule. Strike is a concept, not a replacement vehicle programme, and one on which the future of the field army as a deployable land force

might depend. It will be given physical expression in the shape of at least two vehicles and possibly more, and there is no demand for them to be deployed by air.

Strike is predicated on a completely different starting point to that which informed FRES. The rationale for Strike acknowledges the real limitations of the existing force, both operational and economic, and offers infantry brigades the ability to march and manoeuvre under armour at far greater distances than is currently possible.

Although understanding the field army as having 'light', 'medium' and 'heavy' formations is somewhat simplistic, it may have to suffice for

brevity. One of the main flaws of FRES was that it was part of a medium force capable of delivering the effect of a heavy force but with a lower logistic footprint, as well as being capable of air deployment. Strike will be neither a heavy armoured brigade nor a light infantry brigade, but an infantry brigade moving and manoeuvring under armour.

Furthermore, if Strike brigades are to be considered medium then, in order to be fully effective, they will be dependent on the continued existence of both the heavy and light forces; they will not replace them. The medium force should enhance both the light and heavy. Yet based on current evidence, medium will never replace

heavy, because while medium forces can generate high levels of lethality and mobility, they lack the protection levels assured by 45–72-tonne Armoured Fighting Vehicles' (AFV) armour packs. The fact that Ajax has such armour packs is noteworthy.

As previously stated, Strike is about doing things that neither heavy nor light forces can do, based on their equipment, capability and sustainment. Although this is not a track versus wheels argument, the simple facts of vehicle engineering are highly relevant.

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Almost all wheeled AFVs have substantially greater mean time between vehicle failures than tracked systems – in other words, they do not breakdown so often. A force of 100 tracked vehicles 'marching' 300 km will suffer component wear and breakdowns at a rate far in excess of that experienced by a wheeled force of vehicles of the same approximate weight and capability. The small size of the British Army of the Rhine's (BAOR) area of operations in the Cold War has long disguised this simple truth. This is in sharp contrast to the South African army's experience in the 'Border Wars' of the same period, when wheeled AFVs became the norm due to the march and manoeuvre distances involved. Indeed, the utility of wheeled vehicles is historically proven, from the UK's FV-603 Saracen to the Soviet BTR series, and it should be noted that almost all Cold War Soviet Motor Rifle Divisions maintained two wheeled BTR regiments to one tracked BMP regiment, so clearly wheeled AFVs have considerable utility in high-end war fighting, not just the asymmetric wars that have so far characterised the post-Cold War period.

Wheeled AFVs, with only one or two exceptions, are unlikely to exceed 36 tonnes, so have limited levels of horizontal protection – side-on armour

– compared with tracked vehicles, which can easily exceed 70 tonnes. Contrary to popular belief, however, weight has very little impact on pure logistics. For example, a 35-tonne CV90/120, armed with a 120 mm gun using the same 42 rounds of ammunition as a 70-tonne German-made Leopard 2 Main Battle Tank (MBT), has the same number of crew as the Leopard 2, and requires the near-exact same amount of resupply, in terms of ammunition quantities and ration pallets. The only real difference is fuel consumption, but the number of extra tankers needed is probably one or two more vehicles at the unit level. If first line fuel is carried in one tanker, then doubling that demand means merely two additional tankers. Thus any assumption that the medium force has a significantly lighter logistic tail is flawed.

The main difference is the size and weight of recovery and repair vehicles required, as well as bridging equipment. A 35-tonne vehicle also has greater route options than a 70-tonne vehicle, as shown by NATO's [Military Load Classifications \(MLC\)](#), detailing maximum loads for surfaces and structures. Essentially, anywhere in the world you can drive a loaded 20 ft ISO container is more than accessible by an 8x8 wheeled AFV.

The real utility of a Strike Brigade will be that ability to move over a greater number of routes, with less impact and damage to roads, and with less mechanical attrition and loss over greater distances than a heavy force. Furthermore, while almost all the world's armies are getting smaller, the planet remains the same size, hence areas of operations can be considered increasingly 'spacious' and forces are required to march and manoeuvre over greater distances than in the past to compensate for lower force densities.

Questions have been raised in the media about Ajax's size and tracks. Ajax procurement pre-dates the Strike concept and its inclusion in Strike is an optional element to be employed as and when required, so it is important but not essential to the overall idea. Additionally, Ajax should be able to march for distances far in excess of current expectations for tracked vehicles, although it is not unreasonable to expect that Heavy Equipment

Transporters might be required for extended distances. Ajax, therefore, would certainly not require the same attendant levels of support that the British Army's Challenger 2 (CR2) MBT demands in terms of equipment sustainment, recovery and bridging. For example, if Ajax remains at 42–44 tonnes, it can employ the Rapidly Emplace Bridge System with an MLC of 50. For the same given gap, MBT-mounted BR-90 modular bridging sets would not be required.

The 40 mm Cased Telescoped Ammunition (CTA) cannon on Ajax, if it works as advertised, will substantially threaten everything on the battlefield short of MBTs

As regards firepower, the 40 mm Cased Telescoped Ammunition (CTA) cannon on Ajax, if it works as advertised, will substantially threaten everything on the battlefield short of MBTs, or any vehicles with levels of protection above a Soviet-era T-55. It would be able to do so at a greatly reduced logistic weight of 'stored kills' than the current 120 mm main gun on the CR2. Ajax also has levels of protection commensurate with its mass, so is more able to close with and fight an enemy than the MIV. So if the baseline Future Operating Environment is urban, then a vehicle such as Ajax may be a better option than CR2.

Does Ajax Fit the Bill?

The conceptual and perceptual problem with Ajax is its strong similarity with the Warrior Infantry Fighting Vehicle (IFV) once fitted with the new 40 mm CTA turret. However, the supposed duplication or problematic division of labour is not as some in the media have suggested. In very simple terms, the heavy force will be CR2 with Warrior, where the latter will carry the heavy force's dismounted component. In a Strike Brigade, Ajax

will be fulfilling the heavy force CR2 equivalent, with MIV transporting the dismounted force. Any suggestion that Ajax is somehow akin to Warrior by virtue of a common main armament is not, therefore, valid from the perspective of force structures. Nor is the epithet of Ajax as a poor man's 'mini-tank' well informed; Ajax will provide effective direct fire support for MIV's dismounted personnel in Strike's concept of employment.

The real advantage of Strike lies in its difference to the heavy force and its resilience compared to the light force

Given the reduced likelihood of the Strike Brigades encountering enemy MBTs, Ajax provides an economy of both force and investment, regardless of how accidental that potential may appear. In fact, Strike as a concept is predicated on the absence of an enemy's mounted heavy weapons, which would necessitate altogether higher levels of protection. Exceptions do exist and examples include the Soviet-era 57 mm S-60 anti-aircraft gun widely fielded by irregular forces, as well as the 122 mm D-30 howitzer in the direct fire role and various heavy weapons mounted on light 4x4 vehicles (so-called 'Technicals'). However, these are extremely vulnerable to return fire. If intelligence suggested the enemy did possess a capable combined arms force with MBTs and IFVs, then the UK may need to deploy the heavy force, but context would be critical.

Peer and Non-Peer

Some may assume Strike's merit is therefore dependent on an enemy force lacking capability. This is not exactly true, as even a large number of light vehicle-mounted ATGMs (Anti-tank Guided Missiles) may threaten the heavy force more than a Strike Brigade, due to the latter's ability to better mass and disperse

for exploitation of complex terrain at a rate the heavy force cannot match. For example, in May 2008, rebels from Darfur crossed 600 km of desert in less than 24 hours to raid the Sudanese capital, Khartoum. The Strike Brigade would be a more useful force than a heavy one for sustaining movement and manoeuvre over such distances.

Crucially, this scenario also demonstrates that skilful employment of the Strike capabilities would at least threaten an enemy's 'superior' heavy force. Non-peer can be extremely dangerous not by virtue of absolute capability, but by possessing a different capability, along with the willingness to accept casualties and run risk. The real advantage of Strike lies in its *difference* to the heavy force and its resilience compared to the light force. In fact, the Strike Brigade is far more likely to call into question the future effectiveness of light forces than it is heavy forces, because light forces are relatively vulnerable when faced with even a low level of so-called non-peer capability.

It is reasonable to assume that in future conflicts marches of over 100 km may become routine

In terms of future peer adversary conflicts, which may merely be a euphemism for 'war with Russia', the distances involved in both the Baltics and Ukraine render many of the old BAOR assumptions redundant and in need of reassessment. The 1st (British) Corps' (1 BR Corps) area was 65 km wide and 115–150 km in depth, but the road distance from Vilnius to Tallinn is 610 km, and it is 700 km between Odessa and Kharkiv in Ukraine (for a recent British comparison: the distance between Basra and Fallujah was 600 km via Route 1). Even approximate estimates show that the force densities of future conflicts are likely to be substantially less than those in 1 BR Corps and it is reasonable to assume that marches of over 100 km may become routine. Certainly,

the ability to conduct long-distance marches, even between theatres, will be increasingly desirable.

Conclusion

For all the arguments, the Strike concept is considerably more robust and well-founded than many have assumed. There is still much work to be done, but it requires moving on from the received wisdom of the garrison-based, 'ground dumping' Cold War doctrines of an army prepared for an existential fight over a sliver of temperate terrain.

The real utility of Strike, and therefore the entire land component, will be the options it offers policymakers

The military must conform to political and thus economic realities, not vice versa. The real utility of Strike, and therefore the entire land component, will be the options it offers policymakers. Its development, however, must take into account the hard-edged military expertise learnt from empirical observation and physics. Nothing about the Strike concept suggests ground manoeuvre will be any less decisive in warfare, but there are strong indications that current force structures are not well suited to current, let alone future, challenges born of twenty-first century politics.

War never changes. Warfare changes only slowly, and never at a rate we cannot comprehend; but politics can change rapidly and unpredictably. Strike seeks to address this by providing the government with greater land force options than it currently possesses.

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