Viewpoint

W(h)ither Air Power Education?

By Group Captain Al Byford and Group Captain Ian Shields

At the formal launch of AP3000 – *British Air and Space Doctrine* - at the Royal United Services Institution on 1 December 2009, Sir Brian Burridge delivered a critical appraisal of the RAF's newest statement of doctrine. While he strongly supported the conceptual direction of travel outlined in AP3000, a central tenet of his presentation was the necessity for the RAF to continue to invest – both intellectually and financially – in military education. If we fail to do so, he contended, the consequences would be serious, and he emphasised the point by quoting from the 2009 edition of the *Future Air and Space Operational Concept:* 'Strategic and operational air power thinking is not institutionalised, which has an adverse impact on the rapid development and exploitation of both capability and strategy.'[1] Clearly then, institutionalising military education has the potential to be a significant factor in the RAF's future development as a fighting Service. But what is military education, why is it important to air power practitioners, what is the RAF doing about it now – and what else should it do in the future? As the RAF's Director of Defence Studies and the Assistant Head, Air and Space at the Development, Concepts and Doctrine Centre, the authors have a vested interest in this topic; we have both benefited from the education opportunities available internally, as part of service staff courses, and externally, in the form of service-sponsored non-military post-graduate education delivered at academic institutions. Additionally, both of us currently fill appointments where a broad education has clear and direct relevance to our day-to-day activities. However, we understand that the real value of military education may not be as immediately apparent across the RAF more generally: the benefits tend to be felt in the long-term rather than the short-term, and by their very nature, are difficult to measure or quantify directly. This is a potential problem at a time of financial stringency, when we will have to justify all of our expenditure and activities. Therefore, our aim in this 'viewpoint' is to act as advocates for military education, arguing that the modest sums of money and resources allocated it to represent an essential, strategic investment in the future of our service; it is a force multiplier that adds real value.

To begin, it is useful to define exactly what is meant by education, rather than the training that we traditionally deliver so well. Lieutenant General John Kiszely makes the distinction clear:

Training is preparing people, individually or collectively, for given tasks in given circumstances; education is developing

their mental powers and understanding. Training is thus appropriate preparation for the predictable; but for the unpredictable and for conceptual challenges, education is required...Likely future operations, particularly those such as counter-insurgency, are characterized by complexity, ambiguity and uncertainty and volatility – all of which add up to unpredictability – and by challenges that are not so much formulaic and mechanistic as conceptual and 'wicked'.[2]

The commandant of the Joint Services Command and Staff College made exactly the same point in 2001, but used an illuminating analogy. In the Cold War, he said, training was sufficient, because military officers were like classical musicians; skilful virtuosos on their own instruments, but playing as part of a NATO orchestra to a pre-scripted score, written some time ago, that they could rehearse again and again until they got it exactly right. In contrast, the contemporary operating environment demands military professionals who can act as jazz musicians; they still have to be just as good at playing their own instruments, but now, there is no score and they have to play by ear, improvising around a seemingly random and ever-changing theme:

We have to produce people who can look at chaos with the intellectual confidence it takes to explore it from unexplored angles and discover patterns. This applies regardless of whether they end up devising policy, briefing ministers or coming up with campaign plans.[3]

Education need not be formally taught. Reading broadly is itself a good form of self-education, and Churchill attributed much of his later success to a rigorous period of self-imposed reading in his late teens and early twenties. But however it is acquired - as an outcome of staff training, as a formal academic course, or through self-help - education will help to develop the flexibility of mind and understanding of the wider context that is necessary to counter post-modern threats and challenges. Training can never equip an individual to withstand the shock of warfare, or to fully lift Clausewitz's 'fog of war', and this is also true of education; it can never provide a 'silver bullet'. But as the bi-polar certainty of the Cold War has been subsumed into the ambiguity of contemporary operations, it has proved to be increasingly difficult to anticipate, plan and train for every eventuality. Instead, our resilience needs to be underpinned by intellectual and conceptual agility; and this requires people who can understand and adapt to operational circumstances that are likely to be very different on each occasion that force is used. This agility, open-mindedness and imagination – as General Kiszely and Air Marshal Burridge contended – is more likely to be the product of education, rather than training.

Broad-minded thinking, developed through education, arguably becomes even more important as an individual progresses through the rank structure, because a wider appreciation of strategy, and an understanding of the links between the campaign plan and its execution, and the interaction between the political and the military spheres, cannot be simply taught; this is a realm of nuance, subtlety and interest, and is better grasped by a challenging and educated mind. There is high-level concern within the Ministry of Defence, and indeed

across government, that the United Kingdom has collectively lost the habit of strategic thinking. This *lacuna* was repeatedly identified by Lieutenant General Sir Frederick Viggers in the evidence that he recently submitted to the Chilcot Inquiry into the Iraq War,[4] and was addressed as a specific issue by the Chief of the Defence Staff in his Christmas Speech to RUSI in December.[5]

As a forward-looking and technologically-based service, the RAF is potentially better placed than the other two services, as it has always been fortunate in attracting highly capable and educated personnel at all ranks. The recently implemented Review of Office and Aircrew Development ('ROAD') study into through-career development has capitalised on this intellectual resource by enhancing the RAF's ability to educate as well as train; the links that have been established between Kings College London and Halton, Cranwell and Shrivenham are already bearing fruit in providing an external, academic input to challenge received wisdom and take personnel out of their institutional 'comfort zone'. And we are not alone in acknowledging this requirement. A recent report on the United States Air Force (USAF) attributes many of its well-publicised recent problems to a lack of intellectual self-confidence, borne of too much introspection. It recommends institutionalising post-graduate military education as an antidote:

Advanced education at first-rate institutions of higher learning must become a priority for senior Air Force officers. The service should also provide more comprehensive officer education on the US national security institutions, starting with their own and the other three Services.[6]

General Patreus, holder of a PhD himself, and the most celebrated of the cohort of American 'soldier-scholars' attributed with turning around the conflict in Iraq, endorses this recommendation. In a recent address at West Point, he identified post-graduate education at a non-military, 'top twenty-five' graduate school as one of the five most important pre-requisites for success in military leadership. The non-military emphasis is deliberate: Patreus was making the point that however laudable the training – and sometimes education – offered by military staff courses, only non-military education provides the stimulus of exposure to the fresh and provocative ideas – and people - that can challenge and reinvigorate the military establishment.

The RAF has already taken some steps along this path. The Chief of the Air Staff's Fellowship scheme offers selected individuals the opportunity to study externally at post-graduate level, and even to undertake sponsored doctorates, while those officers selected for the Advanced Command and Staff Course have the opportunity to take a Master's degree in Defence Studies. The recent initiatives by Birmingham University and Kings College London to establish part-time Masters' degrees in Air Power Studies, the first of their kind in the United Kingdom, provide further evidence that academia also appreciates that a market exists for professional military education. But are these steps sufficient?

The RAF sends some 10% of its senior squadron leaders and wing commanders to advanced staff college annually, and only a small handful of individuals, typically six a year, into academia, as Chief of the Air Staff's fellows. This does not compare favourably with the US forces, where a minimum of a Master's degree is expected for those aspiring to rise above the rank of major, and more than 15% of all USAF officers above one-star rank hold a doctorate. There is a different institutional expectation with regards to education; available resources clearly matter, but there are cultural differences too, and full-time academic education is seen as part of the career mainstream in the US armed forces in a way that is still not shared by the RAF. Despite the clearest possible direction from the highest level – witness the Chief of the Air Staff's personal endorsement and interest in the fellowship scheme – there is a perception that a year at a top university, undertaking a demanding course to gain a sought after post-graduate qualification - is a 'year out' and represents a career foul; and this acts as a disincentive to those individuals aspiring to fast-track advancement who might be contemplating a period of academic study. The career stream for those destined for highest ranks remains wedded to the cockpit and outer office appointments and, other than staff course training, offers limited opportunities for broad, academic development of the intellect. Perhaps then, our biggest challenge remains a cultural one: are we ready to accept, and even embrace, intellectualism, or are we still in thrall to the cult of the gifted amateur – or the narrowly-focused, technically adept military professional? To quote General Kiszely again:

Some …. challenges have been or are being overcome, there are others, particularly those associated with military education and culture, which have yet to be fully recognized, let alone met, if modern warriors are to be a match for tomorrow's warfare.[7]

Obviously, the individual services have differences in outlook and attitude here. The Royal Navy, drawing on its long tradition of practical seamanship, has always tended to be sceptical about the value of theoretical education and has never been particularly rigorous about the criteria or premium it puts on either staff training or education more broadly. However, it is indicative that in recent years it has recognised that its strategic decision-making has been questionable, and it has reinstated an academic element at Dartmouth, and its own higher level academic programme, in response. In terms of the RAF, the Chief of the Air Staff's Fellowship Scheme and the senior support it implies is the envy of the other services, but the technical nature of the service is both a strength and a weakness; we attract the most highly educated recruits of the three services, but there is a sense that we put technology above ideas, and too much emphasis on equipment, rather how we to use it most effectively. Arguably, the single biggest challenge facing us remains our continuing institutional suspicion of education, and intellectualism.

Encouragingly, there are signs that this problem is generational and that a cultural change is taking place. Anecdotally, evidence suggests that the outlook on education of the cadre

that has been exposed to a significant academic element throughout their early careers is far more positive than their more senior peers in 'middle-management' and beyond. Initiatives such as ROAD and the links to King's College London have already been mentioned. Additionally, the Chief of the Air Staff's Reading List provides a first step for self-helpers; this is refreshed annually and is a good guide to a broad range of books on air power, space power, contemporary conflicts and the nature of warfare. *Air Power Review* is widely respected and is influential as a peer-reviewed academic journal, and it has effectively been replicated by the USAF with its *Strategic Studies Quarterly Journal*. But other ideas might be initiated that would broaden the RAF's intellectual base. These include a return to a formal promotion examination from Flight Lieutenant to Squadron Leader (in line with the 'C' Exam of old), a service-wide annual essay prize for junior officers (on the model of RAF Regiment's current competition), and an annual air power debate or conference limited to squadron leader rank and below.

In a recent edition of *Air Power Review*, the Chief of the Air Staff offered a personal perspective on the future of British air and space power. He said:

In terms of people, the requirement for agility is clear, and this will increasingly demand strategic and operational thinking, in addition to the tactical proficiency that we have excelled at in the past. We need to institutionalise air power education, and nurture leaders who can deal with the complexity and ambiguity of the contemporary operating environment.[8]

These words neatly capture the 'why' of military education for the RAF: it is hoped that this article has addressed some of the 'hows'. If we had to pick just three strands to provide the best prospect of achieving the Chief of the Air Staff's aim, they would be: first, to formalise a viable career path for 'thinkers' as well as war-fighters, linked to the Chief of Defence Staff's initiative to develop a pool of strategic thinkers; second, to develop an aspiration and expectation that all those destined for two-star rank and above will have spent a year in full-time study at a major United Kingdom university; and finally, to maintain and develop the emphasis on through-career education embodied in the ROAD study.

The motto for the Royal Air Force's Centre for Air Power Studies is *concordia res parvae crescent* - work together to accomplish more. Military education is the key to achieving this aim.

Notes

[1] Future Air and Space Operational Concept 2009, p 1-9.
[2] The Shrivenham Papers No 5, *Post-Modern Challenges for Post-Modern Warriors*, John Kiszely; Shrivenham, December 2007, p. 14.
[3] **http://www.guardian.co.uk/education/2001/nov/27/students.careers**
[4] **www.iraqinquiry.org.uk/media/39532/091209viggers-figgures.pdf**
[5] **http://www.mod.uk/DefenceInternet/AboutDefence/People/Speeches/ChiefStaff/20091203RusiChristmasLecture.htm**
[6] Center for Strategic and Budgetary Assessments; *An Air Force Strategy for the Long Haul* by Thomas P Ehrhard, 2009, p.xii.
[7] John Kiszely, *Op Cit*, p.5.

[8] Air Chief Marshal Sir Stephen Dalton, 'British Air and Space Power: A Personal Perspective', *Air Power Review Vol. 12, No.2*, p. 11.