

AIR/LAND INTEGRATION

Another theme that has been running through the last few editions of *RUSI Defence Systems* has been air/land integration. We have heard from both the Army and the Royal Air Force on the various problems that have still to be overcome – including issues of culture, language and parochialism. Now Brigadier Simon Deakin considers lessons learned from Iraq 2003 and identifies future challenges, although one major issue – that of Air Space Management – needs further examination, perhaps in future issues.

Joint Fires – The Challenges To Come

by *Brigadier Simon Deakin*

Simon Deakin is the UK's Director of Capability Integration (Army). In this article he looks at air/land integration, the lessons learned since 2003, the proposals for the future and the further challenges to be resolved.

The Air/Land environment has changed; in short, life has become more complex. Project Coningham Keyes exists in recognition that there is much more work required in order for UK forces to integrate air and land assets better. From the land perspective there are two broad areas which have altered dramatically: first, there has been an increase in the number of assets available to support ground forces at a lower level than previously was the case; second, there has been an increase in sophistication, not just of the types of delivery means, but also in the requirement for precision effect, itself demanding a marked improvement in intelligence, surveillance and target acquisition, and command and control.

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With some nostalgia one recalls staff college exercises where one fast-air, low-level transit route was allocated to a corps area, where use of HELARM was the preserve of the divisional commander and where the Joint session between the three Service colleges revealed the mysteries of restricted operating zones and fighter engagement zones; all to be forgotten shortly afterwards. Any account of fighting in Iraq or current operations in Afghanistan illustrates that, now, close support is given to the most junior patrol commander – fast air (much of it not single-seat close air support in the traditional sense),

attack helicopters, rocket and tube artillery and mortars. Furthermore, tragic events often delivered in graphic detail on our television screens or on the internet demonstrate that errors in targeting, whether accidental or not, do not come without penalty – advantage given to a ruthlessly exploitative foe, support ebbing away at home.

Lessons from Iraq 2003

Four straightforward lessons were drawn from Operation TELIC 1 (the 2003 invasion of Iraq):

- The Forward Observation parties (FOO parties) from field artillery regiments attached to ground forces (usually armoured or infantry) could not conduct Joint Fires effectively – indeed, the post-operational report from 1 (UK) Div praised the capability of the USMC Air and Naval Gunfire Liaison Company detachments (ANGLICO) in comparison.
- The integration of close air support was weak.
- The capacity to conduct air-space management was weak.
- The Manoeuvre Arm Commander at every level needed a focal point for advice on the delivery of integrated Joint Fires, and the management of the associated battlespace.

The UK's reaction has been to develop Fire Support Teams (FST) and to strengthen battlegroup, brigade and divisional headquarters with appropriate planning staff. The FST has a commander, a Forward Air Controller (FAC), an Artillery Controller, an Attack Helicopter (AH) controller, a Mortar Fire Controller (MFC), drivers and signallers. It is not the purpose of this article to rehearse developments in-theatre as, first, there has been comprehensive coverage of this in both military and commercial defence journals; second, operational structures tend to adapt quickly to meet a need – the correct personnel and means can be imported and theatre establishments augmented; and last, those who were able had already changed – 7 Parachute Regiment RHA readily combined FACs with their FOOs, and the Naval Gunfire Support (NGS) teams from 29 Cdo Regt RA had always possessed this capability. Rather, the purpose is to describe how it is proposed to meet



A Fire Support Team (FST) controlling an Alpha Jet at BATUS, Canada. The proposed future army structure demands a far higher number of FSTs distributed to more sub-units than has hitherto been the case [Graeme Davis]

the requirement in the future structure of the Army and to identify the broad challenges which will have to be confronted.

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Proposals for the Future

Some context is needed at this point, and this is provided with a description of what is proposed in Future Army Structure Next Steps or FAS (NS). Critically FAS (NS) will have to be tested

in the coming Strategic Defence Review (SDR) – to which the three largest political parties are committed – in order to judge its suitability to meet the strategic aims of the government and country in the context of the likely future character of conflict and within the bounds of affordability.

The aim of FAS (NS) is to build a structure of relevant and resilient capabilities that can be force-generated routinely to meet the most likely eventuality: that of an enduring operation to which the UK has committed a medium-size force (in land forces' parlance a brigade plus – broadly corresponding to the force levels in the later stages of Iraq and currently in Afghanistan). But the structure must be capable of being task-organised to provide a force for the most demanding eventuality: a divisional-sized deliberate intervention force. Present planning foresees a structure of six modular brigades comprising the following regiments and battalions: armoured, armoured reconnaissance, armoured infantry, mechanised infantry, two light-role infantry battalions, an artillery regiment and an engineer regiment. 16 Air Assault Brigade (16 AA Bde) and 3 Commando Brigade (3 Cdo Bde) remain as the

specialist entry brigades and much work continues to develop corresponding headquarters, command support and combat service support structures.

Challenges

A brief consideration of this proposed structure allied to the accounts from theatre and an understanding of what has previously existed in terms of organisation and establishment, will give some indication of the challenges faced. Many of these are being developed as the FST Concept of Use (CONUSE) matures, so my intention is to point up the challenge rather than give an answer. Modular or not, the proposed structure demands a far higher number of FSTs distributed to more sub-units than has hitherto been the case. Previously, armoured and armoured infantry units were given three FOO parties, mechanised infantry two and light role units (save those in 16 AA Bde and 3 Cdo Bde) none. FACs were always in short supply.

An FST requires a greater variety of sights and communications than an FOO party – fitting out Warrior may stretch already thin resources

Now all sub-units must be supported. In accepting that circumstances must change, the Royal Artillery has acknowledged that Close Support Regiments must be structured to generate FSTs as their primary export, rather than provide FOO parties exclusively from gun batteries. So, the challenge is both structural and that of career streaming and management.

The second challenge relates to the distribution of those FSTs and the requirement for flexibility – two examples spring to mind. Combat logistic patrols are routinely involved in fighting in Helmand and it is reasonable to assume that this will be the case in the future. As now, they will require FST support perhaps organically, but more likely task organised from elsewhere for specific missions. The other example is formation reconnaissance which, in its traditional role, may not benefit from FSTs at all. How would the FST commander ensure that his team is in the right place when the squadron is deployed on a wide front and, in the FRES era, is it possible to put a more sophisticated Joint Fires coordination effort at squadron headquarters, with better training for armoured reconnaissance crews to provide the greatest advantage?

The third challenge relates to equipment; not how and with what FSTs direct fires (there is sufficient material for a separate article on this alone) but how they move round

the battlefield and communicate. Hitherto FOOs and BCs attached to armoured organisations have used the Warrior Observation Post Vehicle (OPV); other units have been supported in soft-skinned vehicles. But an FST requires a greater variety of sights and communications than an FOO party – fitting out Warrior may stretch already thin resources. For the non-armoured organisations, it is clear that soft-skinned vehicles have no place in a high-threat environment – they are not used ‘outside the wire’ now and it is more than likely that this policy will continue. So finding more, better protected vehicles with the appropriate communications, not just with the effectors and supported units but within the FST, is a possible goal.

The final challenge relates to the broader issue of Air Space Management and the requirement to link this to the direction of integrated Joint Fires and the attendant ISTAR capability, which is developing at an almost exponential rate. To the list of fast air, Attack Helicopters, tubes, rockets and mortars mentioned earlier, one adds Loitering Munitions,¹ the burgeoning number of UAVs, and protection of bases by Counter Rocket and Mortar fire (C-RAM). More widely, the Link 16 air picture connects both to the newly acquired Land Environment Air Picture Provision (LEAPP) programme and the Combat Engagement Capability on Type 45 Destroyers. Finally, the Defence Targeting Tool Set application provides the targeting backbone, linking intelligence to targeter over the Defence Information Infrastructure (DII). This mix of equipment, applications and procedures will require significant staff effort for the effective and safe integration of air/land assets.

Solutions

It is fair to say that solutions for many of these challenges are beginning to be developed in the current operational theatre. The advantage is that these will be founded on practical, hard-won experience rather than theory. But it is also a challenge to ensure that what is developed has broad application across the variety of environments in which UK forces may have to operate in future. And for those engaged in the policy battle the challenge is establishing and maintaining relevance with the requirements which emerge from a Defence Review and developing capabilities the nation can afford. ■

NOTES

¹ Some may be unfamiliar with this capability which is developing quickly. A Loitering Munition is a small cruise missile which can be launched and left to ‘loiter’ in a ‘stack’, to be called forward and designated on to a target when it appears. If no target appears it can be directed to a pre-designated, safe impact area. The advantages are responsiveness, the ability to abort the mission and the ability to guide the munition away from the wrong target. In terms of complicating air space management, space is required for transit routes and loiter zones as well as de-confliction with other users of air space. Most importantly, there is a need of a safe impact zone in the event of an aborted mission.