Balanced Air Power in an Age of Austerity – The Leadership Challenge

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This article examines some of the challenges in funding air power in times of financial stringency. A version of this paper was presented to the Chief of the RAAF's Conference this year and a shortened version to the RAeS Annual Conference. The article points out that air power must be balanced along with the wider interests of defence and not just in terms of a balanced air force. Furthermore the balancing act needs to be seen in terms of capabilities ant just the traditional issues around legacy platforms.

Introduction

It is all too easy to reach for a standard text on strategic leadership and nod wisely over the key factors that differentiate strategic leadership from lower forms of the art. It is even easier to produce powerpoint slides of the various attributes.[1] The real challenges of developing senior leaders are all together different with a range of issues from succession planning, through identifying required competencies, to delivering credible interventions.[2] Yet it is still instructive to distil some of the literature to identify some of the facets that go to make up the Leadership Challenge. One of the key roles of strategic leaders is the identification, and articulation, of the vision and purpose of the organisation as a whole. Given that no entity can operate in total isolation, this vision must be compatible with other organisations which operate in parallel, or in a hierarchy: the strategic leader must be adept at working those interfaces, especially at the political level.[3] This will be developed further in this paper with an examination of the concept of operational art. In terms of describing strategic leadership, the literature and more importantly its practitioners, are unanimous in confirming that it is invariably complex and ambiguous. Its problems are rarely 'simple' capable of linear solutions. Rather they are 'wicked problems' which require a high degree of leadership (rather than management) and clear intellectual ability.[4] The task of providing balanced air power in an age of austerity – in any country – epitomises these leadership challenges.

This paper does not purport to be a blueprint for the senior leadership teams involved in these tasks. It does, however, aim to identify some of the challenges and provoke discussion on the complex issues involved. One of the key interfaces in preparing a balanced air power capability, and more importantly (arguably) in deploying it is that ability to work alongside allies in a credible and convincing manner. Although military action in a unilateral, or regional, situation cannot be excluded, the most demanding scenarios will involve working alongside the United States. This brings its own benefits, but also brings its challenges in terms of parity in technology and scale of contribution (including the need to be logistically self-supporting). This paper will examine some of the issues involved in this including some of the 'softer' issues such as alignment of political goals, legitimacy and the human element. Although the paper will include historical examples, these will be extended to present and future challenges.

Balanced Air Power

The enduring qualities of complexity and ambiguity, along with the themes of vision and purpose, are immediately evident in any attempt to define 'balanced air power'. The first issue is that, at the truly strategic level – as opposed to an academic discourse or discussion in a bar – air power is a necessary part of a more broadly based balanced defence capability constituted to realise a nation's vital interests. These may be expressed in purely national terms or in the context of wider alliances whether formal or ad hoc. By definition, the defence element of national interests can be discussed in isolation, or in a more broad ranging

perspective which includes security policy.[5] Although this may seem obvious to the casual observer, achieving this in reality can be very difficult. If, however, it is assumed that the overarching policy or strategy is in place, then the debate shifts to the military strategic level and the question becomes one of how much of a particular capability or role is required and how it can best be achieved in an affordable manner.[6] For example, capabilities such as anti-submarine warfare (ASW), lift, or air defence can be provided in a variety of ways and is often best considered in combination with assets from each of the components (simply land, sea or air, but could include special forces and so on). The so-called Dowding-system which provided the intelligence gathering, command, control and layered defences for the Battle of Britain included elements of all three Services integrated with civilian authorities such as the telephone engineers provides an example of a sophisticated comprehensive approach to a strategic challenge. The bottom line in all of this is that end results can be achieved in a variety of ways depending on circumstances and factors such as finance.

Inherent in this emerging discussion is a potentially deeper problem over terminology. It is all too easy too easy to get embroiled in debate over terms or concepts such as effects based operations, revolutions in military affairs, network enabled warfare and capability based defence. The ensuing maelstrom of doctrinal jargon risks an early descent into dogma, particularly when some concepts appear to be enduring and others disappear from vogue based on nothing more logical than changes in personalities at senior leadership levels. At the other end of the spectrum, there is a real risk that the debate becomes centred entirely on platforms. In many ways, this is understandable at all levels of the enterprise. First of all, for senior leaders, and their staffs, this is what they grew up with either in flying the aircraft, operating the systems or even mending them! Aircraft, their systems and their crews form Squadrons which are deeply embedded in the organisational culture of all air forces. From a wider perspective, the aircraft and their systems are what defence industry makes – either domestically or on a global scale from which the component parts can be purchased 'off the shelf'. Importantly, the financiers are able to attribute cost to the various lines that contribute to a programme from the aircraft, through its operating systems, to crews and training. But this can be dangerously seductive in that neither approach (platform nor conceptual) adequately describes the air power capabilities that have to be balanced to produce a comprehensive contribution to defence and wider national security.

It is worth considering the broad roles of air power in order to analyse their respective contributions to the formulation of a balanced capability. In all doctrinal or conceptual examinations of air power, control of the air is invariably considered to be of prime importance.[7] The standard refrain is that control of the air allows component commanders the freedom to execute their plans free from enemy air intervention and vice versa. Loss of control of the air can lead, at worst, to catastrophic defeat, or at the very least, the need for commanders to resort to more costly or labour intensive means of carrying out specific tasks. In the period since the end of the Cold War, it has become easy to take this for granted in both time and space. An immediate example of the quest for control of the air is the Battle

of Britain, but for contemporary operations, the evacuation from Dunkirk provides a useful example of control of the air, limited in time and space to the period when the Royal Navy was embarking troops from the harbour wall and Park was able to suppress Luftwaffe activity through the deployment of his fighters in large formations. An interesting contemporary example could be the use, by an asymmetric opponent, of a co-ordinated counter-air operation involving ground attacks on air bases, surface-to-air missiles, small-arms fire and unoccupied aerial vehicles (UAVs) designed to deter or inhibit allied air operations.

Air mobility in contemporary operations is of huge importance at both the strategic and operational levels. In the post Cold War era, it became fashionable to talk about expeditionary operations as the most likely scenario in which armed force would be used. But this has its own challenges with the cost being a major issue. The lift capability has long been something of a Cinderella with only just enough available. As forces are used and deployed over considerable distances in a sustained operation the wear and tear of aircraft becomes a serious factor necessitating far earlier replacement. The same applies to use in theatre of aircraft such as the C130 and the helicopter force. The nature of current operations provides immediate evidence of the requirement for rapid mobility in both deployment of force and recovery of casualties. By the same token, the air-to-air (AAR) refuelling capability is essential in ensuring that limited air assets can be used over prolonged periods.

For at least the last century, advocates of air power have preached control of the air, tolerated air mobility and acknowledged the need for intelligence gathering. But in their souls, they have believed fervently in the use of air power for offensive action. British, and American, air strategy in the Second World War was founded on this belief, with many of its more extreme exponents stating that air bombardment would obviate the need for a land force invasion. Although this did not prove to be the case in the defeat of Nazi Germany, the air offensive against Iraq in 1991 certainly made the task for the ground forces considerably easier than might have been. As the doctrine manuals make clear, air attack is a complex capability ranging conventional kinetic activity through to influence operations. Contemporary operations in both Iraq and Afghanistan has shown that influence can work both ways with what can be depicted as indiscriminate air attack causing unnecessary casualties even though the real cause may have been accidental, or inflicted through other means (with artillery frequently the perpetrator).

Finally, and by no means least, the use of air platforms for the gathering of all forms of intelligence has been an essential part of the development of air power since the earliest days of balloon and kite flight. From directing artillery fire over the Trenches of the First World War to the focus on choke points, lines of ground manoeuvre and insurgent activity in Afghanistan the requirement has been consistently high. The need for situational awareness remains an enduring factor in warfare. But as warfare has developed, tolerance of casualties has diminished whether the cause is enemy action or friendly fire. The exponential improvement in communications has, unfortunately, not sated commanders' and politicians' appetite for

information. Conversely, indeed perversely in some cases, it has only increased the requirement for streams of data whether in the form of statistics or live video footage. The resulting compression of the layers of command and control brings its own leadership challenges.

At first sight, this review of the roles, or capabilities, of air power suggests that a balanced contribution would require the ability to carry out each of these. But this is too simplistic in a number of ways. In the first instance, those air forces that have the luxury of being able to operate within a formed Alliance such as NATO may elect only to contribute to limited roles leaving other nations to do the AAR, ASW, strategic lift or offensive air. This was certainly evident during Allied Force operations over Yugoslavia where there was a surfeit of air defence aircraft. Secondly, a nation may decide, for a variety of reasons, completely to forego a role or capability; the demise of RNZAF fast jets provides an immediate example. The third factor is that the wider defence requirement may be carried out by components other than air. Arguably, it may be possible to do all ASW from seaborne assets. Likewise it may be possible, if there is a very high probability of being restricted to littoral conflict, of leaving all lift to shipping. Similarly, airlift could be restricted to special forces insertion and recovery only. These are all issues of choice at the political and strategic levels.

The reality, however, for many nations is more complex. Some will decide for a variety of reasons, such as maintaining an industrial base to attempt to balance their capability spread.[8] An alternative motivation maybe to support a unique system such as an independent nuclear deterrent for which certain key components are required to be under unequivocal sovereign control. Softer issues, such as national prestige may also play a part. The motivating factors can become important, for any nation, not only in coming to the decision that they will adopt a force posture that allows an element of each of the roles to be maintained, but also will condition the depth and the breadth of the elements of each of them. This then is the area in which the complexity of the leadership challenge comes to the fore. Taking ISTAR for example, just how many systems, reporting through and to whom, will the national component commander need, and how much can be afforded? Still with intelligence gathering, the interoperability with allies, especially America, will also determine the extent of the packages available. Likewise in deciding upon an offensive air capability, the debate goes far beyond the platform and must embrace the types of weapon system likely to be acquired, the scope for its deployability, sustainability and issues such as its legitimacy in any likely conflict.[9] Similar considerations arise in the case of air mobility where strategic airlift, AAR and a sizeable rotary wing component could well be the entry level requirements for serious coalition warfare; and would certainly be essential for any unilateral operation at range.

A balanced air power capability is therefore a multi-dimensional conundrum the solution to which must be tailored to meet the strategic political, regional, domestic and industrial situation a nation is in presently and likely in the future. Although it is possible, especially within a major Alliance, to drop whole air power roles, the likelihood is that a balanced

capability will embrace elements of the four detailed above. The key question of balance comes in deciding the balance between the roles and the depths of the capabilities within each of them. There will inevitably be a wide range of factors influencing this balance including a defence industrial base, the immediate requirements of current operations, or the most likely (or most dangerous) future conflict.

There is always a great temptation to use vocabulary such as 'capability gap'. The various factors combine into a very complex capability matrix which must be closely examined to identify the 'capability gaps'. At the same time, an equivalent risk matrix is required to enable analysts and planners the opportunity to identify, and classify the risks inherent in making cost savings in specific areas. These risks can then be either accepted or mitigated. If they are accepted the process should automatically feed this back into the assumptions and constraints on current and future policy making. Each of these matrix exercises is variable over time with delay often increasing risk in all of its guises. For all nations, including the United States and notwithstanding its superpower status, the financial resource aspect will be a controlling factor. It is highly improbable that there will ever be a surfeit of resources and risk therefore will be ever-present.

An Age of Austerity

At its simplest, the expression 'austerity' implies little more than the dictionary definition of 'harsh or stern'. In an economic context, this could be extended to include the strictness of the spending regime especially in times of economic hardship. In a more contemporary, and less general, context the definition would embrace the challenges of global recession, banking crises leading to the shortage of credit to industry, all in the face of unprecedented demands on service personnel and materiel. These challenges, jointly and severally, make the provision of balance air power all the more difficult. Yet it could be argued that these conditions of hardship are enduring, albeit in different guises. Except in the possible conditions of total war experienced between 1939 and 1945, financial strictures are the norm rather than the exception. For Britain, its colonies and Empire in this period, there was no 'blank cheque' for defence expenditure as the bills had to be paid either from gold reserves or in the form of loans to the United States. Even in this extreme situation other resource restrictions rendered the conditions austere. The first of these was the shortage of suitable personnel for a wide range of tasks. The high calibre, well-educated young men were in great demand as NCOs and junior officers in all three Services, in Industry and the ever-growing ranks of the RAF in general and Bomber Command in particular. The highly skilled workforce needed to build and salvage the aircraft in which they were to fly was supplemented to a welcome degree by women, but sadly few had the opportunity to train or qualify as engineers. Although the situation today is by no means as bleak, there is still a degree of austerity in that the top quality young men and women required to populate an air power world are in arguably greater demand from competing career fields, especially in cultures where the rigours of military and possibly perceived political incorrectness bring extra stress.

The hierarchical nature of military organisations also precludes suitable talent being recruited at mid-career levels or to fill vacancies at strategic leadership levels.

In some ways, contemporary operations have a degree of similarity with the Second World War in that materiel was (and is) actually expended – rather than just be allowed to gather dust on the quartermasters' shelves prior to disposal as was the norm for the Cold War. This in turn brings its own real challenges, first in terms of the cost of the bullets, missiles and the considerable impact on the platforms themselves which frequently have to operate at much higher levels of usage and climatic deterioration. At the highest levels of leadership, these challenges bring in the commercial issues of the cost of configuring defence industry for vastly varying rates of consumption. Being able to surge production of low density, high cost items such as missiles is an expensive and high risk enterprise with shareholder not known necessarily for charity or allowing patriotism to outweigh dividends. The same is arguably true of being able to provide operational essentials that had not been budgeted for in a peacetime situation, but are urgently required for the conflict at hand.

The majority of these issues could be taken to apply to all nations contemplating entering a conflict zone. But for some players, there are additional factors that follow from these challenges. Often in a time of extreme financial stretch, investment in research and development is an early casualty. Some nations have no choice but to maintain a domestic defence industry, where access to outside markets may be denied (such as China, North Korea or Israel). But for all, there are considerable areas of risk in disinvestment. Some niche areas scientific or technological research are so specialised that the loss of a few key people due to redundancy, or a brain drain, could lead to an irrevocable loss of capability. Even for those nations that do not wish to maintain a domestic, or sovereign, design capability need sufficient capacity to be able to act as an 'intelligent customer'. This in turn begs the questions as to just how easily previous operators (aircrew in the main) are able to keep pace with technological developments to be able to fulfil this role. Nowhere is this more evident than in software engineering. In all of these areas there is an understandable, possibly inevitable, tendency to resort to sourcing equipment, research and development and even whole packages including contracted personnel from third party suppliers – often the United States. Whatever the cause of the austerity, there are no pain-free options.

Working with Allies

Precedents set since the end of the Cold War strongly indicate that most conflicts, on whatever scale, will be conducted in coalitions. These will often have many varied partners each with a differing range of capabilities and probably an even greater range of constraints under which they are forced to operate. Irrespective of the frustrations of this type of arrangement they have become a fact of life for a number of reasons. The first of these is that the formation of a broad ranging coalition actually bestows a higher degree of perceived legitimacy on the enterprise than a simple unilateral operation; this is true for domestic audiences and for the

wider international community. It is also possible that a junior coalition partner may well bring specific 'low density/high value' assets to the fight that are in short supply even in the lead nation's armoury.[10] At this stage it is worth stating the obvious that it will invariably be the United States that fills this role; most nations' defence policies will be openly or tacitly based on this premise. The motivation for joining a coalition will inevitably vary from nation to nation reflecting the nuances in each country's unique interpretation on their own vital interests. Each nation will therefore have to build its own relationship with the lead nation, not least in order to exert influence.

This paper does not seek to provide a 'staff-college-perfect' solution of what makes an ideal coalition partner to a United States led coalition operation.[11] Rather it aims to analyse some of the major factors that have been evident in such operations, many of which will impact on the senior leadership challenge of preparing a balanced air power capability. It is overly simplistic to begin with the inevitable reminder that size is important. But there are also issues over the likely duration of the conflict and with anything other than a very short term engagement the challenges of roulement are likely to be significant. For a fast jet contribution to control of the air, or precision attack missions the planners will need to consider factors such as aircraft serviceability rates, mean time between failures, spares availability, ordnance stocks, crew capabilities and the ground support functions necessary to contribute to the planning and execution of the likely missions. These issues cannot be fixed 'on the night' and must be built into the balanced capability. All of this has to be logistically self-supporting in terms of spares provision, ability to deploy and recover and compatibility with the US and with the host nation (where appropriate). Countries that choose to buy off the shelf from US countries will have fewer problems even if they have only been allowed to acquire an 'export' version.

It can be useful to take this debate a stage further in terms of likely contributions to an Air Tasking Order (ATO). There are important factors at each stage of this process from its inception, through the planning phase into the actual formulation, dissemination and then translation into mission planning details. Each of these factors has its own subsets including access to IT hardware and software; communications equipment compatibility; possession of an air power capability required on the ATO; and softer issues such as a current awareness of US doctrinal thinking, language and vocabulary. Possession of unique, niche or critical assets or enablers greatly enhances the probability of inclusion in the planning process and the final execution. The aircraft likely to participate in ATO missions must be suitably equipped. On a major operation the ATO runs to thousands of lines potentially building massive situational awareness problems. These are invariably reduced by the use of appropriate equipment, familiarity with tactics and procedures and experience. But secure radios, LINK equipment and the opportunity to exercise with the US are not necessarily easily achieved. Inability to comply with the requirements laid down is likely to result in exclusion from the ATO; missions outside the formal planning process invariably come into the 'too difficult' category. If the balanced air power capability has been planned to be able to operate with US, these are critical issues

and not merely desirable even though they require a significant commitment in equipment, training and liaison with US colleagues.

One of the key challenges for senior leaders in coalition operations is a high level of ability in working the interfaces between coalition partners, home and other government departments (especially host nation) and multi-national (or non-governmental) agencies. Each of these will have their own agendas, interpretations of mandates and view on international legal issues. These potential minefields often manifest themselves in targeting issues or interpretation of rules of engagement. In extremes (hopefully, but not necessarily an infrequent occurrence) failure to agree or compromise can lead to national 'red cards' and a potentially very tense compression of the gaps between the operational and grand strategic levels of war. Even in a straightforward 'war fighting' situation, the multi-dimensional nature of the interfaces between nations, components and policy formers is both complex and challenging. In a 'Phase 4' or state-building environment, the complexities are magnified several fold. Integral to this process is a deep understanding of what makes and organisational culture and how these vary within and across nations.[12] Preparation of future air power leaders for this inherently challenging matrix of joint, combined, multi-cultural, intra-governmental and inter-governmental operations is problematic. These are 'wicked' rather than 'tame' problems requiring the highest levels of intellectual ability and leadership.

Development of the Multi-national, Multi-cultural Leader

The traditional approach to consideration of these issues has tended to be a reliance on the quality of the individuals recruited as officer cadets (often as teenagers) supplemented by a general staff training. In the ideal world future leaders will have had exposure to US practices and techniques through exercises such as Red Flag or, increasingly, in actual operations. It could, however, be argued that this is a linear approach which is not compatible with matrix challenge discussed above. Many nations take considerable pride in the through-life development of their officer cadre from single service specialists into future joint commanders. But even this begs the question as to whether enough is done on the wider development of senior NCOs and Warrant Officers who frequently have difficult and responsible roles to play in coalition operations from the flight line to the operations centre. Having accepted, from a defence planning assumption perspective, that coalition operations led by the US will be the norm rather than the exception, is enough done by the coalition leaders, and follower nations, to ensure that a sustainable number of future leaders have had access to the appropriate education and training.[13]

A critical role in senior leadership is succession planning. Part of this aims to ensure that successive generations of senior leaders are able to build on the core values while embracing the wider elements of change brought about by the wider society. Military organisations face particular challenges in this arena as they are not able to bring in talent from the civilian world to bolster the 'through ranks' team. The literature on strategic and executive leadership

is clear that there is step change in the roles and requirements at high levels and it could be argued that not all nations adequately prepare their people for the transition.[14] For air power leaders in particular, the skills and traits necessary to become a top class tactical leader are not necessarily those needed to run an organisation at senior levels and in many cases the promotion ladder does not reflect this identification of executive potential.

The leadership literature also consistently emphasises the intellectual challenges of working complex and ambiguous issues. At the popular press end of the spectrum, much has been made of General Petraeus holding a doctorate and including a significant number of similarly educated advisers on his staff. This raises further questions as to whether this level of military intellectualism is an unnecessary and time-consuming luxury; or whether it is an essential in the preparation of those destined to apply 'operational art'. Some air forces have institutionalised educational provision into programmes up to and including doctoral level in a formal series of fellowships.[15] But few, if any, can emulate the US Schools of Advanced Studies (such as the Maxwell School of Advanced Airpower Studies), both in the scale of their courses and the systematic employment of their graduates in high profile appointments. Nevertheless, preparation of future senior leaders is as important a factor in creating a balanced air power capability as the provision of platforms, even in an age of austerity.

Conclusion

This paper has aimed to show that the planning and provision of a balanced air power capability is a more considerably more complex leadership challenge than the mere acquisition of a number of platforms able to fulfil the broad doctrinal requirements or roles. No age is free from its share of austerity in its various forms and the key is to provide a balance in depth and breadth appropriate to the context. There also has to a balance between the national, regional and alliance requirements, particularly if a nation is to make a significant contribution to working alongside the United States. In such a case full logistical self-sufficiency is essential from spares to ordnance. Possession of niche, or specialist, capabilities can enhance the attractiveness of a force contribution. But again the situation is more complex than the straightforward provision of platforms and crews. For air power coalitions to function efficiently the absorption of national components must be seamless, otherwise the senior leader will have to spend a disproportionate amount of time and effort working the interfaces: this has been true of all such enterprises from Normandy in 1944 onwards. Training and education has to be in place to ensure that senior personnel understand the organisational cultures of the entities which they will be required to work alongside. This begs the question as to the adequacy of succession planning, identification of talent and ensuring that relevant interventions are in place. But this does not happen by accident, nor can it just be left for commanders, and their staffs, to 'make it all right on the night'.

It would not be unreasonable for senior leaders – political, military and civilian – to express the balance of capability (not platforms) in a matrix including depth, breadth and time. The same

can be applied to the challenges of working with Allies and for the development of future leaders. Gaps can be identified and the equivalent risk matrix mapped out to identify where problems can be bought out, mitigated or accepted. These are complex and ambiguous problems and deservedly attract the description 'wicked'.

Notes

[1] According to Stephen J. Zaccarro, *The Nature of Executive Leadership: A Conceptual and Empirical Analysis of Success*, (Washington DC: American Psychological Association, 2001), there are fewer decent studies on strategic leadership owing to the difficulty in identifying rigorous sample sizes to test. For a standard work, see John Adair, *Effective Strategic Leadership* (London: Pan, 2003).

[2] See Air Commodore Peter W. Gray and Jonathan Harvey, 'Strategic Leadership Education', in Colonel Bernd Horn and Lieutenant-Colonel Allister MacIntyre (eds.) *In Pursuit of Excellence: International Perspectives of Military Leadership*, (Kingston ON: Canadian Defence Academy Press, 2006). The literature on senior leadership makes no terminological differentiation between senior, strategic and executive.

[3] This in itself provides an immediate challenge because many senior leaders are the product of their very specific tactical backgrounds often leading to a tendency to revert to the silos from which they emanated. It is instructive to compare Air Chief Marshals Portal and Harris in this respect. The former was particularly good at working the interfaces whereas Harris had to be cautioned many times over his predilection for maintaining a very narrow focus. See Peter W. Gray, unpublished PhD Thesis, The Strategic Leadership and Direction of the RAF Strategic Air Offensive against Germany from Inception to 1945, University of Birmingham, 2010.

[4] See H. Rittell and M.Webber, 'Dilemmas in a General Theory of Planning', *Policy Sciences*, 4 pp. 155-169. For the application of this typology to the military environment, see Keith Grint, *Leadership, Management and Command; Rethinking D-Day* (Basingstoke: Palgrave Macmillan, 2008) , pp. 11-18.

[5] As an example of the UK conducted its recent Strategic Security and Defence Review within the context of a newly created National Security Policy.

[6] This paper is not aimed at providing a detailed discussion on the differences between policy and strategy, not least because the terms can be interpreted in differing ways between government departments and in different capitals.

[7] For the UK view see AP 3000 (4th edn.), MoD, London 2010, p. 38; this uses the expression *primus inter pares*.

[8] As was the case in the UK continuing with its Carrier Srike programme.

[9] Some these issues arose in the UK debate over whether to retain the Harrier or Tornado. Legitimacy issues saw the demise of cluster bombers and anti-airfield munitions such as JP233.

[10] This was certainly the case with air operations over Iraq for many years, and over Afghanistan, where UK probe and drogue tankers have refuelled USN and USMC aircraft.

[11] The author has attended and lectured on a number of US JFACC Programmes where these issues were discussed in detail.

[12] The organisational culture includes the outward trappings of badges, buildings and so forth. As one moves closer to core beliefs the requirements for understanding what makes folk 'tick' becomes more important. It can be see that the cultures within the USAF, air elements of the USN and the USMC differ. Likewise between Foreign Affairs Departments and so forth.
[13] Both words are used with deliberation here. Education could include access to SAAS programmes and increased participation in Staff and War Colleges remotely if necessary.
[14] See Gray and Harvey, 'Strategic Leadership Education'.
[15] The author had the privilege of being awarded the first RAF Portal Fellowship providing support for his doctorate.