
THE FUTURE OF
AIRPOWER?

Phil Meilinger's excellent article on The Future of Air Power highlights many of the current factors which influence both the strategic analysis of how air power might develop in the foreseeable future and its possible place in the hierarchy of forces. However, as the article itself makes clear from the outset, it is essentially a US view of the issues. Not surprisingly, therefore, it is based on an analysis of likely future US military capabilities and an analysis of likely US political and individual reactions to future conflicts. As close allies within NATO and for a host of historical, cultural and political reasons, much of what Phil Meilinger puts forward as a US view finds an echo in the UK. For example, the trends and characteristics he gives as relevant to future US involvement in military operations (such as '[national] vital interests will not normally be at stake, or that 'future intervention will generally not be predictable either by location or scale') are no less relevant to the UK.

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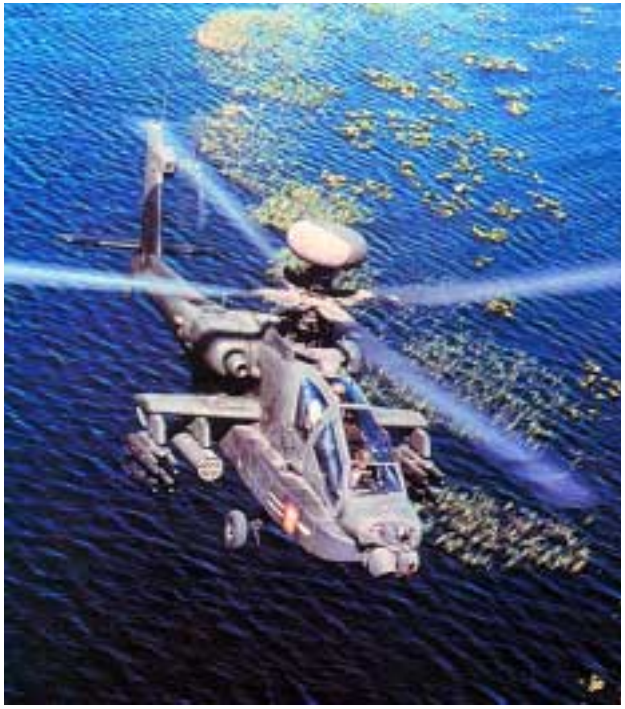
I recognise that it is possible to consider the future of 'pure air power' in a non-national and theoretical way. However, most mature air power nations will need to take account primarily of 'applied air power', applying their own unique perspective. This is because there are important differences of scale, doctrine, capability and national character which mean that, powerful though it is, a US view on the future of air power cannot necessarily be practically accepted as the definitive view of the all our futures, except perhaps in a 'pure' sense, which assumes that all force elements are available in sufficient quality and quantity to align theory and practice. For the UK and all other nations, the divergence between theoretical and actual capability will be significant. Therefore, when considering the future of air power for the UK, we must from the outset be alive to the constraints which our more limited resources will place on the way in which we will use air power, including being realistic as to whether air power will indeed be the military option of first resort for the UK. This is not to say that



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Phil Meilinger is wrong in any of the conclusions he reaches, but the purpose of this short commentary on his views is to point out some of the areas in which a different perspective might be more relevant to the UK. For the purposes of this commentary, I shall concentrate on 3 broad areas; scale, technology and national character.

SCALE

The UK retains a highly professional and balanced air power capability. The next few years will see the introduction into service of several new platforms and weapons, which in many cases will represent a substantial increase in capability; there are also a number of upgrade programmes which will enhance the capability of existing assets. In addition to the hardware itself, organizational and doctrinal improvements such as the creation of JF2000 and the arrival of Apache will provide opportunities to exploit new air power. No less importantly, the strength of our air power capability is built on a firm foundation of rigorous training, which not only teaches the hard skills necessary for the optimum use of aircraft and ground systems, but also provides a breadth and depth of education which places a high value on ingenuity, analysis and leadership. As a result, (and I know we can all think of exceptions) we buy good kit and we get the most out of it.

However, none of us are under any illusions about the limits imposed on the UK's application of air power imposed by the size of our forces and the lack of capability in certain areas; ingenuity can only take us so far, but it will not get a Challenger tank into the back of a C-130 or make a Tornado GR4 stealthy. For the US, the situation is markedly different; by virtue of the size of their investment, industrial base and population, the gap between the

theoretical possibilities which air power offers and their capabilities is small. Put simply, assuming political will and no concurrent major conflicts, a US JFACC is in a position to formulate a plan, effectively unhindered by equipment constraints, and able to match roles and missions closely to the theoretical ideal. His UK counterpart will seldom have that luxury and will have to scale his plan to match the available capabilities, which might well be some way removed from the theoretical ideal.

In terms of air power delivery, this difference of scale could well make itself felt in a number of areas, all of which could pose challenges for a UK JFC. In comparison with the US in particular, these challenges are likely to include intelligence gathering, analysis and transmission, seizing and retaining air superiority, lack of airlift capability and CSAR. These challenges certainly do not mean that the UK does not have an effective and broad spectrum autonomous air power capability. However, what they do mean is that UK commanders and their staffs will be more exercised by capability gaps, roulement issues during protracted operations and hard decisions over the apportionment of forces.

In the 2 theatres on which Phil Meilinger concentrates (the Gulf and FRY) the UK gaps have been filled by (principally) the US and have therefore not affected the outcome. On the positive side, the UK has been able to provide niche expertise which the US, for all its assets, did not possess. The issue for the UK is therefore not to be seduced by the theoretical capabilities of air (and space) power to such an extent that, when formulating our doctrine, we begin to forget the practical limits which our own more modest capabilities will impose on us, for national or coalition operations not involving the US. Just as we would be foolish to predict our enemies, so we would be unwise to assume that UK and US interests will always coincide so closely to guarantee that the US will always be our ally in the field, even if it were to remain a benign observer.

The Prime Minister has made clear one way in which the issue of scale could be addressed for European nations, by strengthening the European Defence Identity (EDI) within NATO. Whilst this would not improve national capabilities, it would allow eradication of some European capability gaps, assuming that more cost-effective expenditure in the military aerospace arena was not simply translated into a reduction in national defence budgets, or the pursuit of nationalistic procurement agendas. In addition to the hard procurement decisions that would have to be overcome, it is still unclear how a EDI would, in practical terms, either detach itself from, or gain access to, US C3I capabilities embedded in NATO. Furthermore, even if we assume unity of command could be achieved, unity of purpose to embark on warlike action is not a given. For example, if OPS SOUTHERN WATCH and NORTHERN WATCH were EDI operations, the political differences between France and the UK would make unity of purpose and selection of the aim extremely difficult. All these difficulties were brought into sharp relief during the Kosovo air campaign where US

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capabilities dominated. The campaign vividly illustrated that Europe needs to do more, but we should not delude ourselves that the EDI option, however desirable, will be easy or cheap. There is a long and hard road between 'Something must be done' and practical capability.

There is one further significant result of the difference between the US and UK's relative sizes which deserves to be highlighted and that is our different approaches to jointery. Phil Meilinger points out the difficulty a potential enemy will face because of the redundancy of US forces, a redundancy that encompasses not only substantial air arms of all 4 Services, but also redundancy of capabilities within them. At this scale, true jointness is seen as a drawback, because it reduces options by reducing redundancy. The focus is therefore an effective collaboration and advantages accrue from cumulative effect, rather than true synergy.

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Thinking in the UK could hardly be more different. Much of the UK's air power capability will in future be controlled in peace and war by joint formations; for example, battlefield helicopters by JHC, Harrier and Nimrod MR by JF2000, and 38 Gp assets are already tasked by MOD. This creates an absolute requirement for a depth of joint understanding, which we are making good progress towards, but have yet to fully achieve. It also creates the possibility for substantial disagreement at Joint Targeting Board (JTB) level and below over how limited assets should be used to best effect. Air staffs will therefore have to be extremely well educated in the effective application of air power doctrine, if they are to contribute effectively to the JTB process. Type knowledge, however deep, will no longer be enough. For today's airman, the superstructure of joint knowledge cannot be heavier than can be supported

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by the foundation of air power knowledge on which it rests, a fact which has been recognised and acted upon. Therefore, whilst redundancy is a positive benefit for the US, lack of redundancy is an issue for the UK and brings with it a greater training burden, if joint synergies are to be identified and exploited.

TECHNOLOGY

In many ways, improved technology is also an issue of scale and the resources that a nation or organization is prepared to (or simply has available to) devote to development. As Phil Meilinger correctly states, it is the huge increase in computing power which has allowed such rapid advances in capability, allowing, for example, not only the design of aerodynamically unstable aircraft but the on-board computing resources to actually keep them in the air. However, nowhere is the technology gap between the US and UK more evident than in the

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exploitation of space. Even if we consider space only in respect of reconnaissance, intelligence and communications, the range of assets deployed by the US dwarfs that available to any other nation. Once again the capability difference is mitigated if we (the UK) are able to share in the benefits of this capability as a preferred coalition partner, but for the reasons given above we would be unwise to rely on this in all circumstances.

The technology gap is also beginning to impose real constraints on the interoperability of US air forces with those of other nations. Understandably, the US seeks to exploit its technological advantage by producing equipment which will give its forces the greatest chance of success, at minimum risk to themselves. Such technological advances, such as secure communications and JTIDS/Link16 bring with them not only a hardware gap but, more significantly, a doctrinal and operating procedures gap. Technology allows forces to fight smarter and, frankly, the US does not want less advanced allied nations degrading its technological advantage in combat. This is a significant difference between the issue of scale and the issue of technology; a difference in scale means we can only contribute to part of the campaign, a difference in technology might mean we are not even invited to the fight.

One technological factor which is common to both the US and the UK is that most cutting edge technological development is now undertaken to meet civilian commercial needs, unlike the Cold War period when military requirements often forced the pace of technological change. Whilst this removes a large R&D burden from the military defence budgets, it often means that the technology we procure is not unique to us and is available to others. An example of the consequences of this change, which does not relate to a weapons system, is that commercial news gathering companies have equipped themselves with real time satellite transmission equipment which can and does beam the war into our homes. This real time imagery and instant reaction, which often prefers immediacy of comment to analysis, does not of itself cause casualties, but it does accelerate the pace of decision making to a degree which risks allowing the news agenda to drive military and political decision making. The reluctance or inability to match such resources means that we become, in turn, dependent on them, with all the attendant risks of inaccuracy, bias and speculative comment which they bring. The image of casualties around a still smoking hole in the ground, accompanied by the statement ‘NATO did this’ is a powerful message to have to counter, whether or not the statement later proves to be accurate.

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However, before UK readers despair, superior technology is not always synonymous with superior battlefield performance, and as support for this I would refer readers to Dr Kenneth Freeman's article in the June 1999 edition of the RUSI journal, in which he compares the relative combat effectiveness of the low-tech A-10 and the high-tech Apache in the Gulf war. We must also match the technological means to the desired combat outcome. For example, the US dominated the electromagnetic spectrum in Mogadishu, but the investment was futile as the 'enemy' were not using electromagnetic means to pass their messages. Also, the successful policing of the Iraq no fly zones does not mean that they have become no persecution zones, so there are limits to what airborne technology can achieve. Therefore, although I would not wish to be accused of making a virtue of a necessity, a lack of access to technology can lead to greater ingenuity and success in some circumstances.

NATIONAL CHARACTER

The combined effect of scale, technology and national character is that the US and the UK approach the use of force from very different standpoints. For example, the way in which the police forces of both countries are equipped and operate is a clear, non-military, indication of that difference. Therefore, Phil Meilinger's image of a 'cop on the beat' will conjure up a different image for a US citizen than that of a 'bobby on the beat' would do for a Brit. Whilst both nations operate strictly within the law of armed conflict, the US approach, particularly following Weinberger/Powell, is essentially one of overwhelming force, compared with the British approach of minimum force. Again, issues of scale and availability of forces are a factor, but national character plays an important part here. The US's ability to muster and deploy overwhelming force has also contributed to the intolerance of casualties which Meilinger describes. In the UK, whilst everything is done to minimize unavoidable casualties, there is perhaps a difference between the 2 nations in what 'unavoidable' means, in that there is a greater acceptance of casualties by the UK population, provided they are convinced that the plan is sound and the cause is just. Although the circumstances were different, the smaller UK population was more tolerant of the 252 UK Service fatalities during the Falklands war than the US was of its 18 fatalities in Somalia.

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Both the US and UK will apply similar criteria of legality, political risk and 'national interest' when assessing a situation. However, on the use of force, the UK, particularly in the case of a national operation, might well apply the same criteria as the US, but be forced to reach rather different conclusions. This might be due not only to a greater military risk, or non availability of forces, but also to perceived greater adverse diplomatic or commercial consequences. We can punch above our weight, but only up to a point.

THE FUTURE FOR UK AIR POWER

Given the differences between the US and the UK, is the future for UK air power that it 'will be increasingly viewed as the weapon of first resort', at least when all but the military options have been tried and failed?

For many of the reasons cited by Meilinger, the answer must be yes. Air power can make a rapid and powerful statement of intent almost anywhere on the globe (and this definition of air power includes, for example, the carrier borne elements of JF2000). It also offers a degree of commitment which can be increased or decreased with greater speed and less logistic implications than a ground force of consequence and avoids at least some of the complex legal and practical difficulties of

committing ground forces into a hostile third country. Furthermore, air power does not mean uniquely combat power, but embraces reconnaissance, intelligence gathering and airlift for humanitarian or evacuation tasks, all roles which can provide leverage to de-escalate a situation without resort to combat power. Ships, Royal Marines and soldiers can also undertake some of these roles and it would be nonsense to claim them all as the unique prerogative of air power. However, there is no doubt that the rapid deployment of air power in adequate strength will remain as attractive an option to domestic political leaders as it is unattractive to potential adversaries.

We must also remember that the inherent characteristics of air power, such as speed, reach and flexibility, remain equally applicable to the smallest and the largest air forces. These are the very characteristics which make air power such a responsive and valuable tool in a complex world of inter and intra state conflict. Air power will often be the best mechanism to display the iron fist of resolve, without removing the velvet glove of diplomacy. Whether employed as the sole response or as part of a joint force, in a benign or hostile environment, air power in at least one of its guises will certainly be in the vanguard of our future operations.

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Royal Air Force Nimrod MR2