Air & Space Power after the SDSR
Air Chief Marshal Sir Stephen Dalton

The Gloves Will Have To Come Off: A Reappraisal of the Legitimacy of the RAF Bomber Offensive Against Germany
Air Commodore (Retired) Dr Peter Gray

“The Qu’ran and War: Observations on Islamic Just War”
Dr Joel Hayward

Christianity, the West and Just War in the Twenty-First Century
Dr Peter Lee

Prevention is better than Cure: What is the Utility of Air Power in Conflict Prevention?
Group Captain Clive Blount

‘Pink’s War’ – Applying the Principles of Air Control to Waziristan, 9 March to 1 May 1925
Lieutenant Colonel Andrew Roe

False Start: the Enduring Air Power Lessons of the Royal Air Force's Campaign in Norway, April-June 1940
Group Captain Alistair Byford

Viewpoints
Flight Lieutenant Sandy McKenzie
Professor Philip Sabin

Book Reviews
Group Captain Clive Blount
Group Captain John Alexander
Rev Dr (Squadron Leader) David Richardson
SEE THE ROYAL AIR FORCE
AIR POWER REVIEW ON-LINE
www.airpowerstudies.co.uk

Air Power Review is the professional flagship publication of the Royal Air Force
The Royal Air Force Air Power Review is produced under the auspices of the Director of Defence Studies (RAF). The publication aims to support the British armed forces in general and the Royal Air Force in particular by developing thinking about the application of air power. The intention is to provide a forum for high quality and academically credible articles on air and space power, with the objective of stimulating debate and promoting the evolution of air and space power thinking within the broader military and academic communities. Authors are, therefore, encouraged to challenge accepted norms and offer novel conclusions; consequently, the views expressed in this journal are not endorsed by either the Editor or the Royal Air Force and do not represent statements of official policy.

Feedback from readers is most welcome and encouraged; those wishing to make comments both positive and negative or make suggestions for how APR can better meet the needs of the broad air power community can do so by clicking on the ‘Feedback’ button on the Air Power Review page of the RAF CAPS website.

Contributions from both Service and civilian authors are sought which will contribute to existing knowledge and understanding of the subject. Any topic will be considered by the Air Power Review Management Board and a payment of £200 will be made for each article published. Articles should be original and preferably unpublished, although important papers of particular merit will not be precluded.

Articles should comply fully with the style guide published at the RAF Centre for Air Power (RAF CAPS) website, www.airpowerstudies.co.uk; essentially they should be between 2,000 and 10,000 words in length, list bibliographical references as end-notes, and state a word count. Lengthier articles may be published in instalments and contributions from serving military personnel must be made in accordance with 2008DIN03-020.

Material should be submitted in Microsoft Word on CD or by e-mail and should be accompanied, or followed, by a numbered page copy plus any photographs and illustrations. It is the responsibility of article authors to source any figures, (photographs, diagrams or charts) they wish to be included in their articles, and ensure that they have the agreement of the copyright holders for those figures to be reproduced. As a general rule figures will only appear on the article abstract page. Digital pictures should be saved as TIFFs or JPEGs @ 300dpi. Final design format for article presentation on the printed page will be at the discretion of the Editor.

Send articles to:
Director of Defence Studies (RAF)
Headquarters Defence Academy
Shrivenham
Swindon
Wiltshire
SN6 8LA
E-mail: mtomany.dds@da.mod.uk
Editor
Director Defence Studies (RAF)

Production and Design
Air Media Centre

General enquires on Journal distribution may be made to the following address:

Deputy Director of Defence Studies (RAF)
Headquarters Defence Academy
Shrivenham
Swindon
Wiltshire
SN6 8LA
Tel: 01793 314847
E-mail: mtomany.dds@da.mod.uk

Those wishing to be placed on the distribution list should write direct to the Editor.

The views expressed are those of the authors concerned, not necessarily the MoD.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form without prior permission in writing from the editor. Unless by prior arrangement, articles and photographs will not normally be returned.

Editorial board:
Gp Capt M Hart, D Def S (RAF), Chairman
Dr J Hayward, Dean RAFC
Mr S Cox, Head of AHB (RAF)
Air Cdre (Retd) Dr P Gray, Senior Research Fellow, University of Birmingham
Mr P Gibson, Hd of Air Media Centre, Air Cmd
Gp Capt C Blount, Asst Hd of Air & Space, DCDC
Wg Cdr M Tomany, Dep D Def S (RAF)
Dr I Gooderson, DSD, JSCSC
Dr D Hall, DSD, JSCSC
Dr A Conway, DSD, RAFC
Dr B Jones, DSD, JSCSC
Dr D Jordan, DSD, JSCSC
Sqn Ldr N Jones, D Def S (RAF) TO, Secretary

Photograph courtesy of:
Defence Image Database

Print:
No1 AIDU, RAF Northolt

Royal Air Force technicians work on a Chinook helicopter during a pre-Afghanistan exercise.
Air & Space Power after the SDSR
Air Chief Marshal Sir Stephen Dalton

The Gloves Will Have To Come Off: A Reappraisal of the Legitimacy of the RAF Bomber Offensive Against Germany
Air Commodore (Ret’d) Dr Peter Gray

"The Qu’ran and War: Observations on Islamic Just War”
Dr Joel Hayward

Christianity, the West and Just War in the Twenty-First Century
Dr Peter Lee

Prevention is better than Cure: What is the Utility of Air Power in Conflict Prevention?
Group Captain Clive Blount

‘Pink’s War’ – Applying the Principles of Air Control to Waziristan, 9 March to 1 May 1925
Lieutenant Colonel Andrew Roe

False Start: the Enduring Air Power Lessons of the Royal Air Force’s Campaign in Norway, April-June 1940
Group Captain Alistair Byford

Viewpoints
Flight Lieutenant Alexander McKenzie
Professor Philip Sabin

Book Reviews
Group Captain Clive Blount
Group Captain John Alexander
Rev Dr (Squadron Leader) David Richardson
Foreword

It is appropriate that this edition of Air Power Review opens with a piece by the Chief of the Air Staff offering his views on the delivery of Air and Space power in this post Strategic Defence and Security review era. Far from the apocalyptic landscape that many predicted, despite the loss of some platforms, the RAF remains capable across all 4 key air and space roles.

From this most contemporary view of the world, the second article is an historic treatise from Peter Gray examining the legitimacy of the bomber offensive over Germany in the 2nd World War. It explores the debate surrounding the RAF’s part in the strategic bombing offensive against Germany which, as Richard Overy’s recent Rees-Knowle lecture at Cambridge indicates, continues to attract considerable attention at academic and popular levels. The article addresses one of the most contentious aspects of all - the legality and legitimacy of the campaign. It argues that the debate within the Air Ministry and with Bomber Command was actually more nuanced than is normally admitted and that thinking on the laws of air warfare was surprisingly mature in the inter war years. The article concludes that given that the Second World War was total war, the strategic air offensive played a vital part.

The next two articles by Dr Joel Hayward and Dr Peter Lee do not have a traditional link to air power but address an important contemporary debate. Dr Hayward argues that, given the strategic importance of the Middle East, the geographical location of our major wars throughout the last two decades and the cultural origin of some of the Islamist extremist groups currently fighting the West, it is surprising that very few non-Muslim strategists and military personnel have included the Qur’an in their reading. The article analyses the Qur’an and articulates its mandatory codes of conduct vis-à-vis the use of military force. It concludes that the Qur’an is unambiguous: Muslims are prohibited from aggressive violence and are compelled, if warfare should become unavoidable, always to act within a code of ethical behaviour that is closely akin to, and compatible with, the western warrior code embedded within the Just War tradition. This article is intended to be useful to western military personnel — sufficient to dispel any misperceptions that the Qur’an advocates the punishment, subjugation or even killing of “infidels” as well as to reveal its key concepts governing justice during wartime. The second article, by Peter Lee explores early Christian
influences on the Just War tradition before discussing how the ongoing relevance of secularised versions of these ancient ideas is influencing why and how war is fought in the twenty-first century. The past two decades have witnessed a number of military interventions by US, UK and other allied forces in theatres as diverse as Kuwait, the Balkan region of Europe, Iraq and Afghanistan. At different times over this period President Bill Clinton, President George W. Bush and Prime Minister Tony Blair have made recourse to the vocabulary of Just War in a bid to convince their respective peoples to support the use of force in pursuit of political ends. Just War is characterised by a number of criteria that have been codified and embedded in Western war discourse over many centuries and are widely understood: just cause, right intention, last resort, legitimate authority, proportionality, discrimination of combatants and so on. This is an important and fascinating debate and entirely relevant for our time.

Group Captain Clive Blount provides an article in a more traditional vein, drawing on the aspiration for an ‘adaptable Britain’ and a need to get maximum value from a taut force structure. He argues that the flexibility and adaptability of air power provides decision-makers with a key crisis management tool – across the whole spectrum of conflict. The article examines this utility, asking how air power can be used to prevent recourse to war to solve conflict. After first describing the range of conflict prevention, from upstream engagement to deterrence and coercion, it then goes on to describe the attributes of air power that suit it to support conflict prevention activity. Using historical examples, the article demonstrates that air power provides decision makers with strategic choices unavailable from the deployment of other force types.

Lieutenant Colonel Andrew Roe takes a refreshing look at ‘Pink’s War’. In March 1925 the RAF was presented with the unique opportunity of testing the utility of air control against the mountain strongholds of Mahsud tribesmen in South Waziristan. The successful 54 day operation, under the command of Wing Commander Richard Charles Montagu Pink, was the only independent air campaign on the North-West Frontier of India, despite a number of ambitious schemes for the fledgling Service to take full control of the region. Known simply as ‘Pink’s War,’ this article overviews events prior to the start of operations, and offers a detailed account of RAF bombing and strafing activities from 9 March to 1 May 1925. It concludes
by analysing the outcomes of the mission, which ultimately resulted in the tribal leaders seeking an honourable peace, with the loss of only two British lives. The use of coercive air power in Waziristan, and particularly against the Mashud tribe has an uncanny contemporary echo in the American Predator campaign against Islamic militants in Pakistan.

A further historical analysis is offered by Group Captain Al Byford who marks the seventieth anniversary of the expeditionary campaign that was fought in Norway in the spring and early summer of 1940 and brings it right up to date. Although the operation was eclipsed at the time by the German victory in France and the Battle of Britain, it is worthy of independent study. The Luftwaffe demonstrated, for the first time in modern warfare, how all four air power capabilities – control of the air, intelligence and situational awareness, air mobility and attack – could be brought together to influence a joint campaign decisively. The RAF was much less successful, primarily because it was neither organised nor equipped to undertake expeditionary warfare, but it still contributed more to the campaign than is generally acknowledged. In particular, air operations around Narvik act as a useful point of comparison with the disastrous experience in south-central Norway. Considered analysis of Norway 1940 highlights many lessons that are still of real contemporary relevance; in particular, the critical importance of control of the air in enabling all other activities; the psychological impact of air power; and air power’s potential as a force multiplier providing mobility and firepower to small bodies of troops in extremely difficult terrain. But the limits of the air weapon were also evident, especially its dependence on force protection and secure basing in a campaign that was dominated by range and distance, time and space, and the paucity of useable airfields.

This edition of Air Power Review contains two viewpoints, one by Flight Lieutenant Alexander McKenzie and the second by Professor Philip Sabin. Alexander McKenzie offers a view of operations in Afghanistan using a historical perspective and warns against the folly of transposing successes in one theatre to the challenges of another. The article discusses the complexity of the current operational environment, the difficulties of conducting effective COIN operations in a 21st Century world and the contribution that air power can make to such operations. The viewpoint offered by Professor Sabin, an earlier version of which
some readers may have seen as a
discussion paper on the RAF CAPS
website,\textsuperscript{1} discusses the current and
future utility of air and space power.
It addresses its topic in four parts.
First, it shows from past experience
the difficulty of predicting the future,
and assesses whether the UK’s
recent National Security Strategy
and Strategic Defence and Security
Review take adequate account of
this unpredictability. Second, it
discusses the key characteristics
of air and space power relative to
land and naval power, by boiling
the essential differences down to
just four basic factors, and assessing
the implications for the aerospace
contribution to joint campaigns. It
thirdly examines the very difficult
trade-off between the flexibility of
aerospace capabilities (in terms of
geographical application, operational
utility across the spectrum of conflict,
and adaptability of effects) and the
high costs and lead times which such
flexibility normally requires. Finally,
it analyses the human dimension of
air and space power, by assessing
how advances in simulation, UAV
technology and computer networking
are changing the roles of human
operators, and what this means for
the future of aerospace power.

This edition concludes with book
reviews offered by Group Captain
Clive Blount, Group Captain John
Alexander and Rev Dr (Squadron
Leader) David Richardson.

Notes
\textsuperscript{1} Link to RAFCAPS Discussion
co.uk/discussionpapers.htm
Notes on Contributors

**Air Commodore Dr Peter Gray** retired from the Royal Air Force in June 2008 and took up the position of Senior Research Fellow in Air Power Studies at the University of Birmingham on 1st September 2008. Prior to retirement, Gray was Director of the Defence Leadership and Management Centre taking up post in September 2004. Gray spent his early career as a navigator on the F4 Phantom aircraft and, more recently, commanded 101 Squadron flying VC10 K tanker aircraft. He has spent two staff tours in the personnel field followed by a lengthy sojourn in the Cabinet Office, several appointments in the Ministry of Defence and has served as Director of Defence Studies for the Royal Air Force. Gray holds degrees from the Universities of Dundee, London, Cambridge and Birmingham (PhD). He is a Fellow of the RAeS and of the Institute of Leadership and Management.

**Dr Joel Hayward** is the Dean of the Royal Air Force College. He is also a Director of the Royal Air Force Centre for Air Power Studies (RAF CAPS) and the Head of King’s College London’s Air Power Studies Division. He is also the lead academic for King’s MA, Air Power in the Modern World, which is the UK’s first specialist degree programme in air power studies. He is the author or editor of eight books as well as many book chapters and journal articles, some of which have appeared in German, Russian, Portuguese, Spanish and Serbian translations. He lectures widely throughout Europe, Asia and beyond on various defence and security topics.

**Dr Peter Lee** served as a Royal Air Force chaplain during the build-up to the 2003 invasion, and for most of the period of the UK’s involvement in Iraq. After hostilities commenced he spent five months at a military hospital in Cyprus providing pastoral support to wounded, maimed and injured soldiers who had been airlifted from the battlefield. During this period Dr Lee developed a keen interest in the way the intervention was justified, particularly by Prime Minister Tony Blair. This prompted extensive reading of the classic just war arguments, eventually leading to formal research in the field at King’s College London War Studies Department. Since 2008 Dr Lee has been employed by King’s College London as a Lecturer in Air Power Studies based at Royal Air Force College Cranwell in Lincolnshire, specialising in the ethics of war. In 2010 he gained his PhD in War Studies for a thesis entitled *A Genealogy of the Ethical Subject in the Just War Tradition*. Dr Lee is regularly invited to lecture on this subject to military, academic and wider audiences.
**Group Captain Clive Blount** is Assistant of Air and Space at the Development, Concepts and Doctrine Centre at Shrivenham. A fast-jet navigator by trade, he has a varied flying background including tours in as an instructor and in test flying. He has completed staff tours in the MOD, NATO, and with HQ KFOR in Kosovo, commanded RAF Gibraltar, has served as an ACSC tutor and ‘until recently’ was XO of the Air Warfare Centre Test and Evaluation Division at Boscombe Down. He was a Tedder Fellow in 2007/8, gaining an MPhil in International Relations at the University of Cambridge and is currently engaged, as a Portal Fellow, in part-time study for a PhD with King’s College London.

-------------------------------

**Lieutenant Colonel Andrew M. Roe** YORKS, Military Assistant to the Surgeon General, was commissioned into the Green Howards in 1992. He has held various command and staff positions in Northern Ireland, Germany, Bosnia, Afghanistan, the Falkland Islands and Iraq. He is a graduate of the U.S. Army Command and Staff College and the School of Advanced Military Studies, Fort Leavenworth, Kansas. He has a PhD from King’s College London and is the author of *Waging War in Waziristan: The British Struggle in the Land of Bin Laden, 1849-1947*.

-------------------------------

**Group Captain Alistair Byford** is a Tornado strike, attack and reconnaissance pilot who has flown over 4000 hours in a career that began with the 1991 Gulf War and has included twelve operational detachments, command of No. 31 Squadron and latterly, No. 904 Expeditionary Air Wing in Afghanistan. He has taken post-graduate degrees at both Cambridge and Kings College London, is the author of the current edition of *AP 3000 – British Air and Space Doctrine*, and won the Two Air Forces’ Award’ for his recent *Air Power Review* essay on the Channel Dash. He is currently attending the Royal College of Defence Studies, following his last appointment as the RAF’s Director of Defence Studies.

-------------------------------
Air & Space Power after the SDSR

by Air Chief Marshal Sir Stephen Dalton
KCB ADC BSc FRAeS FCMI RAF
Introduction

The 2010 Strategic Defence and Security Review (SDSR) was conducted under 3 cute countervailing pressures: the need to do all we can to ensure the success of current operations, the need to look forward to 2020 and beyond to ensure the long-term security of the United Kingdom, and the urgent need to address the government’s wider financial situation. The Review was structured in 2 parts: the National Security Strategy (NSS), published on 18 October, and the SDSR. The NSS provided strategic vision and purpose, and highlighted, above all, the complexity and potential volatility of the 21st Century world in which we live. The test of the strategy will be the coherence of NSS and SDSR – how well are the ends set out in NSS supported by the ways and means delivered by SDSR, and by implication how well is the Future Force described in SDSR matched by Defence Planning Assumptions and the more detailed decisions on implementation which are needed. From an Air perspective, whilst the full implications and detail will take some time to establish, it is clear that the outcome is a capable RAF, with an updated inventory, structured to be as coherent as possible with the wider priorities of UK Defence requirements in the 21st Century. There will inevitably be rough edges that need to be smoothed.

Afghanistan

In the immediate term, the overriding priority is the campaign in Afghanistan. Strategic failure is something we simply cannot countenance from any perspective, be it national security, the potential for the destabilisation of Pakistan and the wider region, or simply David Kilcullen’s pithy observation that the West is likely to have to fight hybrid wars against deeply asymmetric opponents until it demonstrates it can succeed in them. The RAF is, and will remain, fully committed to providing assured operational capability and relevance in Afghanistan, across all 4 Air & Space Power roles (see below), and building on the level of expertise in Air/Land Integration, and on the subtle but critical key roles involved in applying air power in a complex COIN environment.

Core Roles

During the SDSR process, I was (and remain) determined to retain the capabilities necessary to deliver each of the 4 fundamental air and space power roles: Control of the Air and Space; Air Mobility; Intelligence and Situational Awareness; and Attack. Though the post-SDSR RAF will undoubtedly be smaller, it will retain the ability to deliver significantly in each of these areas, in maintaining the sovereignty of United Kingdom airspace, in Afghanistan, in the Falkland Islands, and in the event of short-notice contingency operations anywhere on the globe.

Whilst we will retire some fast jet platforms (all our Harrier and some GR4) migration to their successors, the Typhoon and eventually Joint Combat Aircraft (JCA), will give us a durable truly multi-role Combat ISTAR capability based on 2 types as we progress to 2020. Technologically this is the equivalent of the replacement of biplane fighters with the Hurricane and Spitfire in the 1930s. As each individual Hurricane and Spitfire delivered a quantum
leap in capability over the Gloster Gauntlet and Gladiator aircraft they replaced, so it became possible to achieve more with fewer aircraft, and fewer squadrons. The same applies today. The very fact, that unlike Harrier, Tornado GR4, and Tornado F3, both Typhoon and JCA will be as capable of delivering Control of the Air as they are Attack or Intelligence and Situational Awareness, means that in the contested and challenging operational environment of the future fewer platforms will be required to deliver greater capability. Increasingly realistic and networked simulation is also allowing us to conduct much more training in synthetic environments.

The Future Force structure also maintains the capability of the RAF to address another core Air and Space role – the provision of Intelligence and Situational Awareness to the campaign. The further development of Remotely Piloted Air Systems (RPAS) is one of the central elements. Not only do they provide a key capability for the current Afghan campaign, they also provide the basis for a persistent Combat ISTAR capability in future campaigns, and ensure that the RAF and UK remain in the vanguard of the development of RPAS tactics and techniques, and at the core of the eventual move to truly unmanned autonomous systems. It is not unreasonable to envisage force structures with a mix of, say, one third remotely piloted Combat ISTAR platforms to two-thirds manned after 2030.

Strategic intelligence is a key capability for the United Kingdom. In the current strategic environment, the ability to detect the development of threats and deal with them early is critical. The UK’s ability to do this will be significantly enhanced by the introduction of the Rivet Joint capability which is able to span the full spectrum of intelligence collection and dissemination, from the strategic to the micro-tactical, and deepen still further our cooperation with our key intelligence ally. The RAF will also continue to provide the UK military lead in integrating with our allies and partners in the use of Space for intelligence and situational awareness. Intelligence collection is of little use without effective analysis, processing and dissemination, and as a Service we will remain centrally engaged at the national and coalition level to ensure that the collection of intelligence by air and space platforms is coordinated with HUMINT, and its processing and dissemination integrated with both HUMINT and information from open sources.

Air Mobility is absolutely key to success at every level in Afghanistan in its current phase, and in most likely campaigns of the future. As with our Combat ISTAR, we will replace old with new. Chinook, for example, is the key provider of rotary wing mobility in Afghanistan, and in the likely Joint campaigns of the future, and we will be getting an additional 12 Chinooks – less than originally hoped but still very necessary. Similarly, whilst the Hercules, VC10 and Tristar continue to provide excellent service, our ability to squeeze much more from such venerable aircraft (some of our C130Ks are almost 40 years old) is limited. The C17, A400M and FSTA represent a better future capability for Defence – and FSTA is more than
a tanker, it also provides enhanced strategic airlift capability.

The last ten years have seen a quantum leap in our ability to provide air mobility in the demanding High Intensity Counter-Insurgency environment. Our equipment is better protected, and our crews more tactically adept. This is something we will maintain after the drawdown of operations in Afghanistan. Operationally focused and tactically effective air mobility is not an optional extra, it is absolutely essential to the core business of joint warfare.

For our Allies, the RAF will remain a valuable partner capable of the full range of air operations in the most demanding environments. The quality of the combat force will be enhanced; indeed, the ability to self-escort will make integration into Coalition operations easier and mean that we will offer considerably more against capable opponents. Our capability to provide mobility will be modern and survivable and our Strategic ISR capability will be enhanced, notwithstanding the difficult decisions not to bring the Nimrod MRA4 into service (see below) and the withdrawal of the Sentinel once it is no longer required in Afghanistan.

People

The same premium that demands agile future platforms demands intellectually and professionally agile people. This necessitates a singular focus on the quality of training, using advanced simulation where appropriate, and education to ensure our current operationally focused ethos is fully embedded across the whole Service in a form that would be recognisable to Trenchard, to Dowding, to Coningham or to Slessor. The already impressive level of operational experience across the Service also provides the basis to enhance the conceptual component by educating ourselves to produce flexible, thinking military airmen, true members of a wider profession of arms, able to offer the optimum to joint and coalition campaigns at all levels. This will particularly involve a positive, sensible and credible articulation and advocacy of the value of air and space power in the joint and combined campaigns of the future. The professional links and relationships we have developed across the Atlantic and the Channel, within the broader NATO and further afield will remain strong and our people will continue to punch above their weight in Combined Air Operation Centres and joint and coalition headquarters.

Safety

One area, which is non-negotiable, is safety. The RAF will not, under any circumstances, be driven by considerations of resource to compromise safety, either on operations or in training. On operations, it is quite simply unacceptable to expose our people, of all 3 Services, to any greater risk than that imposed by the combination of extremely demanding operating environments and the enemy.

Risks

So much for the positives. Whilst the properly resourced SDSR will deliver an RAF capable of fulfilling the 4 core air power roles, and offering particular capabilities such as Storm
Shadow to Coalition partners and allies, we should not blind ourselves to the fact that it contains some areas of risk. Perhaps the most obvious is the deletion of the suite of capabilities provided by Nimrod MRA4, which range across the air, maritime and land environments, and the full range of effects it offers, from long range search and rescue at the softer end of the spectrum, to kinetic attack against submarines and surface combatants. In addition, the Sentinel will be withdrawn from service, and the RAF Regiment reduced in size, once no longer required in Afghanistan.

Mitigating these risks will demand close cooperation with our sister Services in the UK, with industry and with Allies. The Defence Secretary has been clear that the Nimrod decision means taking some risks on the capability that the MRA4 was to provide, and has been similarly upfront on the judgement that we have sufficient certainty in overflights and overseas basing to take risk on Carrier Strike until the Joint Combat Aircraft – Lightning II – capability enters service. The Carrier Variant of JSF will be cheaper to buy, and cheaper to maintain whilst operationally it will go further and carry a greater weapon payload than the STOVL version. But we must retain the concept of employment jointly with our Naval colleagues as the aircraft and the ship together are the power projection element and the raison d’être for the carrier.

These decisions also show the need in coming years for a ruthless focus on delivering value for money. Delays and cost overruns have both reputational and practical implications. The need to do more with less should drive innovation; there are few good reasons, for example, why every airframe in an operational area should not be an ISR collector – or that FSTA could not be configured as a strategic ISR platform - off the shelf modular capabilities to make this happen exist and can be integrated into current and future platforms.

**Future**

It would be foolish to assume that the potential adversaries of the future, whether state, non-state or hybrid, will concede entry to Western military expeditions as readily as they did in the moment of apparent unipolar American power between the end of the Cold War and 2003. Hezbollah’s ability to challenge Israeli use of the Lebanese littoral in 2006, and its deployment of crude weaponised UAVs, is a valuable lesson.

It is not necessary to agree completely with the detailed examination of potential future adversaries expounded in the American Air-Sea Battle concept, to accept that contested access will feature as a matter of course in many future operational scenarios. The reality of 21st century operations is that we deploy, enable and largely maintain our forces by air and sea, and that highly capable anti maritime and anti aircraft capabilities will be increasingly available to potential future adversaries, whether state, non-state or hybrid actors. We must also accept and be able to work within cyberspace as our adversaries seek to gain the advantage in unconventional and novel ways. Theatre entry and deployed force sustainability are thus likely to be challenged by our enemies as we
move towards and beyond 2015. Without the capability to operate in contested air and maritime environments therefore, the UK’s ability to project military influence in future would be diminished. So for the air environment, maintenance of sufficient high end capability is an essential pre-requisite for an adequate contribution to UK Defence in any but the most benign scenario.

Both the National Security Strategy and DCDC’s Future Character of Conflict paper (FCOC) clearly identified Space and Cyberspace as areas of asymmetric vulnerability. That the UK is beginning to take ensuring access to Space somewhat more seriously, is heartening, but we need to consider carefully how (and how much) to invest in the assured access to Space, upon which all 9 pillars of our critical national infrastructure depend.

FCOC notes that all future conflicts will partially be fought through the media and by the use of cyberspace. As the Director of GCHQ recently highlighted, cyberspace is a contested and competitive area. The domination of the information space will be critical to the delivery of future military effect. Both hybrid actors and nation states already exploit cyberspace, and as the cyber attack on the Estonian banking system in 2007, and denial of Georgian internet services during the Russia-Georgia conflict in 2008 indicate, sophisticated, developed societies and economies are particularly vulnerable. The UK must strive to guarantee that our systems and processes afford the resilience needed to enable us to continue to operate effectively in the future, and if necessary to have credible offensive capabilities in cyberspace. The nature of the RAF’s business, our implicit understanding of the cyber terrain, and our technical culture and training, all point to the Service having a pivotal role to play in the understanding, defence and exploitation of cyberspace, now and in the future.

As we refine existing capabilities and develop new capability areas essential to the challenges of the 21st Century and as we move to assure further our access to space, Defence must seek innovative approaches to ensure affordability. Commercially available technologies such as small satellites now offer much of the capability previously restricted to expensive military systems at a fraction of the cost. It should therefore be possible to meet many of the Defence requirements by developing a mix of small and relatively inexpensive satellites and purchasing space products without necessarily owning the systems.

**Conclusion**

The apocalyptic predictions of the effect of SDSR on the RAF proved unfounded. Despite the loss of some platforms, the Service remains capable and prepared to deliver across the 4 core air and space power roles. It is well configured, postured and focused to support the immediate and overriding campaign priority in Afghanistan – where its Combat ISTAR capability, principally in the form of the Tornado GR4s, are delivering outstanding reliable cost-effective results - the Air Defence of the United Kingdom and dependent territories, including the Falkland Islands, and small scale contingencies. By 2020, it will be a
more modern, and in many ways more capable force than it is today, with an enduring capability based on 2 highly capable and truly multi-role, Combat ISTAR platforms, a range of manned and remotely piloted Strategic ISR capabilities, a modern and flexible fixed and rotary-wing mobility capability and the pivot of UK military capability in both space and cyber operations. That this is the case reflects a fundamental and enduring reality. The ability to exploit the third dimension is essential to success in modern warfare: air and space power is both a key effector and enabler across the full gamut of current and potential future operations.
The debates surrounding the RAF strategic air offensive against Germany continue to attract considerable attention at academic and popular levels of debate. This article examines what is arguably one of the most contentious aspects of all - the legality and legitimacy of the campaign. It argues that the debate within the Air Ministry and with Bomber Command was actually more nuanced than is normally admitted and that thinking on the laws of air warfare was very mature in the inter war years. The bottom line, however, was that the Second World War was total war and had to be won; the strategic air offensive played a vital part.
Introduction

One of the great misconceptions, and then font of many subsequent injustices, arising from the Second World War was that the airmen merely saw this conflict as the ideal proving ground for the application of the principles of unrestricted air war against civilians and their cities as had been laid down by the various inter-war ‘prophets’. The myth has continued that the ‘Bomber Barons’ then pursued those aims without constraint once the nature of the conflict confirmed that the gloves had indeed come off. The expression itself is derived from the short hand used by senior officers in the RAF in the lead up to the War in which Britain should not be the first to unleash unrestricted warfare, but that it was ultimately inevitable. But this image of callous, blood thirsty, potential war criminals sits at considerable odds with the more traditional concepts of military chivalry and the underlying requirements for the conflict to be legal and for there to be a just cause for the military actions undertaken.

The underlying military ethos was built on the work of early Christian writers who, acknowledging the sanctity of human life, tried to impose a degree of rationalism and discipline on the inevitable exercise of violence and taking of life. In 418, St Augustine wrote a short treatise on military morality to a senior Roman official charged with keeping tribesmen from the Sahara out of Roman (Christian) Africa. Augustine advised that war should only be conducted when necessary and then with the minimum force; he added that mercy should be shown to the enemy. These tenets gave rise to the concepts of *ius ad bellum* and *ius in bello* which are central to the Just War Theory and are also key in the International Law of War; in turn, they reflect the rules of going to war and the conduct of combatants in war itself. More recently, and arguably reflecting his own age as well as that of his subject, General Viscount Wolseley in his *Life of John Churchill*, writing in 1894, stated that *history proves that it [the army] has seldom fought well in what it believed to be an unrighteous cause. Unless the Rank and File are interested in their work, there will be no enthusiasm, and from an army without enthusiasm little can be expected.*

The essence of this was, written as it was by a distinguished soldier, that the need for a just cause was paramount for military forces to be expected to function (presumably in the absence of prevailing laws of armed conflict which were then newly under development). Despite more modern rhetoric, these concepts were equally valid for the bomber crews and their commanders.

The standard refrain, however, has been that cynical national interests prevented the ratification of the 1923 Hague Rules on Aerial Bombardment and any meaningful progress to be made at the Geneva Disarmament Conference, thus preventing the use of the bomber from being outlawed or restraint placed on its use. Recent discussion has therefore tended to have been conducted on moral grounds thus allowing the philosophers and more emotive voices to come to the fore. This exercise has often been completed using modern vocabulary,
standards and invariably without the international and technological context. Recent examples include A. C. Grayling, *Among the Dead Cities* and Donald Bloxham’s chapter, ‘Dresden as a War Crime’ in Addison and Crang’s *Firestorm: The Bombing of Dresden*. For some authors, the bombing offensive has become the epitome of all that is brutal in war with, in an extreme form, the air offensive approximating in its manifestation of evil to the Holocaust. Although it is possible to use theories such as Michael Walzer’s work on *Just and Unjust Wars* it has to be acknowledged that, notwithstanding its ancient precedents, this concept was not in widespread use at the time that the Offensive was planned and conducted. It is therefore suggested that it is not appropriate to use modern constructions out of the context of the times and that a serious analysis should be seen from a historical backdrop. This paper will examine the development of thinking on the restraint of warfare prior to the advent of air power and subsequently in order to show that thinking at the senior levels in the Royal Air Force and in the Air Ministry was considerably more complex and sophisticated than the standard caricature.

The second serious misconception has been that the Strategic Air Offensive against Germany, to use the title of the Official History, and area bombing in particular started with Harris and his advent to power as Commander-in-Chief Bomber Command in February 1942. As this paper will show, the road to area bombing was all the more incremental with all of the implications involved in a progressive approach. The third misconception, will be explored is that once the ‘gloves’ had come off, the debate was over. The reality was that there were serious concerns over the perceptions of the campaign and its portrayal. Finally, the paper will show how these concerns became evident even while the offensive was being waged.

**The Development of Thinking on the Morality and Legality of Warfare**

The standing military view on ethics in conflict, pertaining to the period in which air power was conceived and developed, can best be summarised as conservative and, to the military mind, appealingly pragmatic. In a lecture to the Royal United Services Institute in February 1898, W. V. Herbert queried whether it was possible to have an ethical side to warfare. He went on to discount the arguments germane to the professional philosopher who ‘will argue a soul into a stone, and beauty into the earthworm’, preferring to align the discussion with ‘the ordinary fight-your-daily-battle individual like you and me.’ Herbert dealt with *ius ad bellum* as concomitant with nationhood and therefore inevitable. But he saw *ius in bello* as having changed, or developed, with ‘women and children not molested – at least, not officially;’ open towns are not shelled and poison gas is held in abhorrence. Herbert, arguably showing more foresight than many others investigating the moral and legal issues, concluded with the suggestion that as warfare had developed, there was need to develop, a ‘firmly-established and universally-accepted code’ to regulate its conduct.
then went on to stress the primacy of actually winning:

All said and done, ‘Win your war’ is the most important, and it is the most primitive, maxim of the science of strategy – that is drive your opponent into such a corner that he is content to have the terms of peace dictated to him. The rest comes a long way after.¹⁵

In an answer to a question from the floor, Herbert explained that a code of ethics could only be relevant between nations of an equal state of civilisation and that it could not reasonably be expected to apply between the English and the Zulus.¹⁶

This presentation was only 20 years before the end of the First World War and it is unlikely that attitudes would have changed markedly from the date of its delivery through to the years of colonial air policing and the formation of Fighter and Bomber Commands in 1936. The need for parity between the levels of civilisation of the warring states would later have chilling overtones in the justification for a range of activities in Europe and the Far East. The Germans, for example, considered the Slavs to be approaching subhuman and the Japanese had a similar approach to the Chinese. The Americans in putting together their fire-bombing offensive of mainland Japan had a similar mindset.¹⁷ At a more pragmatic level, the language used by Herbert should not be viewed with modern mindsets of equality and tolerance; his was very much the language and attitude of the time. And this was reflected in the official publications (acknowledging the Journal of the Royal United Services Institute as only quasi-official) such as C.D 22 Operations Manual, Royal Air Force issued in 1922 in which chapter XI deals with ‘Aircraft in Warfare against an Uncivilised Enemy.’¹⁸ The enemy are uncompromisingly referred to as ‘savages’.¹⁹

The natural progression from a broadly accepted code of conduct, arguably an extension of the chivalric code, is for the required behaviours to be set out in formal language and agreed between nations; ideally this should take the form of a binding treaty. In short, to transpose them into an international law of armed combat. Adam Roberts has insisted that the study of [international] law must be integrated with the study of history.²⁰ A logical extension of this is that the development of air law, and indeed strategy and doctrine, must be examined in the context of the wider international and domestic political situation. In turn, the developments in thinking must take heed of the pace of technological progress (including limitations), and in particular the weapons on which restraint was sought.

The literature on the laws of war, and their development, is extensive.²¹ Michael Howard makes the point that the role of the military is to use violence with deliberation, with purpose and in a legitimate manner; he characterises this as force and that force between states constitutes war.²² This can be taken slightly further with the legal aspect expanded to include the use of force for legitimate reasons and applied in a legitimate manner thereby specifically encompassing ius ad bellum and ius in bello. Within Howard’s use of ‘deliberation’, he embraces the elements of choice, decision and the issue of orders.²³ The latter, although Howard does not
pursue the issue, is important in the context of subordinates being protected from charges of war crimes by the orders of their superiors; the understanding of international law in the inter-war years allowed such protection. But Howard does make the point that if control does break down, the result is likely to be one that contravenes the ethical and legal dimensions.

The development, and application, of international law has long been problematic in that states have consistently sought to avoid the incorporation of laws that they consider likely to impinge upon their national interests; this is compounded by the absence of any real enforcement mechanism beyond the utterances of the International Court of Justice. In his detailed review of *Air War and the Law of War*, the distinguished American military lawyer Hays Parks cites one of the most pre-eminent international lawyers of the 20th Century, Sir Hersch Lauterpacht, as stating that ‘If international law is the weakest point of all law, then the law of war is its vanishing point’. Notwithstanding this apparently cynical viewpoint from the legal profession, the advisers to the Air Ministry, and their predecessors in the War Office, took these issues seriously as will become evident below. The issue is further complicated by the benefit of hindsight in that the prospect of international conventions being used to curb the likes of Hitler seems improbable at best. From a jurisprudential point of view, however, the possibility of contravention of these rules, and the unlikelihood of retribution, has not prevented nations, their politicians and their officials from seeking to impose some degree of order. This may have been for a variety of motives some of which may have been genuinely altruistic; others aspects may have been self-serving, but there is no doubt that at least they tried.

Attempts to prohibit specific (usually nasty) types of weapon had a much longer provenance with Greek, Roman and Hindu codes banning the use poisons; later, the Lateran Council of 1132 declared that the arbalest and crossbow were ‘unchristian weapons’. Beyond the broad appreciation of the need for there to be an underlying moral sense of rightness about the cause discussed above, the first significant attempt at the codification of the rules of warfare was completed by Dr. Francis Lieber of the University of Columbia for issue to the Union Army on 24th April 1863. The ‘Lieber Code’ became the model for many national manuals and for the Hague Peace Conferences of 1899 and 1907. More recently the 1868 St. Petersburg Declaration sought to ban ‘explosive projectiles under 400 Grammes weight’ (sic). This Declaration is also particularly significant in its attempt ‘to alleviate the calamities of war; That the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy’.

This was followed by the 1899 Hague Conference which was originally called under a Russian initiative designed to slow down the potential impact of Western technology and, ideally, to avoid war completely. For obvious reasons,
air power was not high on the agenda, but Commission I of the conference agreed a 5-year moratorium on the discharge of explosives or projectiles from balloons.\textsuperscript{34}

The prohibition on the utilisation of balloons had expired by the time of the 1907 Hague Convention which duly renewed the ban.\textsuperscript{35} And although manned flight had occurred by this time, its military utility was not uppermost in the minds of the delegates. Technological advances in artillery and ballistics, however, were such that the dangers of long range bombardment resulted in Convention IV laying down the following Articles which would later influence the 1923 Convention on Aerial Warfare and the thinking of officials in the interim:

\textbf{Article 25.} The attack or bombardment, by whatever means, of towns, villages or buildings which are undefended is prohibited.

\textbf{Article 26.} The officer in Command of an attacking force must, before commencing a bombardment, except in cases of assault, do all in his power to warn the authorities.

\textbf{Article 27.} In sieges and bombardments all necessary steps must be taken to spare, as far as possible, buildings dedicated to religion, art, science, or charitable purposes, historic monuments, hospitals and places where the sick and wounded are collected, provided they are not being used for military purposes.\textsuperscript{36}

The advent of the First World War saw rapid developments in the aircraft and associated weapons. As the range, and payload, of the aircraft increased so did the capability to carry the war deeper into the homelands of the belligerents. Technology had, however, only progressed so far and there were no real navigations aids, resulting in inaccuracies in bombing. For example, a German raid, by aircraft as opposed to Zeppelins, on 13 June 1917 against the ‘docks, wharves, railways, Government Stores, and warehouses situated in the centre of the town on the banks of the Thames’ actually hit a council school in the East End of London killing or injuring 120 children.\textsuperscript{37} But as Parks points out, aerial bombing (or bombardment) was not the worst offender when it came to lack of discrimination. The German ‘Paris Gun’, which was used in conjunction with their offensive in March 1918, had a range of 75 miles and could only be aimed at the centre of Paris.\textsuperscript{38} Naval bombardment of shore positions, especially as the calibre of the guns increased was no more discrete. There is an interesting contemporary issue in these latter points in that artillery remains at least as guilty as air power in causing collateral damage, but the latter invariable gets the blame.\textsuperscript{39}

During the First World War, the War Cabinet was clearly concerned about the legality of aerial bombardment of undefended (or open) towns and cities and the possibility of ‘tit for tat’ reprisals. The War Office accordingly produced two memoranda clarifying the situation.\textsuperscript{40} The General Staff summarised the use of aerial bombardment and outlined the history of the development of the law. In the second paper, the Staff pointed out that the renewal (in 1907) of the Hague Declaration of 1899 outlawing the launching of projectiles had not been fully ratified, and not at all by the four Central Powers, thereby leaving it without binding force. The paper
went on to confirm that although bombardment of undefended towns was forbidden, there remained doubt on both sides as to what constituted defence, openness and the removal of legal protection when the town contained targets of military utility.\(^{41}\) The interplay between technological capability, the needs of discrimination and the desirability of tapping the potential of offensive air power would continue to challenge the exponents of the new air arm throughout the period covered in this paper.

The development of the legal thinking in how to limit, contain or prohibit the use of aircraft continued almost seamlessly. There was, however, a new impetus as the various powers tried to recover from the shock of four years of brutal warfare. The Paris Aerial Navigation Convention of 1919 did nothing to constrain potential belligerents.\(^{42}\) The Washington Naval Conference (more correctly titled the Washington Conference on the Limitation of Armament) made a brief attempt to ban novel forms of warfare, including aircraft, but concluded that this would not be practical.\(^{43}\) Instead the baton was taken up by the Hague Commission of Jurists which commenced on 11 December 1922 under the chairmanship of John Bassett Moore of the United States.\(^{44}\) The delegation consisted of representatives of the United States, Great Britain, France, Italy, Japan and the Netherlands; each delegation consisted of legal and technical experts.\(^{45}\) The delegation from the Britain included J. M. Spaight, a senior official from the newly formed Air Ministry.\(^{46}\) The Hague Conference finished on 19 February 1923 with the unanimous adoption of a two-part report; the first part covered Rules for the Control of Radio in Time of War and the second Rules of Aerial Warfare.\(^{47}\) One of the crucial steps forward, in theory at least, was Article 22 which stated that:

Aerial bombardment for the purpose of terrorizing the civilian population, of destroying or damaging private property not of military character, or of injuring non-combatants is prohibited.\(^{48}\)

Article 24 went on to state that:

(1) Aerial bombardment is legitimate only when directed at a military objective, that is to say, an object of which destruction or injury would constitute a distinct military advantage to the belligerent.

(2) Such bombardment is legitimate only when directed exclusively at the following objectives: military forces; military works; military establishments or depots; factories constituting important and well-known centres engaged in the manufacture of arms, ammunition or distinctively military supplies; lines of communication or transportation used for military forces.

(3) The bombardment of cities, towns, villages, dwellings or buildings not in the immediate neighbourhood of the operations of land forces is prohibited. In cases where the objectives specified in paragraph 2 are so situated, that they cannot be bombarded without the indiscriminate bombardment of the civilian population, the aircraft must abstain from bombardment.

(4) In the immediate neighbourhood of the operations of land forces, the bombardment of cities, towns, villages, dwellings or buildings is
legitimate provided there exists a reasonable presumption that the military concentration is sufficiently important to justify such bombardment having regard to the danger thus caused to the civilian population.  

These Rules made a brave attempt to impose some degree of humanitarian control on the development of air power. But the 1923 Hague Rules were not ratified by any of the nations, with France, the Netherlands and Great Britain particularly opposed to their adoption. The conventional view, therefore, was (and remains) that they were a political and legal failure. The reality was that the states involved were not prepared to fetter what was still a largely untested weapon of war that clearly had considerable potential.

That said, the Hague Rules provided a foundation level of understanding of what possible future laws of aerial warfare might look like, or be based upon. The Rules also provided a useful vehicle for the evolution of those that had been specifically drafted for Land or Naval warfare. Furthermore, rules for the third dimension acknowledged that air operations could operate over either environment without discrimination; by implications, crews could not be expected to follow one set or the other depending on their geographical location. Probably most importantly, in absolute terms in Britain and more specifically for the development of thinking in the Air Ministry, the sessions in the Hague kept the issues close to the forefront of intellectual endeavour. This was due in no small part to the efforts of J. M. Spaight, who was a delegation member in 1923. In addition to being a senior official in the Air Ministry (having transferred from the War Office on the formation of the new organisation), Spaight was a prolific author writing on issues such as the legalities of Land Warfare. He was also a keen advocate of air power publishing numerous volumes including one on the likely future role of air power in a potential major war which was published in Liddell Hart’s series. Spaight’s work has three facets that are both distinct, and complementary. He was an air power advocate; an academic lawyer (a jurist in his own right); and a senior official. What then is the evidence for his influence on the existing and future members of the Air Ministry?

The difficulties of establishing influence are considerable, particularly when those who should be susceptible are idealists wedded to the invincibility of their ideas or weapons. Nevertheless, Higham considers Spaight to be an air power theorist without whom no survey would be complete; he describes him as being ‘Trenchard’s good friend’. Some degree of influence may be assumed from such an association. Spaight’s academic pedigree (including an LLD), along with his status in the, then small, Air Ministry also implies a degree of influence – especially over legal issues. This is seen quite specifically in 1921 when he proffered text and advice – which is taken in full – for the draft of CD22 the RAF’s first Operations Manual. Spaight then took his academic knowledge, and experience of attending the Hague Conference, and articulated his thinking in Air Power and War Rights first published in 1924. In his preface to the second
edition, he wrote of the great honour to have had his book officially recommended to candidates for the RAF Staff College, implying that there was a captive audience of potential students to be influenced. Spaight saw his intermediate work, *Air Power and the Cities*, as being part of a continuum. Beyond the rather high-flown prose of his published work, Spaight also produced two legal briefs for internal Air Ministry consumption; these are undated, but the AHB archivist’s assumption is that they were written in 1927. Higham suggests that Spaight’s influence comes through in a memorandum published by Trenchard in 1928 which points up the likeness between naval and air bombardment.

There are, however, a number of more explicit references to Spaight’s work which confirm his influence. In the Chief of the Air Staff’s submission to a Chiefs of Staff Meeting in 1928, the equivalence of naval and air bombardment was reintroduced with a specific reference to the *British Year Book of International Law* article written in 1923 by Spaight. A similar, but even more explicit, reference occurs four years later in the context of Air Ministry proposals for amendments to the Hague Rules in which a minute to the Chief of the Air Staff confirms that:

*Some help has also been given by Mr. Spaight whose book on ‘Air Power and War Rights’ has been considerably drawn on in framing the paper.*

The minute sheet is subsequently initialled with ‘I agree J.M.S.’ presumably indicating Spaight’s concurrence with the paper. It is clear from (then) Group Captain C F A Portal’s signature to a number of minutes on the file (as Director of Operations and Intelligence) that the future Chief of the Air Staff was fully conversant with the debate. The fact that Spaight was employed at the time as Director of Accounts clearly did not limit his influence on international legal matters. A similar minute to the Chief of the Air Staff on Disarmament links potential use of bombing with reprisals and specifically cites Spaight as the source of legal advice (again still as Director of Accounts).

Although Spaight saw his *Air Power and War Rights* and *Air Power and the Cities* as being a series with the first edition of *War Rights* in 1924; *Cities* in 1930 and the second edition of *War Rights* in 1933, it was clear that any amendments that Spaight sought to make to the second edition were limited by the printing requirements of not being able to change the pagination. The most significant difference between the two editions is the introduction of discussion on disarmament. Parks makes the point that Spaight’s works were ‘far more comprehensive than any law of war manual used by any military service at the time.’ Spaight’s work was therefore a readily available source of legal advice for his colleagues in the Air Ministry, and those who were likely to become staff officers having attended the Staff College at Andover. At the most basic level he provided a straightforward iteration of the Draft Rules and a guide to their interpretation. More importantly, Spaight also provided detailed examples of where the British, French and German air forces had used air power in the First World War. This was not just of historic interest, but presented clear
Evidence of the custom and practice of states – *opinion juris* and therefore an actual source of international law. He took the analytical process a stage further by highlighting areas where the Draft Rules would be likely to be impractical guidelines for future commanders. Spaight was prophetic in his identification of the difficulty in discriminating between military targets and neighbouring civilian populations. He went on to highlight the potential difficulties for airmen in operating at considerable height and in bad weather.

As a keen author on wider air power issues, as well as having the insight from his position in the Air Ministry, Spaight was well aware of the contemporary thinking on the morale-damaging potential of air attack. He therefore commenced his chapter on ‘Bombing: (III) Civilian Property’ with a discussion on bombing ‘for a political or psychological end’.

*The object of their attack will be moral, psychological and political rather than military: the aim will be to so to disorganise and disturb the life and business of the enemy community as to make it impossible for the enemy State to continue to resist, and at the same time to create in the enemy population as a whole a feeling of depression and hopelessness, to make a whole nation war-weary.*

Spaight then introduced a degree of realism into the jurisprudential arena by acknowledging that States would accept the prohibition on attacking civilian property, but that they would qualify it with the proviso that ‘common sense and practicability’ would not prevent attacks from taking place. He suggested that jurists and statesmen should acknowledge this pragmatism and, instead of seeking outright prohibitions, they should attempt to impose some degree of control. This conditional use of language is important in that it allowed Spaight to introduce his next theme in which ‘there is a right to bombard certain categories of purely civilian property [which] should be recognised and regulated’.

Characteristically, he then went on to describe custom and practice in land and naval engagements.

Spaight pragmatically summed up his thinking on the subject – as a jurist seeking to influence his peers in the legal arena on whom would fall the responsibility of formulating revised rules – by bluntly stating that:

*Let there be no mistake about it: the cities will be bombed, whatever rule is laid down. In no other way will belligerents be able to seek to obtain the moral effect which they will certainly seek.*

This set the tone for the thinking in the Air Ministry and subsequently Bomber Command. There was a complete acceptance that air warfare should be waged in as humane a way as possible consistent with the exigencies of the conflict. This was underpinned by the conflicting wishes to see as fair a code of rules as could be achieved. Furthermore, it shows that official Air Ministry thinking had developed in pace with international developments, with acknowledgement to the technological developments and with a marked degree of common sense. Finally, it is evident that senior military officers, and in particular those destined to run the strategic air offensive had direct access to the thinking and were influenced by it.
The Geneva Disarmament Conference and the Potential for limitations on Bombing

The Geneva Conference enjoyed cross-party support in the United Kingdom with Lloyd George, MacDonald and Baldwin firmly behind the main issues. They considered the country to be bound by Article 8 of the Covenant of the League of Nations in which:

*The Members of the League recognise that the maintenance of peace requires the reduction of national armaments to the lowest point consistent with national safety and the enforcement by common action of international obligations.*

Furthermore, the preamble to Part V of the Treaty of Versailles required Germany ‘strictly to observe the military, naval and air clauses’ in ‘order to render possible the initiation of a general limitation of the armaments of all nations’. Baldwin saw this also as a matter of honour. Unfortunately, the vast majority of States represented, and especially the more powerful, ‘did not care what came out of the Conference, for good or ill, provided their own interests were safeguarded’. Londonerry (Secretary of State for Air) concluded that ‘[the Conference] never had a chance of success from the very beginning owing to the fact that, with exception of ourselves, no Power, small or great, had any intention of reducing its armed forces’. Nevertheless, the task had to be tackled. The inherent contradictions did little to make the task easier for those entrusted with giving effect to government policy, or to building a bomber force that could potentially reach the desired deterrent features.

Given that the rationale for the Conference was based (at least in part) on alleviation of suffering inflicted on the huge scale in evidence during the First World War, it may have been reasonable to assume that each of the military environments was equally at risk of forced reduction, or abolition. Fleets had arguably been responsible for the blockade of Germany and the deaths of three-quarters of a million civilians. Similarly, Terraine offers ‘a grim commentary’ in his tables of casualties during the First World War challenging the myth that the defensive was less costly than the offensive. The irony therefore was that it was the potential of air power, rather than its proven destructive capacity and ability to inflict suffering, that brought it to centre-stage in Geneva.

After some seven years of preliminary discussions, the Conference opened formally in Geneva on 2 February 1932. Fifty nine nations sent delegations and this rose to sixty one before the end of the proceedings; each nation carried an equal vote leading countries that did not have a particular capability to vote for the abolition of weapon systems that they did not possess (such as air power or submarines). Inevitably continental nations saw the offensive, or defensive, nature of weapons from their own geo-strategic viewpoint; for example, the Japanese saw large surface fleets as aggressive, whereas the United States viewed them as
first lines of defence. The British approach was to encourage an all-round reduction in armaments and was prepared to set the example even though British air strength was lagging behind that of Italy, France, the Soviet Union and America. The Chiefs of Staff Annual Review for 1932 made grim reading in its description of the effects of the ten-year rule and dire economic situation.

But the Foreign Office saw this as what today would be described as ‘best practice’ with Britain demonstrating real commitment to treaty obligations. The official Foreign Office policy submission to the Cabinet was based on the so-called ‘Leeper memorandum’, named after its author in the department. The proposals in this document included the submission that German claims for parity of treatment should be acknowledged; that the British policy should be based on qualitative disarmament; and that HMG should consider proposing ‘the complete prohibition and outlawry in all circumstances of the dropping of bombs from any aircraft on the territory or shipping of another Sovereign State’.

It was axiomatic to the Foreign Office that Britain should play a leading role at the Conference.

In Cabinet on 4 May 1932, the Prime Minister (Ramsay MacDonald) pointed out to his colleagues that nearly every nation had made proposals on the subject of air warfare and the absence of a statement on the United Kingdom position was very likely to be remarked upon. Various suggestions, including the introduction of a new law of war prohibiting ‘bomb-dropping on the territory and shipping of another Sovereign Signatory State’, and the abolition of heavy bombers, had been raised, but subject to much criticism. Baldwin took matters considerably further with the radical, but heartfelt, suggestion that if nations were really serious, they ‘ought to agree to scrap all military and naval aviation. Civil aviation also would have to be dealt with, possibly by abolishing the costly subsidies devoted to this purpose’.

He went on to acknowledge that his views were unlikely to find favour, either with colleagues, or internationally. But Baldwin stressed that if his ideas were feasible the abolition would ‘remove one of the main elements of that fear that was the disturbing feature in the international situation’ (emphasis in the original). The Cabinet were reported to be ‘impressed’ by the proposal and no objection of principle was raised. A more pragmatic note crept in with the acknowledgement of likely rejection and the concomitant requirement to have policy at hand to cope with the many other proposals tabled.

Baldwin’s realisation that a total abolition of military aviation was unlikely to find favour was quickly realised. The Prime Minister raised the issue informally with the French who ‘would have none of it’. The Air Ministry response was inevitably hostile, both to the impracticality of abolishing all air forces and imposing control over civil aviation. The former point was eventually acknowledged by the Cabinet which agreed that other methods would be required. Nor was the Air Ministry convinced that
a prohibition of bombing would result in a meaningful reduction in the threat to world peace. The CAS stated in a letter to Londonderry that, in the event of war, reliance on a written pact would have little chance of observance, not least because war was supposed already to have been renounced by just such a pact. Furthermore any country at risk of aggression would use ‘every weapon it could lay its hands on’. Finally, Salmond pointed out that reliance on a ‘paper pact’ would be dangerous for the protection of ‘military objectives in this country, including those in London’ and that this point had been accepted by the Cabinet sub-committee chaired by Baldwin. A complete abolition of bombing also required qualification to allow its limited use in air policing in India, Aden and Iraq as had been tentatively acknowledged by Leeper and featured in most Air Ministry submissions.

The Air Ministry preference was for there to be a strict convention on the circumstances under which bombing from the air could be considered acceptable. They were totally content to see an ‘entire prohibition of all air attack upon the civilian population’ and restrictions in numbers and weights. The Air Staff files show the depth of the debate on these issues with advice coming from J.M. Spaight on what had already been covered during the discussions on the Hague Rules in 1923. These suggestions varied from a requirement for all potential military targets to be situated a specified distance from civilian populations through to an acknowledgement that a general prohibition of bombing was not considered legally workable. The essence of the Air Ministry thinking was that a complete abolition would render rules nugatory meaning that once conflict commenced, bombing would be unrestricted; it would be better to acknowledge the probability of bombing being used, but to circumscribe its use by clear rules. This is echoed in the Second Edition of Air Power and War Rights, where J.M. Spaight wrote:

*It seems to be unsafe to disregard the verdict which history has pronounced from the Second Lateran Council onwards, upon such attempts to ban completely the use of new and more scientific weapons of war. Such attempts are foredoomed. Rules regulating and restricting bombing, but not prohibiting it absolutely, are likely in the writer’s opinion, to be honourably observed by civilised states.*

These debates continued throughout the life of the Conference in a manner that was described by a Foreign Office official, who quoted the French delegation as saying that ‘the Disarmament Conference was like merry-go-round – the same old wooden horse kept coming round and round again’, but that he was afraid ‘that it is the French themselves who supply the motive gyratory power’. Germany withdrew from the Conference in mid-September 1932, not to return until January 1933. Hitler’s accession to the Chancellorship on 30 January 1933 ensured that the demands for parity of treatment would grow along with French concerns over security. Germany finally walked out of the Conference chamber on 14 October 1933 and subsequently resigned from the League of Nations, effectively bringing matters to an end.
and the abolition of air power, the task facing Londonderry and his senior colleagues changed radically to become one of matching German growth in aircraft. Nevertheless, the evidence from the files does not suggest the degree of cynicism over which airmen have been so frequently accused. There was certainly realism at all levels that air warfare could not be banned, but there seems to have been a genuine acceptance of the political desirability of outlining rules under which it could be used.

The Road to War

The use of air power in Spain (and in particular in Barcelona in March 1938 where bombardment had been used with the threat that it would be repeated every three hours until the city surrendered) and by the Japanese in China was cited as evidence that ‘the only way to humanise war is to abolish it.’ The Prime Minister admitted that the advent of air warfare had introduced ‘new methods, new scope and new horrors which have, in fact materially changed its character.’ He went on to admit that there was ‘no international code of law with respect to aerial warfare which is the subject of international agreement,’ but that the underlying principles of the law as it applied to sea and land warfare were applicable to the air ‘and are not only admitted but insisted upon by this Government.’ These principles included that it was against international law to bomb civilians as such, and to make deliberate attacks upon civilian populations.

In the second place, targets which are aimed at from the air must be legitimate military objectives and must be capable of identification.

In the third place, reasonable care must be taken in attacking those military objectives so that by carelessness a civilian population in the neighbourhood is not bombed.

This expression of formal Government policy was reiterated to Bomber Command in response to a query from the C-in-C on 30 August 1938 that in attacking German aircraft factories, a proportion of bombs would fall outside the immediate designated target area causing serious casualties among the civilian population. The Air Council replied on 15 September 1938 having taken advice from Malkin. The Air Council admitted that ‘there are certain objectives, particularly among aircraft factories, which it would be impossible to attack, even by day, without causing loss of life to the civilian population in the neighbourhood.’ The operational limitations were again acknowledged, but ‘for reasons of policy, however, which the Council feel sure you will readily understand, it is essential that in the opening stages of a war your action should be rigorously restricted to attack on objectives which are manifestly and unmistakably military on the narrowest interpretation of the term; and that even such objectives should not be attacked initially unless they can be clearly identified and attacked with a reasonable expectation of damage being confined to them.’ The policy was based on the need not alienate neutral opinion (not stated, but presumably America as Roosevelt had appealed for such restraint) and to avoid giving any ‘genuine pretext
for retaliatory action.’ Attacks would therefore have to be concentrated on targets such as railways (but not trains unless positively identified as military), formed bodies of troops and concentrations of transport. Newall, in submitting this directive to Swinton for approval concluded that these restrictions were unlikely to last long stating: ‘but we obviously cannot be the first ‘to take the gloves off.’”

Chamberlain’s acknowledgement of the parallel nature of some of the laws of war came into focus in 1939 when the Admiralty raised the question of bombardment of targets on the shore including coastal defence works and docks. The CAS wrote to his naval counterpart (Admiral Sir John Pound) suggesting that Malkin chair a meeting with representation from each of the Services to discuss setting rules to prevent loss of civilian life. The meeting went into considerable detail and outlined a two-stage approach with first restricting bombardment to a very narrow interpretation of military objectives and the second allowing a broader approach consistent with the lines agreed with French in Staff Conversations. The instructions, which Army commanders were to be required to obey in spirit, reiterated the key principles of bombardment of civilians being illegal. In the event, foreign policy issues intervened with Lord Halifax of the opinion that the original ‘Stage One was too restrictive and would alarm our allies.’ These were duly issued by the Air Council to Air Officers Commanding at home and overseas on 22 August 1939, followed by a further letter enclosing ‘Air Ministry Instructions and Notes on the Rules to be observed by the Royal Air Force in War.’ In setting the foundations for the future direction of war, the Air ministry letter included the following general statement:

The policy governing the selection of targets for air attack is a matter for decision by the government. This policy will be made known, through the Air Ministry, to Commanders-in-Chief and will be reflected in operation orders.

The practicalities of who would be allowed to do what and when were discussed by the Chiefs of Staff and subsequently in the CID on 1 September 1939. The essence of the discussion was that if Germany initiated unrestricted air attacks at the outset of hostilities, Bomber Command would be used to attack the German oil resources. If, however, Germany was to restrict attacks to military objectives, the RAF would attack the German Fleet at Wilhelmshaven; attack warships at sea when found within range; undertake widespread propaganda (leaflet) drops at night; and ‘conserve resources until our hands are freed.’ Bomber Command therefore went to war with bombing policy predicated on the foreign policy requirements consistent with President Roosevelt’s message to all potential belligerents that their ‘armed forces shall in no event and under no circumstances undertake bombardment from the air of civilian populations or unfortified cities, upon the understanding that the same rules of warfare shall be scrupulously observed by all their opponents.’ The other constraint (imposed by Halifax) was that the rules should not appear overly restrictive lest allies (France in particular) thought that
Britain was being overly cautious in the interests of its own defence. But throughout the process, it is clear that the serving officers, at least from Group Captain and above were prepared to follow a restrictive approach. It could be argued that this was a merely mechanical reaction based on the, admittedly high, likelihood that the gloves would indeed have to come off at some stage. But the evidence suggests that if those in the Air Ministry were cynical about the whole issue, they had the sense not confide their doubts to the files destined for the archives! But as Hays Parks has pointed out, even the international lawyers of the day doubted the applicability of the international law of war to the modern means at the disposal of nations on an unprecedented scale. Interestingly, Parks acknowledges the failures in diplomacy, but has hard words for the failure of international lawyers and moral philosophers of the time ‘who failed to adjust international law and moral thinking to major technological changes in society and warfare.’ Nor could the scholars claim that the issues had not been raised. That said, neither government, nor private citizens, had much faith in international agreements providing them with protection. The reality of the international experience of the 1930s where Britain had attempted to set the example by unilaterally disarming had been shown to be false logic. International agreements appeared to mean little to the new breed of dictators as events were proving. And the ready examples of the use of air power in Abyssinia, Spain and China suggested that the analogy of ‘removing gloves’ was mild in the extreme.

The Strategic Air Offensive

The raw reality of the first months of the war was the RAF was not technologically capable of carrying heavy bombing raids into German territory irrespective of the rights or wrongs; in the words of the official historians ‘Bomber Command was small, ill equipped and ineffective,’ This was recognised within the COS as was the need to build up strength in what became known as the ‘phony war.’ Within the Air Ministry, the Director of Plans (Slessor), as early as 7 September 1939, carried out a detailed review of German actions in Poland working on the basis that Germany had set the precedent for unrestricted attack. The official historians point out that it was ‘Air Commodore Slessor’s duty to examine this question from every side, and his memorandum should not be taken as an indication that he or the Air Staff were at this time definitely opposed to the policy of restricted bombing.’ Nevertheless, they added that the policy was as much a matter of expediency as of morality. This view was directly reflected in the words used by Newall in a telegram to Barratt in France some weeks later in which he said:

Owing to German action in Poland, we are no longer bound by restrictions under the instructions governing naval and air bombardment S.46239/S.6 of 22/8 nor by our acceptance of Roosevelt’s appeal. Our action is now governed entirely be expediency i.e. what it suits us to do having regard to (a) the need to conserve our resources; (b) probable enemy retaliatory action, and (c) our need still to take into account to some extent...
At face value, this would appear as if Slessor’s appreciation of the situation had been accepted by the CAS and policy had changed formally. The reality, however, is that the strategic air offensive was held in check for many months and prohibition on indiscriminate bombing remained in place until 1942 and explicitly reinforced on a number of occasions as will be covered below. From the wording used by the Air Staff, including in formal Directives, it is clear that while Newall would have liked to change RAF policy, Government policy had not moved at all. Chamberlain clearly believed that the war would ‘fizzle out with the collapse of the Nazi regime’ and an escalation in the use of air power may have exacerbated the situation. He had also seen the bombing force primarily as a deterrent from the beginning of the rearmament phase. Chamberlain also fundamentally believed that Britain should have the ‘moral right’ on her side as it would be a ‘tremendous force on our side’ and that if bombing started it would be ‘worth a lot for us to be able to blame them for it.’ It is possible that Chamberlain’s mindset over countries far away prevented him from agreeing with Slessor’s establishment of the precedent.

The question of expediency and morality had to be reviewed, first in the light of the invasion of Denmark and Norway on 9 April 1940 and then the low-countries in May 1940. Following consideration by the COS, fresh instructions were issued on 4 June 1940 in which the term ‘military’ was to be interpreted in the broadest sense; lines of communication which were useable for military purposes were included. From this point, there was a gradual escalation in what Bomber Command was being asked to carry out, and what it sought permission to attempt. For example, in part in retaliation for the bombing attacks on London, the C-in-C sought permission to attack the ‘middle of Berlin’ citing the German War Office and Air Ministry as appropriate aiming points. Newall’s response was to substitute ‘Railway Communications’ and not mention the former targets! Nevertheless it is clear from a minute sent by SASO Bomber Command (AVM Bottomley) to the Groups which reminded them that the behaviour of aircrews from ‘another Command’ in jettisoning their bombs through cloud without being able to identify the target was not acceptable; the minute concluded unequivocally that ‘Bombs are not to be dropped indiscriminately.’

The retaliatory nature of the escalation is apparent from the Directive issued to the Command at the end of October 1940. This included the need to attack the morale of the German people ‘when they can no longer expect an early victory.’ In addition to attacks on oil, and aluminium and component factories, there should be raids to cause ‘heavy material destruction in large towns and centres of industry’ as a demonstration ‘to the enemy of the power and severity of air bombardment and the hardships and dislocation that will result.’ These attacks were to include high explosives, incendiaries, delayed action bombs and ‘the occasional mine.’ Part of the rationale was to
impose pressure on the fire services. These instructions clearly mirror the experiences of London over the period and again echo the place of retaliatory action in the culture of the times (which had been present since the German Zeppelin raids of 1916). After an interlude, which was planned to be about four months, where the Directives focused on anti-submarine activities a ‘comprehensive review of the enemy’s present political, economic and military situation’, disclosed that the weakest points in his armour lie in the morale of the civilian population and in his inland transportation system. Although barely mentioned in the directive, the aim of the review was to see what could be done to assist Russia. The other important milestone in this directive was the inclusion of ‘Targets on water suitable for concentrated and continuous area attacks on moonless nights’ [emphasis in the original]; these targets were ‘congested industrial towns where the psychological effect will be the greatest’ and included Cologne, Dusseldorf, Duisburg and Duisburg-Ruhrort. The section on Duisburg, almost certainly inadvertent considering the emotive tones it would later carry, included the word ‘area.’

This period saw the Chiefs of Staff conclude that, after ‘meeting the needs of our own security,’ the heavy bomber would receive top priority in production in order to destroy the ‘foundations upon which the [German] war machine rests – the economy which sustains it, the morale which sustains it, the supplies which nourish it and the hopes of victory which inspire it.’ The Directorate of Bomber Operations worked up this plan and the CAS (Sir Charles Portal) submitted it to Churchill who was doubtful, to say the least. The Prime Minister was clearly concerned that the required resources, based on the extant woeful lack of accuracy, would not produce the effects that the Air Ministry predicted. The situation was compounded by depressingly high casualty figures among the aircrews that, if sustained, would prevent the force ever generating sufficient crews to man the expanded force. Accordingly, directives were issued emphasising the conservation of forces ‘in order to build a strong force to be available by the spring of next year’ [1942]. This recuperative lull, and the impending introduction of navigation aids such as Gee, enabled the Air Ministry to issue the Directive of 14 February 1942 (notably to Air Marshal Baldwin who was Acting C-in-C prior to the arrival of Harris) in which he was accordingly authorised to employ your effort without restriction’ [emphasis added]. The directive acknowledged that this renewal of the offensive ‘on a heavy scale’ would ‘enhearten [sic] and support the Russians.’ Furthermore, the directive of 9 July 1941 was modified because it had been decided that the ‘primary object’ of Bomber Command operations ‘should now be focused on the morale of the enemy civil population and in particular, of the industrial workers.’ It would be all too easy to take the critical words ‘without restriction’ out of context and imply that this meant the formal institution of terror bombing. Throughout the first three years of the war, the legality and morality of the strategic air offensive were inextricably interlinked with what
was technically possible. It is clear from Churchill’s frustration over the lack of urgency in carrying out reprisals included an element of moral argument. For much of the period, Britain fought without effective allies with whom a coalition strategy could have offered an alternative to bombing. In efforts to have some real effect on the German war machine, the march towards unrestricted area bombing was inevitable. The unthinkable option of coming to terms with Germany passed and the focus of those charged with the conduct of the war had to come up with strategy that offered a credible way in which to win. W.V. Herbert’s 1898 RUSI lecture had stressed the importance of winning ‘with all of the rest coming a long way after’ was arguably increasingly relevant as the war became ‘more total’. In many ways, it was easier for those charged with decision making if the movement (one would hardly call it progress) towards totality in warfare was gradual and the decisions could be taken incrementally rather than in a single step. This incremental process, and the central role played by Portal as C-in-C and then CAS, must be acknowledged. The Directive of 1942 was in place before Harris arrived as C-in-C. Although he had been involved in policy formulation when he was DCAS, this was earlier in the war and although he was subsequently an advocate of the Offensive, he was not its sole author or architect.

The Debate over Perceptions of the Campaign

As C-in-C, Harris was acutely aware of the dangers faced by his crews, and was not shy to admit that to their faces. But at the same time, Harris was aware of the serious potential of damage to morale if their sacrifice was ignored, or worse, that a public debate should challenge the morality of their actions. Any war machine runs the risk of being depicted as causing wanton death and destruction; this is an enduring fact of warfare. The problem for Bomber Command, and the Air Ministry, was all the more complex because the crews, who risked their lives daily, still lived in the local community and had to return there every morning. Accusations against them would have been hugely detrimental to their morale and that of their families. But Harris was keen for the importance of his Command’s work to reach a wider public. His post-war complaint was that the Air Ministry was ‘extraordinarily cautious’ in the way in which it dealt with even the more intelligent and reputable journalists. On the other hand, Churchill, Portal and the Air Staff were concerned that offensive could be portrayed as indiscriminate. Although Harris would almost certainly not have been bothered by the comparison, it is probable that his more strategically minded colleagues would have preferred not to have any comparisons between British and American professed operational techniques aired in public, particularly in the United States.

The problem was exacerbated by the repeated government statements confirming that ‘the policy of limiting objectives of Bomber Command to targets of military importance... and not been changed to the bombing of towns and wide areas in which military targets are situated.’
Parliament, in December 1943, Sinclair confirmed that the policy had not changed since he had previously answered a similar question in March 1943. When tackled over Berlin, Sinclair confirmed the military and economic significance of the capital, but again avoided the issue of the government having now ‘resorted to indiscriminate bombing, including residential areas.’ As Hastings has pointed out, a similar exchange took place between Sinclair and Lord Salisbury when again the Secretary of State failed to defend the C-in-C whose rhetoric over the heart of Berlin ‘ceasing to beat’ had provoked the correspondence.

Predictably, Harris took up the cudgels formally against the ‘dead hand of the Civil Service’ in attempting to ensure that the public understood what was being achieved by his people. The Permanent Under Secretary (PUS), Sir Arthur Street assured Harris that ‘no attempt has been made to conceal from the public the immense devastation that is being brought to the German industrial cities’, but he went on to point out that ‘in all official pronouncements’ the emphasis was on the ‘obvious truth, i.e., that the widespread devastation is not an end in itself but the inevitable accompaniment of an all-out attack on the enemy’s means and capacity to wage war.’ Street then went on to state that:

It is, in any event, desirable to present the bomber offensive in such a light as to provoke the minimum of public controversy and so far as possible to avoid conflict with religious and humanitarian opinion. Any public protest, whether reasonable or unreasonable, against the bomber offensive could not but hamper the Government in the execution of this policy and might affect the morale of the aircrews themselves. Biddle has described this as ‘semantic hair-splitting’ which ‘angered Harris’; presumably the lengthy delay before Street replied would have done little to help. Harris was not prepared to accept what was arguably a more reasoned and strategic outlook. His response provided both a blunt statement of the reality of the offensive and a clear insight into his own view of the total nature of the war.

It is surely obvious that children, invalids and old people who are economically unproductive but must nevertheless consume food and other necessaries are a handicap to the German war effort and it would therefore be sheer waste of effort to attack them.... The German economic system, which I am instructed by my directive to destroy, includes workers, houses, and public utilities, and it is therefore meaningless to claim that the wiping out of German cities is ‘not an end in itself....’

Harris then went on to explain the reality, that in the war as it was then being fought, ‘everything and everybody’ in the cities ‘which is a help to the German war effort’ came within the objectives which Bomber Command was seeking to destroy. Furthermore, he asked that anyone in the authorities who did not understand this should ‘at once be disabused of the illusion, which is not merely unfair to our crews now but will inevitably lead to deplorable controversies when the facts are fully and generally known.’ Harris further emphasised that

It is not enough to admit that devastation
is caused by our attacks, or to suggest that it is an incidental and rather regrettable concomitant of night bombing. It is in fact produced deliberately.\textsuperscript{185}

He went on to recommend that the Air Ministry request the Joint Intelligence Committee (JIC) to produce a report on German morale.\textsuperscript{186} The findings of this, and the more detailed report produced by the Air Ministry intelligence staff will be covered in the next section; meanwhile, it is interesting to note that with the exception of a JIC Report in October 1943, very little intelligence work had been done on the subject since at least before America entered the war.\textsuperscript{187}

It is clear from the correspondence that Harris understood that the Air Ministry was trying to ‘provoke the minimum of public controversy and so far as possible avoid conflict with religious and humanitarian opinion’, but did not accept the primacy of such an approach over the protection of the morale of his crews who may not have been expected to grasp the subtleties of the real strategic level. Probert, citing Longmate presumably with approval, has suggested that only Harris emerged from this debate with any real credit.\textsuperscript{188} But it could be argued that Harris was not able to grasp, or accept, the complexities and ambiguity that characterises leadership at the highest levels. Furthermore, although he professed that he understood the potential consequences of too open an admission of the totality of the war Bomber Command was fighting, Harris was clearly not willing to moderate his anger or exasperation. In his memoirs, he remained uncompromising and almost dismissive with language such as ‘the fact that our aircraft occasionally killed women and children is cast in my teeth I always produce this example of the blockade.’\textsuperscript{189} To Harris, it was evident that the war with Germany was total war, and he was unshakeable in this view and in the consequences that stemmed from it.\textsuperscript{190} In the context of Sinclair’s ‘hedging’, Probert has suggested that Harris ‘was being left, in effect, to carry the can at home and abroad.’\textsuperscript{191} It could therefore be argued that allowing Harris to remain in post was a politically shrewd decision by Sinclair and Portal, even though they may not have said as much.

The Sting in the Tail

On 26 January 1945, Churchill minuted his close friend Sir Archibald Sinclair (Secretary of State for Air):

\begin{quote}
I did not ask you last night about plans for harrying the German retreat from Breslau. On the contrary, I asked whether Berlin, and no doubt other large cities in East Germany, should not now be considered especially attractive targets. I am glad that this is ‘under consideration’. Pray report to me tomorrow what is going to be done.\textsuperscript{192}
\end{quote}

Sinclair dutifully replied the next day that, after attacks on oil production and other approved systems, the Air Staff had now arranged for effort to be directed against ‘Berlin, Dresden, Chemnitz and Leipzig or against other cities where severe bombing would not only destroy communication vital to the evacuation from the East but would also hamper the movement of troops from the West.’\textsuperscript{193}

Despite reservations from Harris as
to the utility of attacking Dresden, Bomber Command attacked on 13 February 1945 with the USAAF Eighth Air Force following up the next day.\textsuperscript{194} Even by the improved standards of 1945, the raids were extremely successful causing considerable damage and many casualties. What made Dresden different was the press release and interview given by Air Commodore C. M. Grierson at the Supreme Headquarters Allied Expeditionary Force in Paris.\textsuperscript{195} The ensuing Associated Press (AP) despatch stated that Allied Air Chiefs had made the ‘long awaited decision to adopt deliberate terror bombing of German population centres as a ruthless expedient to hastening Hitler’s doom.’\textsuperscript{196} This was widely published in America and was broadcast in Paris. Public opinion in the US had hitherto been fed a diet that emphasised the precision of the American bombing campaign. Concern was only partly alleviated by Marshall’s statement that it had been carried out at Russian request.\textsuperscript{197} The despatch gained a brief exposure in London prior to heavy censorship. The matter was subsequently raised in parliament on 6 March 1945 by Mr Richard Stokes MP.\textsuperscript{198} As he rose to speak in the House, Sinclair rose from his seat and pointedly left the Chamber. Stokes read out the AP despatch in full and then accused the government of hiding the true nature of the bombing campaign from the British public. Sinclair replied some hours later that the government was not wasting its time on purely terror tactics. Although criticism was relatively muted, the seeds had been sown for later outbursts of conscience.

At a more elevated level, the Prime Minister put pen to paper in what has been described variously as among the ‘least felicitous… of the long series of war-time minutes’ and ‘an astonishing minute.’\textsuperscript{199} He wrote:

\textit{It seems to me that the moment has come when the question of bombing German cities simply for the sake of increasing terror, though under other pretexts, should be reviewed. Otherwise we shall come into control of an utterly ruined land….The destruction of Dresden remains a serious query against the conduct of Allied bombing. I am of the opinion that military objectives must henceforth be strictly studied in our own interests rather than that of the enemy.}\textsuperscript{200}

Portal immediately instructed Bottomley to ask for Harris’s comments. His personal letter to the C-in-C is reproduced in full in Saward’s ‘\textit{Bomber} Harris’.\textsuperscript{201} Bottomley summarised the Prime Minister’s note, reiterated extant policy and invited the C-in-C to comment. Harris’s reply was prompt and predictably pungent. He pointed out in characteristically blunt terms that the suggestion that the Bomber offensive had been conducted for the ‘sake of increasing terror, though under other pretexts’ was an insult both to the Air Ministry policy and to the crews that had carried it out. Harris went on to highlight the misperceptions over Dresden that would be obvious to any psychiatrist – ‘it is connected to German bands and Dresden shepherdesses’. Rather, ‘Dresden was a mass of munition works, an intact government centre and a key transportation point to the East. It is now none of those things.’ He went on to discuss the policy underlying the Bomber offensive,
concluding with the warning that such scruples as the Prime Minister was considering would lengthen the war and increase the task facing the army both in Germany and against Japan.

Portal strongly backed the stance taken by his C-in-C and Churchill withdrew his minute. The revised version made no mention of Dresden. The attack, however, was something of a turning point in that the genie was now out of the bottle and the role and purpose of the offensive was subject to rather more debate – on both sides of the Atlantic. In the UK, this increased as it became increasingly obvious that the war was going to be won and that such destruction would require to be more rigorously justified. Arguably this saga was the starting point of what many saw as the belittlement of Bomber Command’s achievements leading to bitterness and acrimony among crews, groundcrews and commanders as the politicians were seen as belatedly scrabbling for the moral high ground.202

Concluding Comments

This paper has sought to place the ‘savage debate’ over legality and morality of the Strategic Air Offensive in some form of historical context rather than adopt the now popular emotive tone adopted by some modern philosophers. The track record of the lawyers, officials and military officers over the half century before area bombing shows that a number of attempts were made, even before air power was recognised as having the potential that it eventually achieved, to limit or regulate the bombardment of cities and civilians. There is clear evidence that this both reached the highest levels of the Air Ministry in the inter-war years and was acknowledged in the Geneva Disarmament process. As the Second World War approached, there was considerable American pressure on the belligerents not to remove the gloves. It was clearly understood within the Air Ministry that, although Germany had attacked cities in Poland and subsequently Rotterdam in an indiscriminate manner, the RAF would not be allowed to do so as it was contrary to Government policy. This did not change until Chamberlain was replaced by Churchill who favoured offensive actions in all its guises and was adamantly opposed to any political settlement with Germany. For many months thereafter, Bomber Command was the only means by which Britain could strike at Germany. Even when America entered the war after Pearl Harbor, it was many months before sufficient means were available to adopt a different strategy. Even then, any possible method could be considered reasonable to shorten the conflict and save lives (of whatever nation) as a result. The memories of flying over the devastation of the battle fields of the First World War remained clear in the minds of the Commanders and senior politicians and the carnage of bitterly fought land warfare was to be avoided.

The reality was that the road to area bombing was complex involving a range of factors, including technology, poor weather, aircrew loss rates, German defences and the need to demonstrate a second front to the Russians all contributing to the development of the policy. It is clear that German bombing of European cities and eventually British added
to the ‘justification’ for widening the scope of the attacks on Germany. Although the Directive of February 1942 was a watershed in terms of targeting policy it has to be noted that this was in place before Harris took Command. Admittedly, he was a staunch advocate of the Offensive, and had been part of the staffing process when DCAS; but he was not its sole architect. It is also clear that the senior figures in Whitehall at political, official and military levels, understood that there was an underlying debate to be had on the morality of the offensive they were extremely keen that it should be downplayed for much of the War. The unedifying scramble for the moral high ground after Dresden, and the subsequent snub of the Command, all suggest that these senior folk were well aware of the action for which they bore as much, if not more, responsibility than Harris.

By the end of the Second World War it appeared that little had changed from Herbert’s presentation at RUSI; even in the realms of *ius in bello*, the racial sub texts of rules only applying to civilised peers were evident in the German attitudes to Slavs and by (and against) the Japanese in the far-east and Pacific. And Herbert’s stress on the importance of winning ‘with all of the rest coming a long way after’ was arguably increasingly relevant as the war became ‘more total’. In many ways, it was easier for those charged with decision making if the movement (one would hardly call it progress) towards totality in warfare was gradual and the decisions could be taken incrementally rather than in a single step. The logic of the transition at the time was all the more reasonable because of the lack of alternatives, especially in 1942; by the unanimity of purpose within the senior leadership in the UK; by the agreement with the American allies from 1943 onwards; and by the evident results as the offensive continued.

In retrospect, there is a seeming inevitability about the move towards area bombing as part of the totality of the war against Germany. In the context of the scale of losses in the bombing of Japan (both conventionally, by fire bombing and the two nuclear detonations); in the holocaust; and on the eastern front between Russia and Germany the damage inflicted on Germany was an integral part of what it took to win. It also meshed with the culture of thinking on bombing that had grown from popular literature, through the experiences of 1916-18, by which London had to be defended – preferably by offensive action and that the British public (and its press) demanded retribution in kind. But this culture in Britain also allowed the politicians, officials and senior military officers to go through the motions of seeking either to abolish, or to regulate, warfare (and aerial bombardment in particular) in a way that seemed to have been futile in 1942 and arguably ever since. The reality was that there were no extant Laws of war that would make the bombing offensive legal or otherwise. To many, however, the honest endeavour of the inter-war years and the patient attention to detail, for whatever underlying reason, did more than enough to ensure that cause was seen as just and legitimate. The practicalities of having a war to win, by any available means and without restriction, was hardly a
policy that was going to withstand post-war scrutiny, especially when the erstwhile aggressors were likely to be tried for war crimes. But the scramble for the moral high ground did little to dignify what, for the vast majority, for the greatest bulk of the time was a just and legitimate offensive. That it was seen as such is evident from the words of a letter from Marshal of the Royal Air Force, Sir John Salmond to the Archbishop of Canterbury (Dr William Temple) who had expressed his regret to the press over the bombing of Lubeck and Rostock:

Surely the innate decency of the Briton and the principles of Freedom and Justice which all of the allies are united to maintain, are sufficient moral guarantee that they will be qualified to use ‘Victory to God’s Glory’, when the time comes. 203

Notes


On the injustices, the debates over memorials to ‘Bomber’ Harris and, indeed to Bomber Command continue to this day. Repercussions continue, not least in Canada where the remembrance of crews lost in the Command is marred by continuing accusations of war criminality: see David L. Bashow, No Prouder Place: Canadians and the Bomber Command Experience, 1939-1945 (St Catherines, Ontario: Vanwell, 2005) and interview with author October 2006 following Bashow’s Presentation to the Air Crew Association Metro Toronto Branch, 9 September 2006 (author’s collection). Carlo D’Este has described the debate as ‘savage’: see Warlord: A Life of Churchill at War, 1874-1945 (London: Allen Lane, 2009), p.732.

2 The concepts of military chivalry should not be overstated in this context, but it is especially noteworthy that specific rules had long existed about ‘open towns’ and siege warfare.


7 A. C. Grayling, Among the Dead Cities: Was the Allied Bombing of Civilians in WWII a Necessity or a Crime (London: Bloomsbury, 2006) and Paul Addison and Jeremy A. Crang (eds), Firestorm: The Bombing of Dresden 1945 (London: Pimlico, 2006). The literature on Dresden in particular is extensive, but these references provide a flavour of the debate.


The resurgence in Just War Theory was largely due to American philosophers’ frustration with the lack of logical explanations for their country’s involvement in Vietnam.


12 Ibid., p. 1024.

13 Ibid., p. 1025.

14 Ibid., p. 1026.

15 Ibid., p. 1027.

16 Ibid., p. 1032.

17 See, for example, Michael Howard, ‘Constraints on Warfare’, in Howard, Andreopoulos and Shulman (eds.), *The Laws of War*, op cit., p. 8.


19 Ibid., p.126.


22 Howard, *Restraints on War*, p.3.

23 Ibid.

24 This was obviously pre-Nuremberg Trials. See J. M. Spaight, *Air Power and War Rights*, (London: Longmans, 1924), p. 47. Spaight’s role within the Air Ministry and as an author, will described below; it is useful to note his citation, with approval, of the British Manual, *Land Warfare* as agreeing this point.

25 Howard, op cit., p.3, he cites the American atrocities at My Lai in 1969 as an example.


31 Ibid.

32 Ibid., pp.54-55 for the full document.


36 Roberts and Guelff, *Documents on
the Laws of War, p.78.
39 The author is grateful to Dr Christina Goulter for highlighting this issue, in addition to her other invaluable comments.
40 TNA PRO CAB 24/44 ‘Air Raids on Open Towns; Memorandum prepared in the Historical Section of the Committee of Imperial Defence in accordance with War Cabinet 358, Minute 9’, 7 March 1918. Followed by CAB 24/48 ‘The Legal Aspects of Bombardment from the Air’, 12 April 1918.
41 CAB 24/48, op cit.
42 Roberts and Guelff, Documents on the Laws of War, p.140
44 Roberts and Guelff, op cit., p.140
45 Ibid.
47 Roberts and Guelff, op cit., p.140.
48 Ibid., p.144.
49 Ibid., pp.144-145.
50 Ibid. p.140.
52 For example, we see repeated attempts by the Air Ministry, and the Admiralty to change those Rules though to 1939. See ADM 116/4155 Note form Air Plans to the Admiralty dated 17 August 1939.
53 J. M. Spaight, Air Power and War Rights, p.35.
57 Higham, ibid., p.230.
58 In 1927 when Spaight produced two legal briefs on the use of air power, he was an Assistant Secretary of which there only eight in the Ministry. This was a 2* level equivalent. The Air Force List April, 1927.
60 J. M. Spaight, Air Power and War Rights, op cit..
64 Higham, Military Intellectuals, p.179. The Trenchard memorandum is reproduced in Sir Charles Webster and Noble Frankland, The Strategic Air Offensive against Germany 1939-1945 (London: HMSO, 1961), vol. IV, p.73. Much of the language in the section on international law sounds as if drafted by Spaight.
65 ‘The War Object of an Air Force’ produced for COS 147 (69th Chiefs of Staff Meeting). AIR 9/8 Folio 1 Air Staff 17 May 1928.
67 AIR 8/141 and The Air Force List, October 1932.
69 AIR 8/139, Minute to CAS dated 5 May 1932.
70 An examination of the first two volumes side by side shows the mirror imaging of the page numbering with changes to the text confined in scope to the number and size of the paragraphs removed.
72 Parks, ‘Air War’, p.39, fn.150. He also points out that *Manual of Air Force Law* in both 1933 and 1939 had not included chapters relating to air warfare; p.39.
73 Spaight, *Air Power and War Rights*, ch. IX provides details over pp. 233-238 of targets, and dates that they were attacked, which would be forbidden should the new rules be adopted.
74 Ibid., p.217.
75 Ibid., pp.220-226.
76 Ibid., p.239.
77 Ibid., p.239.
78 Ibid., p.239.
79 Ibid., p.240.
80 Ibid., p.259.
81 Middlemas and Barnes, *Baldwin*, p.723. It should be noted (as it is by the authors, p.725) that this work was published before Cabinet Papers became available.
83 Ibid., Part V, pre-amble.
84 Middlemas and Barnes, *Baldwin*, p.723.
86 Ibid. Ironically, MacDonald’s attempt to set out figures at the Conference in relation to limitations in numbers set the Conference aghast, Ibid., p.63.
87 Emphasis in the original, ibid., p.50.
88 Figures quoted in Meilinger, ‘Clipping the Bomber’s Wings’, p.309. AIR 8/151, in the Disarmament series, contains an extract from Hansard dated 11 July 1923 in which Lord Linlithgow made this point in debate.
90 For a broader discussion on the early days in Geneva see Maj. Gen A. C. Temperley, *The Whispering Gallery of Europe* (London: Collins, 1938) where the author was the British Chief Military Adviser; see ch.VI for the work of the Preparatory Commission.
92 Meilinger, ‘Clipping the Bomber’s Wings’, p.313. This offensive/defensive divide also featured among the Chiefs with the Navy seeing bombers as offensive: see CAB24/230 C.P. 182(32) dated 31 May 1932. Both the Army and the Navy took every
opportunity to encourage the demise of the upstart Service.

93 CAB 24/227, C.P. 10(32), Disarmament Conference: Memorandum by the Secretary of State for Air on Policy in regard to the Limitation of Air Armaments (With Memorandum by the Chief of the Air Staff), 5 January 1932. See also, Montgomery Hyde, British Air Policy Between the Wars, p.277.

94 CAB 24/229, CID 1082-B, Annual Review for 1932 by the Chiefs of Staff Sub-Committee, 17 March 1932.

95 PRO 30/69/496, Suggested Lines of Policy at the Disarmament Conference, circulated by Simon on 19 March 1932.

96 Ibid., paras. 3, 4 and 5 respectively.

97 Ibid., para.5.

98 CAB 23/71, Cabinet Conclusions 26(32), 4 May 1932, p.3.

99 Ibid.

100 Ibid., p.4.

101 Ibid.

102 Ibid., p.5.

103 Ibid.

104 This was reported by Cadogan (a Counsellor in the Foreign Office, and subsequently Permanent Secretary) to his counterparts in Geneva; a copy of the letter was then slipped ‘confidentially’ to CAS by Wg. Cdr Hodsoll (Deputy Secretary to the CID) on 18 June 1932; AIR 8/151. For a broader discussion see, Montgomery Hyde, British Air Policy Between the Wars, p.281with the implication that MacDonald was lukewarm at best to the proposal.

105 CAB 24/230, C.P. 181(32) dated 31 May and C.P. 183(32) dated 3 June 1932. See also AIR 8/151 for the staff papers.

106 See CAB 21/379, Ministerial Policy Committee Conclusions dated 7 March 1933 for a very clear acknowledgment.

107 AIR 8/140, CAS to SofS (in Geneva) dated 8 July 1932.

108 Ibid.

109 Ibid. See also AIR 8/140 Minute from Gp. Capt. Portal to CAS dated 1 September 1932 emphasising this point. The Sub-Committee reported at C.P. 152(32) and the Cabinet endorsed the Conclusions at CAB 23/71, Cabinet Conclusions 27 (32) dated 11 May 1932.

110 PRO 30/69/496, Suggested Lines of Policy at the Disarmament Conference, para.5. See also CAB 24/228, C.P. 82 (32), Air Disarmament and the Abolition of Bombing Aircraft, Part II, Memorandum date 17 February 1932.

111 See CAB 24/232, C.P. 272(32), Note by the SofS for Air on Air Disarmament Policy, dated 30 July 1932.

112 AIR 8/151 with minutes to CAS and DCAS forwarding notes by Spaight (who was the Director of Accounts for the Ministry but still an authority on International Law ) dated 18 April and 12 May 1932.

113 AIR 8/151: Letter from CAS to Sir John Simon dated 16 February 1932.


115 AIR 8/151, Cadogan to Howard Smith letter dated 15June 1932.

116 Montgomery Hyde, British Air Policy Between the Wars, pp.283-287 and Temperley, The Whispering Gallery of Europe, pp.215 and 233


120 The Prime Minister, ibid., c936

121 Ibid.
Ibid. These were based on the Draft Hague Rules.

123 AIR 20/22, Minute J. B. Abraham to C-in-C Bomber Command dated 15 September 1938. See also AIR 41/5, Section D, ‘Air Ministry Instructions of 15 September 1938’.

124 Ibid.

125 Ibid.

126 AIR 41/5, Section D, ‘Admiralty Proposals 1939’.

127 Ibid. Group Captain J. C. Slessor forwarded a copy of Bomber Command Operation Instruction No.2 to Malkin to inform the meeting. ADM 116/4155, Minute dated 9 August 1939.

128 AIR 41/5, Section D, ‘Interdepartmental Committee. August 1939’.

129 AIR 41/5, Section D, ‘Proposed Permissible Objectives’.

130 AIR 41/5, Section D, ‘Air Council Instructions of 22 August 1939’.

131 Ibid.

132 Ibid.

133 Ibid.

134 Ibid.


136 Ibid.

137 Beyond the works of Spaight, see Philip Landon, ‘Aerial Bombardment & International Law’, JRULSI, 77, 1932, p.44.


139 Webster and Frankland, Strategic Air Offensive against Germany, Vol.I, p.129. They quote this for the first two years of the war.

140 AIR 41/5, Section D, ‘Our Long-term Policy’.

141 AIR 14/194, Paper by D of Plans dated 7 September 1939, ‘Note on the Question of Relaxing the Bombardment Instructions and Initiating Extended Air Attack’.

142 Webster and Frankland, Strategic Air Offensive against Germany, Vol.I, p.135

143 Ibid.

144 AIR 2/4474, Telegram CAS to Barratt dated 16 October 1939, encl 14A. Dean, who was in the civil directorate S6 at the time agreed that bombing in the west was not carried out because it suited Britain, France and Germany; Dean, Royal Air Force in Two World Wars, p.264.

145 Directive (DCAS – Douglas) to Portal dated 4 June 1940; Webster and Frankland, Strategic Air Offensive against Germany, Vol.IV, App.8 (xi). AIR 14/77 in which ‘in no circumstances should night bombing degenerate into mere indiscriminate action, which is contrary to the policy of His Majesty’s Government’.


147 Self, Chamberlain, p.237.


149 AIR 41/5, Section D, ‘Bombing Instructions of 4 June 1940.


151 AIR 41/5, Section D, ‘Berlin’.

152 Ibid.

153 AIR 14/194, Minute SASO to Groups dated 14 June 1940.

154 AIR 41/5, Section D, ‘Directive of 30th October 1940’. See also Webster and Frankland, Strategic Air Offensive against Germany, Vol. IV, p.128, para.3.

155 Ibid. p.129, para, 3(b).

156 Ibid. p.129, para.4 (ii).

157 Ibid.

158 Webster and Frankland, Strategic Air Offensive against Germany, Vol. IV,
p.133 for the former Directive dated 9 March 1941 and p.135 for the latter dated 9 July 1941. See also Vol. II, p.167 et seq for the discussion on the move to area bombing.

159 AIR 41/5, Section D, ‘Help for Russia’.


161 Ibid.


163 Ibid., p.182.

164 Ibid., pp.183-5.

165 Ibid., pp.185-7.

166 Webster and Frankland, Strategic Air Offensive against Germany, Vol. IV, p.142, Directive dated 13 November 1941.


168 Ibid., p.144, para.4(ii).

169 Ibid., p.144, para.5.

170 Churchill, op. cit.


172 The world of experimental psychology emphasises this with the work of Stanley Milgram in particular. In his now infamous experiment (and now considered highly unethical) Milgram demonstrated that under the guidance and authority of a scientist, the subject would eventually apply lethal electric shocks to the victim (a stooge) but the incremental nature made the whole possible. The same is said to apply to the persecution of the Jews in Nazi Germany. See Stanley Milgram, Obedience to Authority: An Experimental View (London: Tavistock, 1974)


174 Harris, Bomber Offensive, p.156.

175 Ibid.

176 See Biddle, ‘Bombing by the Square Yard’, p.641.

177 HC Deb 1 December 1943, vol.395, cc. 337-9; Question put to Sinclair by Mr Richard Stokes (Labour, Ipswich).

178 Ibid.

179 Hastings, Bomber Command, pp.172-3.

180 Harris, Bomber Offensive, p.164.

Harris was less that charitable about many of his civilian ‘colleagues’ one of whom he described as being ‘worth at least a division to the enemy on every day of the war’. Harris’s original complaint is at AIR 14/843, Letter Harris to Street dated 25 October 1943.

181 AIR 14/843, Letter Street to Harris dated 15 December 1943.

182 Ibid.


184 AIR 14/843, Letter Harris to Sweet dated 23 December 1943.

185 Ibid

186 Ibid., para.6.

187 See AIR 20/8143 for the absence of reporting. But see below for the JC Report.

188 Probert, Bomber Harris, p.194. See also Norman Longmate, The Bombers (London: Hutchinson, 1983), ch.26. Longmate described Harris as having none of Street’s ‘Jesuitical niceties’; op.cit., p.369

190 Harris, Bomber Offensive, p.177.

190 For a wider debate of the role of air power in total war see Buckley, Air Power in the Age of Total War.

191 Probert, Bomber Harris, p.193.

192 Minute 26 January 1945. Ian Hunter (ed), Winston & Archie: The Collected Correspondence of Winston Churchill and Archibald Sinclair 1915-
See also Part 1 of this Collection for their correspondence during the First World War including the time when Sinclair was second in command to Churchill in the 6th Battalion, Royal Scots Fusiliers.


200 Prime Minister to General Ismay (for Chiefs of Staff Committee) and the Chief of the Air Staff; 28 March 1945.

201 Saward, op cit, p.383.
“The Qur’an and War: Observations on Islamic Just War”

By Dr Joel Hayward

Given the strategic importance of the Middle East, the geographical location of our major wars throughout the last two decades as well as the cultural origin of some of the terrorist groups that have hassled the West during that time, it is surprising that very few non-Muslim strategists and military personnel have included the Qur’an in their reading. This article analyses the Qur’an and articulates its mandatory codes of conduct in order to determine what that text actually requires or permits Muslims to do vis-à-vis the use of military force. It concludes that the Qur’an is unambiguous: Muslims are prohibited from aggressive violence and are compelled, if warfare should become unavoidable, always to act within a code of ethical behaviour that is closely akin to, and compatible with, the western warrior code embedded within Just War. This article is intended to be useful to western military personnel — sufficient to dispel any misperceptions that the Qur’an advocates the punishment, subjugation or even killing of “infidels” as well as to reveal its key concepts governing justice during wartime.
Introduction

I have been a professional military educator since 1996 and throughout most of those fourteen years I have taught the ethics of war — almost always through the framework of western Just War concepts — to military personnel from all three services and at various levels from officer cadets to senior officers. Particularly since the declaration of the so-called War on Terror in 2001, I have noticed an increasing concern among military students at all levels that, while “we” adhere to Just War tenets, other states and peoples, particularly Muslims in general and Arabs in particular, have no comparable philosophical framework for guiding ethical behaviour during international disputes and during warfare itself.

Having so far overseen the education of approximately 3,000 Royal Air Force officer cadets at the Royal Air Force College, and having taught Just War on almost every commissioning course in which they have studied since 2005, I have been struck by what I perceive to be the consensus opinion of students: that although we westerners have a code of war based on restraint, chivalry and respect for civilians, the faith of Islam — from which “radical Islamists” gain their inspiration and permission, if not guidance — is more militant, aggressive and tolerant of violence. According to this view, Islam is indeed the religion of the sword.

My purpose in writing this article is therefore to analyse the holy text which underpins Islam and articulates its mandatory codes of conduct in order to determine what that text, the Qur’an, actually requires or permits Muslims to do in terms of military violence. It is my conclusion (and that of every authoritative Islamic scholar) that the Qur’an is unambiguous: Muslims are prohibited from aggressive violence and are compelled, should war prove unavoidable, always to act within a code of ethical behaviour that is closely akin to, and compatible with, the western warrior code embedded within Just War.

This article is intended to be useful — sufficient to dispel any assumptions that the Qur’an advocates the punishment, subjugation or even killing of “infidels” as well as to reveal its key concepts governing justice during wartime — but it is not designed to be exhaustive. Nor is it designed to trace the complex 1400-year history of Islamic faithfulness to the Qur’anic teachings. Its endnotes contain terrific books and articles for readers interested in that subject.1 Yet the article will hopefully help to enrich the understanding of the servicemen and women who serve in Islamic lands or see the current conflict as somehow being related to that faith’s approach to war.

The Book with 1600 Million Readers

Although Muslims constitute one-quarter of the world’s population, people do not tend to read the holy scriptures of other faiths so it is not surprising that very few non-Muslims have taken time to read the Qur’an.2 Yet, given the strategic importance of the Middle East, the geographical location of our major wars throughout the last two decades as well as the cultural origin of some of the terrorist groups that have most frightened or angered the West during that time, it is surprising
that very few non-Muslim strategists and military personnel have taken time to read the Qur’an alongside doctrine publications and works of military philosophy. The Qur’an is certainly shorter than Clausewitz’s magisterial Vom Kriege (On War) and far easier to understand.

The Qur’an is a relatively short book of approximately 77,000 words, which makes it about the size of most thrillers or romance novels and roughly half the length of the New Testament or one-quarter the length of the Old. It is neither deeply complex philosophically nor written as inaccessible poetry or mystical and esoteric vagueness. The Qur’an was reportedly revealed by the angel Gabriel to Muhammad, a Meccan merchant in what is now Saudi Arabia, through a series of revelations from Allāh (Arabic for God), over a period of twenty-three years beginning in the year 610. Muhammad’s companions memorised and wrote down the individual revelations almost straight away and compiled them into the Qur’an’s final Arabic form very soon after his death in 632. The Qur’an is therefore held by Muslims to be the very words of Allāh, recorded precisely as originally revealed through Muhammad. This explains why most of the world’s 1.6 billion Muslims endeavour to learn at least the basics of Qur’anic Arabic so that they can read and more importantly hear Allāh’s literal words as originally revealed and why they consider all translations into other languages to be decidedly inferior.

Even a cursory reading of the Qur’an will draw the reader’s eyes to hundreds of scriptures extolling tolerance, conciliation, inclusiveness and peace, but also to a few scriptures that seem to be more aggressive than, for example, Christians are used to reading in the words of Christ and his followers as expressed in the New Testament. Critics of the Qur’an who advance what I consider to be an unsustainable argument that Islam is the world’s most warlike major faith — among whom the American scholar Robert Spencer is both the most prolific and influential — routinely highlight Qur’anic passages to support their argument that Islam has a tendency towards aggressive war, not inclusive peace.

These writers tend to focus their attention on a few passages within the Qur’an which seem to suggest that Allāh encourages Muslims to subjugate non-Muslims, and even to take their lives if they refuse to yield. The critics especially like to quote Surah (Chapter) 9, Ayah (Verse) 5, which has become known as the “verse of the sword” (Ayat al-Sayf). This verse explicitly enjoins Muslims to kill “pagans wherever ye find them, and seize them, beleaguer them, and lie in wait for them in every stratagem (of war).” You could not imagine gentle Buddha or the peaceful, cheek-turning Jesus ever saying such things, the critics assert, brushing off some of Jesus’ seemingly incongruous statements, such as Matthew 10:34 — “Do not think I come to bring peace on earth. I did not come to bring peace, but a sword” — as allegorical and metaphorical.

When they read the Qur’an, the opponents of its message tend not to place adequate importance on the obvious difference between Jesus and Muhammad. Jesus was the spiritual
leader of a small and intimate group of followers at a time of relative peace throughout the land. He suffered death, according to the Christian scriptures, but his execution by the Rome-governed state came after a short burst of state anger that actually followed several years of him being able to preach without severe opposition and no known violence. By contrast, Muhammad (in some ways like Moses) found himself not only the spiritual but also the political and legislative leader of a massive community that wanted to be moderate, just and inclusive but suffered organised warfare from other political entities which were committed to its destruction. His responsibilities (including the governance, sustenance and protection of tens of thousands of children, men and women) were very different.

The scholars and pundits who dislike the fact that Muhammad had to fight his way to peace and who consider his religion to be inherently martial often add to their condemnation of Surah 9:5 with equally strong attacks on Surah 9:29. This verse directs Muslims to “fight those who believe not in Allah” and the Day of Judgment, who do not comply with Muslim laws, as well as those Jews and Christians who reject the religion of Islam and will not willingly pay a state tax after their submission. Many critics assert that this verse directs Muslims to wage war against any and all disbelievers anywhere who refuse to embrace Islam or at least to submit to Islamic rule.

The critics also place negative focus on Surah 2:190-194, which states:

190. *Fight in the cause of Allāh those who fight you, but do not transgress limits: for Allāh loveth not transgressors.*

191. *And slay them wherever ye catch them, and turn them out from where they have turned you out; for tumult and oppression are worse than slaughter; but fight them not at the Sacred Mosque [Al-Masjid Al-Harām, the sanctuary at Mecca], unless they (first) fight you there; but if they fight you, slay them. Such is the reward of those who suppress faith.*

192. *But if they cease, then Allāh is Oft-forgiving, Most Merciful.*

193. *And fight them on until there is no more tumult or oppression, and there prevail justice and faith in Allāh; but if they cease, let there be no hostility except to those who practise oppression.*

Before this article offers an explanation of the meaning of these ostensibly severe verses and presents other verses in order to give a balanced view of the Qur’anic view of war, it is worth observing that even among the scriptures that form the bedrock and bulk of the Judeo-Christian tradition — the Old Testament — are verses that explicitly advocate murderous large-scale violence incompatible with any codes of warfare that Jews and Christians would nowadays condone. When Joshua led the Israelites into the Promised Land and promptly laid siege to Jericho, which was the first walled city they encountered west of the Jordan River, “they destroyed with the sword
every living thing in it — men and women, young and old, cattle, sheep and donkeys.”12 The lack of what we would today call discrimination between combatants and non-combatants accorded with God’s earlier commandment that, in areas which God had set aside for their occupation, the Israelites were to ensure that, “without mercy,” they did not leave alive “anything that breathed”.13

The ancient world was certainly brutal at times, with military excesses sometimes involving deliberate widespread violence against whole civilian communities. “It is a wonderful sight,” Roman commander Scipio Aemilianus Africanus gushed in 146 B.C. as he watched his forces raise the enemy city of Carthage to the ground following his order that no trace of it should remain. “Yet I feel a terror and dread lest someone should one day give the same order about my own native city.”14

No-one can doubt that humanity has since made tremendous progress in the way it conceives the purpose and nature of warfare and the role and treatment of non-combatants. Yet we would be wrong to believe that the “Carthaginian approach” has disappeared entirely. The Holocaust of the Jews in the Second World War, one of history’s vilest crimes, involved the organised murder of millions of Jews by Germans and others who considered themselves Christians or at least members of the Christian value system. Other crimes perpetrated by Christians during recent wars have included the (Orthodox Christian) Bosnian Serb massacre of 8,000 Bosnian Muslim men and boys in and around the town of Srebrenica in July 1995.

It is my assessment of historical evidence that Christianity is a faith of peace that cannot reasonably be considered blameworthy in and of itself for the Crusades, the Holocaust, the Srebrenica massacre or the Timothy McVeigh terrorist attack in Oklahoma City in 1995, even though Christians committed those horrendous acts and many others. It is also my judgment that Islam is equally a faith of peace that cannot fairly be seen as blameworthy in and of itself for the Iran-Iraq War, Saddam Hussein’s invasion of Kuwait or the Al-Qaeda attacks on America in 2001, even though Muslims committed those disgraceful deeds. Certainly Islam’s framing scriptures, the Qur’an, contains no verses which are more explicitly warlike than those cited above and, in any event, those verses have not provided major Islamic movements, as opposed to impassioned minority splinter groups, with a mandate to wage aggressive war or to inflict disproportionate or indiscriminate brutality.

**Abrogation?**

While Muslims hold the Qur’an to be Allāh’s literal, definitive and final revelation to humankind, they recognise that it is not intended to be read as a systematic legal or moral treatise. They understand it to be a discursive commentary on the stage-by-stage actions and experiences of the prophet Muhammad, his ever-increasing number of followers and his steadily decreasing number of opponents over the twenty-three year
period which took him from his first revelation to his political hegemony in Arabia. Consequently, doctrines or concepts within the Qur’an emerged or developed in stages throughout that period, with some early passages on inheritance, alcohol, law, social arrangements and so on being superseded by later passages, a phenomenon that the Qur’an itself describes in Surah 2:106, which reveals that when Allâh developed a concept beyond its first revelation and he therefore wanted to supersede the original verses, he would replace them with “better” ones.

This pattern of conceptual modification or development does not mean that Muslims see the Qur’an as purely contextual, with all its scriptures being relevant only to the time and place of the individual revelations. The Qur’an itself states in several Surah that Allâh’s words constitute a universally applicable message sent down for “all of mankind” and that it was “a reminder” (with both “glad tidings and warnings”) to “all” of humanity. With this in mind, Muslims believe that to ignore scriptures on the basis of a that-was-then-this-is-now reading would be sinful. They likewise believe that to quote or draw inspiration or guidance from verses in isolation, without seeing how they form parts of consistent concepts which only emerge when the entire book is studied, would be unhelpful and self-serving. They also reason that, while their holy book was not revealed with the intention of being a self-contained and systematic ethical treatise, it serves eminently well as the source from which a universally applicable ethical system can and should be developed.

Opponents of Islam or (at least of Islam’s supposed teachings on war) have routinely argued that, in the early years of his mission while still in his hometown of Mecca, Muhammad strongly advocated peaceful co-existence with peoples of other faiths, particularly Jews and Christians. Despite mounting resistance and persecution, some of it violent and all of it humiliating, Muhammad advocated an almost Gandhian policy of prayerful and dignified non-resistance. Then, after he and his followers fled persecution in 622 by escaping to Medina, where they had more chance of establishing a sizeable and more influential religious community, Muhammad became increasing bitter at his intransigent foes in Mecca and ordered warfare against them. Finally (the critics claim), following the surprisingly peaceful Islamic occupation of Mecca in 630, Muhammad glumly realised that certain Jews and others would not accept his prophetic leadership or embrace Islamic monotheism, so he then initiated an aggressive war against all disbelievers. Critics furthermore claim that, because Muhammad did not clarify his position before he died two years later, in 632, after Allâh’s revelation to mankind was complete, the verses encouraging the martial suppression of disbelief (that is, of the disbelievers) are still in force today. These supposedly include the so-called “verse of the sword” of Surah 9:5 (and 29), quoted above and revealed to Muhammad in 631. As scholar David Bukay wrote:

Coming at or near the very end of
Muhammad’s life … [Surah 9] trumps earlier revelations. Because this chapter contains violent passages, it abrogates previous peaceful content.²⁰

The critics of Islam who hold that view insist that these warlike verses abrogate (cancel out) the scores of conciliatory and non-confrontational earlier verses which had extolled spiritual resistance (prayer and outreach) but physical non-resistance. They note that Osama bin Laden and other leading “radical Islamists” — who also believe that the later Qur’anic verses on war have cancelled out the earlier peaceful and inclusive verses — have justified their vile terror attacks on America and other states by quoting from the “verse of the sword” and the other reportedly aggressive scriptures mentioned above. Bin Laden certainly did draw upon the verse of the sword and other seemingly militant Qur’anic scriptures in his August 1996 “Declaration of War against the Americans occupying the Land of the Two Holy Places”²¹ as well as in his February 1998 fatwa.²² The first of these wretched fatāwā instructed Muslims to kill Americans until they withdrew from their occupation of Saudi Arabia, and the second more broadly instructed them to kill Americans (both civilians and military personnel) and their allies, especially the Israelis, for their suppression of Islam and their exploitation of Islamic resources in various parts of the world.

Of course, the obviously partisan bin Laden is not a cleric, a religious scholar or a historian of early Islam. He is an impassioned, violent and murderous extremist without judgement or moderation. He is not representative of Islamic belief or behaviour. His assertions that the verse of the sword and other martial Qur’anic verses are still in place and universally applicable therefore holds no more weight of authority than arguments to that effect made by Spencer, Bukay and their Islam-mistrusting colleagues. Certainly most Islamic authorities on the Qur’an and Muhammad today, as opposed to scholars from, say, the more ambiguous medieval period, are firm in their judgement that the most warlike verses in the Qur’an, even those revealed very late in Muhammad’s mission, do not cancel out the overwhelming number of verses that extol tolerance, reconciliation, inclusiveness and peace.²³ For example, according to British scholar Dr Zakaria Bashier (author of many books on early Islam including a thorough analysis of war), all the beautiful verses throughout the Qur’an which instruct Muslims to be peaceful, tolerant and non-aggressive are: Muhkam verses, i.e. definite, not allegorical. They are not known to have been abrogated, so they naturally hold. No reason exists at all to think that they have been overruled.²⁴

Bashier adds that even the contextual information revealed within the Qur’an itself will lead readers to the inescapable conclusion that the verse of the sword related only to a particular time, place and set of circumstances, and that, in any event, claims of it superseding the established policy of tolerance are “not borne out by the facts of history.”²⁵ Prolific British scholar Louay Fatoohi agrees, arguing that an “overwhelming number” of Muslim
surers reject the abrogation thesis regarding war. Fatoohi highlights the fact that throughout history the Islamic world has never acted in accordance with this extreme view, that Muslims have co-existed very well with other faith communities and that the 1600 million peaceable Muslims in the world today clearly do not accept the view otherwise, if the did, they would be at war as we speak. 

Muhammad Abu Zahra, an important and influential Egyptian intellectual and expert on Islamic law, summed up the mainstream Islamic view by rejecting any abrogation thesis pertaining to conflict and stating that “War is not justified ... to impose Islam as a religion on unbelievers or to support a particular social regime. The prophet Muhammad fought only to repulse aggression.”

Explaining the Verse of the Sword

It is quite true that, taken in isolation, Surah 9:5 (the verse of the sword) seems an unusually violent pronouncement for a prophet who had for twenty years preached tolerance, peace and reconciliation. Yet it is equally true that, when read in the context of the verses above and below Surah 9:5, and when the circumstances of its pronouncement by Muhammad are considered, it is not difficult for readers without preconceptions and bias to understand it more fully. Here is the verse again:

**But when the forbidden months are past, then fight and slay the pagans wherever ye find them, and seize them, beleaguer them, and lie in wait for them in every stratagem (of war).**

The fact that the verse actually starts with the Arabic conjunction “wa,” translated above as “but,” indicates that its line of logic flows from the verse or verses above it. Indeed, the preceding four verses explain the context.

Ayah 1 gives the historical context as a violation of the Treaty of Hudaybiyyah, signed in 628 by the State of Medina and the Quraysh tribe of Mecca. In short, this was a peace treaty between Muhammad and his followers and those Meccans who had spent a decade trying to destroy them. Two years after it was signed the Banū Bakr tribe, which had allied with the Quraysh, attacked the Banū Khuza’a tribe, which had joined the side of the Muslims. Muhammed considered the Banū Bakr attack a treaty violation, arguing that an attack on an ally constituted an attack on his own community. Then, following his extremely peaceful seizure of Mecca and his purification of its holy site (he destroyed no fewer than 360 idols in the Ka’aba), the Qur’anic revelation contained a very stern warning. (Other sources reveal that Muhammad then explained it publicly from the steps of the Ka’aba and sent out deputies to the regions around Mecca to destroy pagan shrines and idols and utter the warnings to local communities.) The scriptural warning was clear: anyone wanting to undertake polytheistic pilgrimages to Mecca (or immoral rituals within it, such as walking naked around the Ka’aba) in accordance with existing agreements with the Quraysh tribe or with Muhammad’s own community should understand that henceforth they would not be permitted to do so. No polytheism (worship of more than one god) and
idolatry (worship of any man or object instead of the one god) would ever again be tolerated within Islam’s holy city. From that time on it would be a city devoted to Allah alone.\textsuperscript{31}

Ayat 2 and 3 were revealed through Muhammad to give polytheists or idolaters living in Mecca and its environs as well as any polytheistic or idolatrous pilgrims in transit along Muslim-controlled trade and pilgrimage routes a clear warning that they should desist or leave. The scriptures generously included a period of amnesty that would last until the end of the current pilgrimage season. Thus, Arab polytheists and idolaters would gain a four-month period of grace. Ayah 4 makes clear that during that period of amnesty, polytheists or idolaters were to be left untouched so that Muslims would not themselves become promise-breakers. ("So fulfil your engagements with them to the end of the term; for Allah loves the righteous.") After clarifying that the threatened violence would apply only to those who had ignored the warnings and continued to practice polytheism or idolatry in and around the holy city and its sanctuary, and were still foolish enough not to have left after four months, Ayah 5 — the sword verse — clearly warned them that there would be a violent military purging or purification in which they seriously risked being killed.

Although this is sometimes omitted by critics of the verse of the sword, the verse actually has a secondary clause which, after the direction to root out and kill anyone who had ignored the clear and solemn warnings and continued their polytheism or idolatry, enjoined Muslims to remember that they must be merciful ("to open the way") to those who repented and accepted their penitent obligations in terms of Islam. Moreover, the verse of the sword is immediately followed by an unusually charitable one — again ordinarily left out of Islam-critical treatments — in which any of the enemy who asked for asylum during any coming violence were not only to be excluded from that violence, but were to be escorted to a place of safety.\textsuperscript{32}

The rest of Surah 9 contains more explanation for the Muslims as to why they would now need to fight, and fiercely, anyone who broke their oaths or violated the sanctity of holy places, despite earlier hopes for peace according to the terms of the Treaty of Hudaybiyah. The controversial Ayah 29, which talks of killing polytheists and idolaters, actually comes right after Ayah 28, which speaks specifically about preventing them from performing religious rituals or pilgrimages in or around the newly purified sanctuary in Mecca. Ayah 29 thus also refers to the cleansing of Mecca and its environs as well as to the need to secure the borders of the Arabian Peninsula from greater external powers which might smother the Islamic \textit{ummah} (community) in its infancy. The rest of Surah 9 also apparently contains scriptures relating to the later campaign against Tabûk, when some groups which had treaty obligations with Muhammad broke their promises and refused to join or sponsor the campaign. It is worth noting that, in this context also, Muhammad chose to forgive and impose a financial, rather than physical, penalty upon those who genuinely apologised.\textsuperscript{33}
It is clear, therefore, that the verse of the sword was a context-specific verse relating to the cleansing and purification of Mecca and its environs of all Arab polytheism and idolatry so that the sanctuary in particular, with the Ka’aba at its centre, would never again be rendered unclean by the paganism of those locals and pilgrims who had long been worshipping idols (reportedly hundreds of them) there. It was proclaimed publicly as a warning, followed by a period of grace which allowed the wrong-doers to desist or leave the region, and qualified by humane caveats that allowed for forgiveness, mercy and protection. It is thus not as bloodthirsty as Robert Spencer and his colleagues portray it. Indeed, it is so context-specific that, even if it WERE still in force — and I share the assessment that it has not abrogated the scriptures encouraging peace, tolerance and reconciliation — it would only nowadays have any relevance and applicability if polytheists and idolaters ever tried to undertake and re-establish pagan practices in the Saudi Arabian cities devoted only to Allah: Mecca and Medina. In other words, in today’s world it is not relevant or applicable.

Critics apparently fail to grasp the specific nature of the context — the purification of Mecca from polytheistic and idolatrous pilgrimages and rituals — and even misquote the famous medieval Islamic scholar Isma‘il bin ‘Amr bin Kathir al Dimashqi, known popularly as Ibn Kathir. Spencer claims that Ibn Kathir understood the verse of the sword to abrogate all peaceful verses ever previously uttered by the prophet. Ibn Kathir said no such thing. He quoted an earlier authority, Ad-Dahhāk bin Muzāhim, who only stated that the verse of the sword cancelled out every treaty which had granted pilgrimage rights to Arab pagans to travel along Islamic routes, enter Mecca and perform unpalatable rituals there. Because this earlier source referred to the verse of the sword “abrogating” something, Spencer mistakenly extrapolates this to claim, baselessly, that this one single verse cancelled out all existing inter-faith practices and arrangements and forever negatively changed attitudes to non-Muslims in general.

In case any readers are not convinced, there is another verse in the Qur’an — also from the later period of Muhammad’s life — which (using words virtually identical to the verse of the sword) also exhorted Muslims to “seize and slay” wrongdoers “wherever ye find them”. Yet this verse, Surah 4:89, is surrounded by so many other explanatory and qualifying verses that its superficially violent meaning is immediately moderated by its context of tolerance and understanding. First, it threatened violence in self-defence only against those people or groups who violated pacts of peace with the Muslims and attacked them, or those former Muslims (“renegades”) who had rejoined the forces of oppression and now fought aggressively against the Muslims. Secondly, it stated that, if those aggressors left the Muslims alone and free to practice their faith, and if they did not attack them, but offered them peaceful co-existence, then Allāh would not allow Muslims to harm them in any way (“Allāh hath opened no way for you to war against them”). The verse went even further. It not only offered peaceful
co-existence to those who formally made peace with the Muslims, but also to anyone, even backslidden Muslims, who merely chose to stay neutral; that is, who did not take either side in the tense relations between the Muslims on the one hand and the Quraysh and their allies on the other.  

Self-defence

It is worth remembering that, for the first fourteen years of his public life (from 610 to 624), Muhammad practiced and proclaimed a policy of peaceful non-resistance to the intensifying humiliation, cruelty and violence that the Quraysh, the dominant tribe of Mecca, attempted to inflict upon him and his fellow Muslims. Throughout this period he strenuously resisted “growing pressure from within the Muslim ranks to respond in kind” and insisted “on the virtues of patience and steadfastness in the face of their opponents’ attacks.” These were:

38. Verily Allāh will defend (from ill) those who believe: verily, Allāh loveth not any that is a traitor to faith, or shows ingratitude.

39. To those against whom war is made, permission is given (to fight), because they are wronged — and verily, Allāh is Most Powerful for their aid.

40. (They are) those who have been expelled from their homes in defiance of right (for no cause) except that they say, “Our Lord is Allāh.”

These verses continue by pointing out that, had Allāh not previously used some people elsewhere to defend themselves from the aggression and persecution of others, there would surely have been the destruction of “monasteries, churches, synagogues and mosques, in which the name of Allāh is commemorated in abundant measure.” The verses add that Allāh will surely aid those who aid him, and that he is truly mighty and invincible.

The references to defending the faithful from harm in Ayah 38, to those on the receiving end of violence in Ayah 39 and those who have been driven from their homes in Ayah 40 are all related to the context of the Meccan and Medinan events described in the previous paragraphs.
homes in Ayah 40 reveal very clearly that Allah’s permission to undertake armed combat was not for offensive war, but self-defence and self-preservation when attacked or oppressed. Interestingly, it even extols the defence of houses of worship, including the churches of Christians and the synagogues of Jews.

This permission for self-defensive warfighting (the Arabic word is qital, or combat) corresponds precisely with the first Qur’anic passage on war that one reads when one starts from the front cover: Surah 2:190, which, as quoted above, states: “Fight in the cause of Allah those who fight you, but do not transgress limits: for Allah loveth not transgressors.” Thus, the purpose of armed combat was self-defence and, even though the need for survival meant that warfare would be tough, combat was to adhere to a set of prescribed constraints. The following verse’s instruction to “slay them” wherever they turn up commences with the conjunction “wa,” here translated as “and,” to indicate that it is a continuation of the same stream of logic. In other words, Muslims were allowed to defend themselves militarily from the forces or armies which were attacking them wherever that happened. Tremendous care was to be taken not to shed blood in the environs of Mecca’s sacred mosque, but if Muslims found themselves attacked there they could kill their attackers while defending themselves without committing a sin. This series of verses actually ends with instructions that, if the attackers ceased their attacks, Muslims were not to continue to fight them because Allah is “Oft-forgiving, Most Merciful.”

Thus, continued resistance could — and nowadays can — only be a proportionate response to continued oppression. In every Qur’anic example in which warfighting (qital) is encouraged for protection against oppression or violence, verses can be found that stress that, should the wrongdoers cease their hostility, then Muslims must immediately cease their own fighting.

The Qur’anic permission for defensive resistance to attacks or oppression does not mean that Muhammad enjoyed war, or took pleasure whatsoever in the fact that defensive warfare to protect his ummah from extinction or subjugation would involve the loss of even his enemies’ lives. He was no warmonger and forgave and pardoned mortal enemies whenever he could. This “reluctant warrior,” to quote one scholar, urged the use of nonviolent means when possible and, often against the advice of his companions, sought the early end of hostilities. At the same time, in accordance with the revelations he had received, he accepted that combat for the defence of Islam and Islamic interests would sometimes be unavoidable. One of Muhammad’s companions remembers him telling his followers not to look forward to combat, but if it were to come upon them then they should pray for safety and be patient. He took no pleasure in the fact that — as also taught in later western Just War theory — the regrettable violence inherent within warfare would sometimes be necessary in order to create a better state of peace. Explaining to fellow Muslims the need in some situations to undertake combat, Muhammad acknowledged Allah’s revelation that
warfare was something that seemed very wrong, indeed a “disliked” activity, yet it was morally necessary and thus morally right and obligatory under some circumstances. Warfare was frightening and dreadful, but *in extremis* better than continued persecution and attack.

His greatest victory — his eventual return to his hometown Mecca in 630 at the head of an army of 10,000 — was itself a bloodless affair marked by tremendous forgiveness. After his forces entered the city, the panicked Quraysh tribe, which effectively surrendered after realising that resistance to the pilgrim army was futile, anticipated that their leaders and warriors would be slain. After all, for two decades they had humiliated, persecuted and tried to assassinate Muhammad and had maltreated and even waged savage war against his followers. Yet, aside from four murderers and serious oath-breakers who were beyond rehabilitation, Muhammad chose to forgive them all in a general amnesty. There was no bloodbath. He reportedly asked the assembled leaders of Quraysh what fate they anticipated. Expecting death, but hoping for life, they replied: “O noble brother and son of a noble brother! We expect nothing but goodness from you.” This appeal must have relieved Muhammad and made him smile. He replied: “I speak to you in the same words as Yusuf [the biblical Joseph, also one of Islam’s revered prophets] spoke unto his brothers. … ‘No reproach on you this day.’ Go your way, for you are freed ones.”

He even showed mercy to Hind bint Utbah, Abu Sufyan’s wife, who was under a sentence of death for having horrifically and disgracefully mutilated the body of Muhammad’s beloved uncle Hamzah during the Battle of Uhud five years earlier. Hind had cut open Hamzah’s body, ripped out his liver and chewed it. She then reportedly strung the ears and nose into a "necklace" and entered Mecca wearing it as a "trophy" of victory. When justice finally caught up with her five years later she threw herself upon Muhammad’s mercy. Extending clemency of remarkable depth, Muhammad promised her forgiveness and accepted her into his community.

**Proportionate Response, Last Resort and Discrimination**

Mercy between humans, based on forgiveness of someone else’s acknowledged wrongdoing, was something that Muhammad believed precisely mirrored the divine relationship between the Creator and humans. The concepts of patience, forgiveness and clemency strongly underpinned the early Islamic practice of warfare. Proportionality — one of the core principals of western Just War — also serves as a key foundational principle in the Qur’anic guidance on war. Doing no violence greater than the minimum necessary to guarantee victory is repeatedly stressed (and described as “not transgressing limits”). So is the imperative of meeting force with equal force in order to prevent defeat and discourage future aggression. Deterrence comes by doing to the aggressor what he has done to the innocent: “Should you encounter them in war, then deal with them in such a manner that those that [might have intended to] follow them should abandon their designs
and may take warning." With this deterrent function in mind, the Qur'an embraces the earlier biblical revelation to the Israelites, which permits people to respond to injustice eye for eye, tooth for tooth. Yet, like the Christian Gospels, it suggests that there is more spiritual value (bringing "purification") in forgoing revenge in a spirit of charity. This passage, interestingly, is from the same period of revelation as the verse of the sword, which further weakens the abrogation thesis mentioned above. Moreover, even on this matter of matching one’s strength to the opponent’s strength, the Qur'an repeatedly enjoins Muslims to remember that, whenever possible, they should respond to provocations with patience and efforts to facilitate conciliation. They should avoid fighting unless it becomes necessary after attempts have been made at achieving a peaceful resolution (which is a concept not vastly different from the western Just War notion of Last Resort) because forgiveness and the restoration of harmony remain Allah’s preference.

Dearly wanting to avoid bloodshed whenever possible, Muhammad created a practice of treating the use of lethal violence as a last resort which has been imitated by Muslim warriors to this day, albeit at times with varying emphases. Before any warfighting can commence — except for spontaneous self-defensive battles when surprised — the leader must make a formal declaration of war to the enemy force, no matter how aggressive and violent that enemy is. He must communicate a message to the enemy that it would be better for them to embrace Islam. If they did (and Muhammad liked to offer three days for reflection and decision) then the grievance ended. A state of brotherhood ensued. If the enemy refused, then a proposal would be extended that offered them peace in return for the ending of aggression or disagreeable behaviour and the paying of a tax. If the enemy refused even that offer, and did not cease his wrong-doing, they forfeited their rights to immunity from the unfortunate violence of war.

Islamic concepts of war do not define and conceptualise things in exactly the same way as western thinking has done within the Just War framework. Yet the parallels are striking. The reasons for going to war expressed within the Qur'an closely match those within _jus ad bellum_, the Just War criteria which establishes the justice of a decision to undertake combat. The criteria include Just Cause, Proportionality and Last Resort. The behaviour demanded of warriors once campaigning and combat have commenced also closely match those within _jus in bello_, the Just War criteria which establishes the proper behaviour of warriors that is necessary to keep the war just. The Qur'an described this as a prohibition against "transgressing limits". Ibn Kathir, a famous and relatively reliable fourteenth-century scholar of the Qur'an, accepts earlier interpretations that the "transgressions" mentioned in the Qur'an refer to "mutilating the dead, theft (from the captured goods), killing women, children and old people who do not participate in warfare, killing priests and residents of houses of worship, burning down trees and killing animals without real benefit." Ibn Kathir points out that Muhammad had himself stated...
that these deeds are prohibited. Another source records that, before he assigned a leader to take forces on a mission, Muhammad would instruct them to fight honourably, not to hurt women and children, not to harm prisoners, not to mutilate bodies, not to plunder and not to destroy trees or crops.62

In the year after Muhammad’s death in 632, his close friend and successor Abu Bakr, the first Caliph, compiled the Qur’an’s and the prophet’s guidance on the conduct of war into a code that has served ever since as the basis of Islamic thinking on the conduct of battle. In a celebrated address to his warriors, Abu Bakr proclaimed:

Do not act treacherously; do not act disloyally; do not act neglectfully. Do not mutilate; do not kill little children or old men, or women; do not cut off the heads off the palm-trees or burn them; do not cut down the fruit trees; do not slaughter a sheep or a cow or a camel, except for food. You will pass by people who devote their lives in cloisters; leave them and their devotions alone. You will come upon people who bring you platters in which are various sorts of food; if you eat any of it, mention the name of God over it.63

There is no explicit statement within the Qur’an that defines the difference between combatants and non-combatants during war, so readers might think that any man of fighting age (children, women and the aged having been excluded) is considered fair game. The Qur’an does not allow this. The verses that talk of combat allow war only against those who are waging war; that is, those in combat. Aside from those combatants and anyone acting unjustly to suppress Islam or violate the sanctity of its holy places, no-one else is to be harmed. The reason for this is clear. Central to the Qur’anic revelation is the message that the decisions that pertain to life and death are Allah’s alone, and Allah has proclaimed that life — a “sacred” gift — must not be taken without “just cause”.64 In the Qur’anic passages narrating the story of Cain and Abel (Surah 5:27-32, revealed very late in Muhammad’s life) one can read an explicit protection of the lives of the innocent. Surah 5:32 informs us that, if anyone takes the life of another human, unless it is for murder, aggressive violence or persecution, it is as though he has killed all of humanity. Likewise, if anyone saves a life, it is as though he has saved all of humanity. To discourage war, the very next verse is clear: those who undertake warfare against the innocent do not count as innocent, nor do those who inflict grave injustice or oppression upon the innocent. They forfeit their right to what we would nowadays call “civilian immunity,” and are liable to be killed in battle or executed if they are caught and have not repented.65

Jihad

It should already be clear that, far from serving as the foundation of a callous faith in which human life is not respected, or a bellicose faith in which peace is not desired, the Qur’an presents warfare as an undesirable activity. It should be undertaken only within certain constrained circumstances and in a manner that facilitates the quick restoration of peace and harmony and minimises the harm and destruction that war inevitably brings. An analysis of such matters
would not, of course, be complete without making some sense of the famous word and concept that is most controversial and misunderstood: *jihad*.

Interestingly, given that *jihad* is now associated with extremists who are full of hatred, like Osama bin Laden and other terrorists, the Qur’an does not allow hatred to form the basis of a military or other armed response to perceived injustices. It explicitly states that the hatred of others must not make anyone “swerve to [do] wrong and depart from justice. Be just.” The Qur’an likewise praises those who “restrain their anger and are forgiving towards their fellow men.” These and other verses communicating the same message are clear enough to prevent crimes perceived nowadays by Muslims from turning them into criminals. They certainly made an impact on Muslims during Muhammad’s lifetime. During the Battle of Khandaq in 627, for example, Ali ibn Abi Talib (who later served as Caliph) reportedly subjugated Amr ibn Abd al-Wud, a powerful warrior of the Quraysh. Ali was about to deal a death blow when his enemy spat in his face. Ali immediately released him and walked away. He then rejoined battle and managed to slay his enemy. When later asked to explain why he had released his foe, Ali replied that he had wanted to keep his heart pure from anger and that, if he needed to take life, he did it out of righteous motives and not wrath. Even if the verity of this story is impossible to demonstrate (it is first found in a thirteenth-century Persian Sufi poem), its survival and popularity attest to the perceived importance within Islam of acting justly at all times, even during the heightened passions inevitable in war.

Despite some popular misperceptions that *jihad* is based on frustration or anger that many non-Muslims consciously reject the faith of Islam, the Qur’an is quite clear that Islam can be embraced only by those who willingly come to accept it. Islam cannot be imposed upon anyone who does not. Surah 2:256 is emphatic that there must be “no compulsion in religion.” Truth is self-evident, the verse adds, and stands out from falsehood. Those who accept the former grasp “the most trustworthy hand-hold that never breaks.” Those who accept falsehood instead will go forth into “the depths of darkness”: the same hell that Christ had preached about. The fate of individuals, based on the choice they make, is therefore Allâh’s alone to decide. The Qur’an repeats in several other verses that coerced religion would be pointless because the submission of the heart wanted by Allâh would be contrived and thus not accepted as genuine. When even Muhammad complained that he seemed to be surrounded by people who would not believe, a divine revelation clarified that Muslims were merely to turn away from the disbelievers after saying “peace” to them “for they shall come to know.” The Qur’an itself enjoins believers to invite disbelievers “to the Way of thy Lord with wisdom and beautiful preaching; and argue with them in ways that are best and most gracious ... if ye show patience, that is indeed the best (cause) for those who are patient. ... For Allâh is with those who restrain themselves, and those who do good.” At no point in Muhammad’s life did he
give up hope that all peoples would want to get along harmoniously. Despite his grave disappointment whenever communities competed instead of cooperated, in one of his later public sermons he revealed the divine message that Allah had made all of mankind “into nations and tribes, that ye may know each other (not that ye may despise each other).” This desire for tolerant coexistence even included other faiths. Despite rejection by several powerful Jewish tribes, Muhammad remained convinced that the Jewish and Christian faith communities (as opposed to individual tribes which acted treacherously) were eminently acceptable to Allah. A verse saying precisely this was revealed very close in time to the verse of the sword, which again undermines the thesis that the latter undid all of the interfaith outreach that Muhammad had preached years earlier.

So what, then, is jihad and why does it seem so threatening? The answer is that jihad, far from meaning some type of fanatical holy war against all unbelievers, is the Arabic word for “exertion” or “effort” and it actually describes any Muslim’s struggle against the things that are ungodly within him or her and within the wider world. One major form of jihad is the Muslim’s struggle against his or her “nafs”: an Arabic word that may be translated as the “lower self” and refers to the individual’s carnal nature and the bad habits and actions that come from failure to resist temptation or desire. For example, a Muslim who consciously strives to break the habit of telling white lies, or the drinking of alcohol, or who struggles against a bad temper, is involved quite properly in a jihad against those unfortunate weaknesses. In Surah 29:6 the Qur’an explains this by pointing out that the striving (jihad) of individuals against their personal ungodliness will bring personal, inner (that is, spiritual) growth. Yet the very next verse goes further by exhorting believers not only to work on their personal faith, but also to do “good deeds” to others. Devoting time and giving money to the welfare of the poor and needy (of all communities, not just Muslims), and to the upkeep and governance of the ummah, is mentioned in several scriptures as this type of divinely recommended effort (jihad). Winning souls to Islam through peaceful preaching is likewise a worthy effort. Muhammad himself revealed a divine exhortation to “strive” with “all effort” (in Arabic it uses two forms of the same word jihad) using the powerful words of the Qur’an to convince unbelievers.75

Jihad is also used in the Qur’an to mean physical resistance to external ungodliness. It appears in thirty verses, six of them revealed during Muhammad’s years in Mecca and twenty-four revealed during the years of armed attack by the Quraysh tribe and its allies and then the protective wars to create security within and around the Arabian Peninsula. All the verses mentioning armed struggle are exhortative in nature: with pleas for effort, urgings of courage and a fighting spirit, assurances of victory and promises of eternal rewards for those who might die in the service of their community. This emphasis reveals that Muhammad recognised that wars were so unpalatable to his peace-loving community that, even though the causes of Muslim warfighting (qital) were just, he had...
to go to extra lengths — much as Winston Churchill did during the dark days of the Second World War — to exhort weary people to persevere, to believe in victory and to fight for it. On 4 June 1940 Churchill gave a magnificent speech to inspire the British people to continue their struggle against the undoubted evils of Nazism, even though the German armed forces then seemed stronger and better in battle. His speech includes the fabulous warlike lines:

*We shall fight on the seas and oceans*
*We shall fight with growing confidence and growing strength in the air, we shall defend our Island, whatever the cost may be*
*We shall fight on the beaches*
*We shall fight on the landing grounds*
*We shall fight in the fields and in the streets*
*We shall fight in the hills*
*We shall never surrender.\(^77\)*

No-one would dream of calling Churchill warmongering, much less murderous. Muhammad’s exhortations for Muslims to do their duty — a phrase used by Churchill in that speech and others — and to struggle against the threat of defeat at the hands of the Muslims’ enemies are best seen in the same light. Indeed, most of the verses which urge struggle (*jihad*) against enemies relate to the self-defensive wars mentioned above, with the remaining verses relating to the broader need to protect the *ummah* from both the local spiritual pollution of intransigent Arab polytheism and idolatry as well as the external threat to unsafe borders around the perimeter of the *ummah*. No verses in the Qur’an encourage or permit violence against innocent people, regardless of faith, and no verses encourage or permit war against other nations or states that are not attacking the Islamic *ummah*, threatening its borders or its direct interests, or interfering in the ability of Muslims to practice their faith. Armed effort against any states that do those oppressive things is still permitted to this day, at least according to a fair reading of the Qur’an\(^78\) — just as it is within western Just War. Yet such a situation would involve a very different set of circumstances to those existing in the world today; those which somehow wrongly prompted a very small number of radicalised terrorists to undertake aggressive and offensive (not justly motivated and defensive) struggles. Their reprehensible actions, especially those that involve the taking of innocent lives, fall outside the behaviours permitted by a reasonable reading of the Qur’an.

**Conclusion**

This article is not an attempt at religious apologetics. It is written by a scholar of military strategy and ethics for a military audience in an endeavour to demonstrate that the world’s second largest religion (only Christianity has more adherents) includes at its core a set of scriptures that contains a clear and very ethical framework for understanding war and guiding the behaviour of warriors. That framework only supports warfare when it is based on redressing substantial material grievances (especially attack or persecution), when it occurs after other means of addressing the grievances have been attempted, and when it includes the cessation of hostilities and the restoration of
peace as soon as a resolution has been attained. It demands of warriors that they uphold the concepts of proportionality (doing no more harm than is necessary) and discrimination (directing violence only at combatants whilst minimising harm to civilians and their possessions and infrastructure). That framework is very compatible with the western Just War philosophy that, for example, gave a moral underpinning to the United Kingdom’s war against Argentinean troops occupying the Falkland Islands in 1982, the US-led Coalition’s eviction of Saddam Hussein’s troops from Kuwait in 1991, and NATO’s seventy-eight day air war against Slobodan Milošević’s Yugoslavia in order to protect Kosovars from ethnic violence in 1999.

So, then, if the Qur’an itself condemns any violence that exceeds or sits outside of the framework for justice revealed within its verses, how can we explain the barbarous 9/11 attacks, the home-grown 7/7 attacks and other suicide-bombing attempts within our country and the murder of civilians by terrorists in other parts of the world who claim to act in the name of Islam? British scholar Karen Armstrong answered this obvious question so succinctly in the days after 9/11 that her words make a fitting conclusion to this article. During the twentieth century, she wrote, “the militant form of piety often known as fundamentalism erupted in every major religion as a rebellion against modernity.” Every minority fundamentalist movement within the major faiths that Armstrong has studied “is convinced that liberal, secular society is determined to wipe out religion. Fighting, as they imagine, a battle for survival, fundamentalists often feel justified in ignoring the more compassionate principles of their faith. But in amplifying the more aggressive passages that exist in all our scriptures, they distort the tradition.”

Notes


4 *Mapping the Global Muslim Population*.

5 The very first word revealed to Muhammad was *Iqra*, which means “recite” and the word Qur’an itself originates from the root word *Qara’a*, which means “to read out” or “to recite”.

6 The title of Spencer’s most controversial bestseller is: *The Truth about Muhammad, Founder of the World’s Most Intolerant Religion* (Washington, DC: Regnery Press, 2006). Spencer’s other books include:

7 Cf. the published works, journalism and internet articles of Daniel Pipes, Benny Morris, David Horowitz, Bernard Lewis, Sam Harris, David Bukay and David Pryce-Jones, among others. I need to make my position clear. As a liberal and an academic I strongly support the liberal arts education model and the enhanced societal contributions made by critically educated minds. At the heart of my philosophy lies a passionate belief in the value of dialogue and debate. I therefore do not challenge the right of these scholars and pundits publicly to express their concerns about Islam, even though I do not share them.

8 There are numerous English language translations of the Qur’an which give slightly different wordings, but the translation that I consider easiest to read and closest to the meaning of the Arabic text is: Tajweed Qur’an with Meaning Translation in English by Abdylah Yusuf Ali & Transliteration by Dr Eng. Subhi Taha (Damascus: Dar-Al-Maarifah, 2003. 2010 edition). All long quotes from the Qur’an in this article are from this excellent translation or, where it aids my desire for maximum clarity, from Maulana Wahiduddin Khan, trans., The Quran (New Delhi: Goodword, 2009). Another very popular modern translation that is even easier to follow is the so-called “Wahhabi translation”: Interpretation of the Meanings of the Noble Qur’an in the English Language: A Summarized Version of At-Tabarî, Al-Qurtubî and Ibn Kathîr with Comments from Sahîh Al-Bukhârî: Summarised in One Volume by Dr Muhammad Muhsin Khân and Dr Muhammad Taqî-ud-Din Al-Hilâlî (Riyadh: Darussalam, 1996. Revised edition 2001). It must be pointed out, however, that this easy-to-read translation has not been immune from criticism, particularly with regard to many interpolations that seem to provide a deliberately negative portrayal of Christians and Jews. For that reason I do not use it, and I believe others should read it, should they wish, with this caveat in mind. Cf. Khaleel Mohammed, "Assessing English Translations of the Qur’an," Middle East Quarterly, Volume 12 No. 2 (Spring 2005), pp. 59-72.

9 Cf. Spencer, The Politically Incorrect Guide to Islam, p. 28. After negatively quoting a statement praising Muhammad as “a hard fighter and a skillful military commander,” Samuel P. Huntington writes that “no one would say this about Christ or Buddha.” He adds that Islamic doctrines “dictate war against unbelievers … The Koran and other statements of Muslim beliefs contain few prohibitions on violence, and a concept of nonviolence is absent from Muslim doctrine and practice.” Huntington, The Clash of Civilizations and the Remaking of World Order (London: Simon & Schuster, 1996), p. 263.

10 Jizya was a tax levied by the Islamic state on non-Muslims. In return they gained exemption from military service and guarantees of safety within the state. This taxation


12 C. Spencer, ed., The Myth of Islamic Tolerance, pp. 43-44.


14 Deuteronomy 7: 1-3 and 20: 16-17.


16 Surah 34:28, Surah 39:41 and Surah 81:27.


18 Cf. David Bukay, “Peace or Jihad: Abrogation in Islam,” in Middle East Quarterly, Fall 2007, pp. 3-11, available online at: http://www.meforum.org/1754/peace-or-jihad-abrogation-in-islam


20 Bukay, “Peace or Jihad,” cited above. 

21 http://www.pbs.org/newshour/terrorism/international/fatwa_1996.html


24 Bashier, War and Peace, p. 284. An interesting introductory book for anyone unfamiliar with Islam is Sohaib Nazeer Sultan’s amusingly titled, The Koran for Dummies (Hoboken: Wiley, 2004). Sultan makes the same point (pp. 278, 281) that the martial verse and the sword and those like it do not abrogate the more numerous peaceful, tolerant and inclusive verses.


26 Louay Fatoohi, Jihad in the Qur’an: The Truth from the Source (Birmingham: Luna Plena, 2009). Email from Dr Louay Fatoohi to Dr Joel Hayward, 23 August 2010.


31 Ali Muhammad Muhammad As-Sallaabee, The Biography of Abu Bakr As-Siddeeq (Riyadh: Darussalam, 2007), pp. 150-151.


33 Tafsir Ibn Kathir, Volume 4, pp. 369ff;
Although Ad-Dahhāk bin Muzāḥim, as quoted by Isma’īl ibn Kathīr (Tafsīr Ibn Kathīr, Volume 4, p. 377) — sees this as a repudiation of Muhammad’s pilgrimage agreements with all pagans, other early sources insist that this was not the case and that it would have reflected intolerance that Muhammad was not known to possess. Rizwi Faizer, “Expeditions and Battles,” in Jane Dammen McAuliffe, ed., Encyclopaedia of the Qur’an (Leiden and Boston: Brill, 2002), Vol. II, p. 151.

Surah 4:90.

Fatoohi, Jihad in the Qur’an, p. 34.

Hashmi, ed., Islamic Political Ethics, p. 201.

Armstrong, Islam, p. 17.


Tafsīr Ibn Kathīr, Volume 1 (Parts 1 and 2 (Surat Al-Fatihah to Verse 252 of Surat Al-Baqarah)), p. 528.

Surah 2:192.

Surah 2:193.

Hashmi, ed., Islamic Political Ethics, p. 204.


Surah 2:216 and see Surah 42:41.

Surah 2: 217, 2:191 and 4:75-78.

Bashier, War and Peace, pp. 229-233.


Ibn Ishaq, p. 385.

Ibid., p. 553; Lings, Muhammad, p. 303; Armstrong, Muhammad, p. 244. Surah 8.56.

Surah 5:45.

Cf. Surah 2:194.


Cf. Khadduri, War and Peace, pp. 96-98.

Ibid., p. 98.


It even applied to the quarrels that the Qur’an criticises most: those between different Muslim groups. If one side aggressively “transgressed beyond bounds,” the other side was permitted to fight back in self-defence, but only until the aggressor desisted, at which point war was to end and reconciliation was to occur. Cf. Surah 49:9-10.

Tafsīr Ibn Kathīr, Volume 1, p. 528.

Shirazi, War, Peace and Non-violence, p. 29.

Hashmi, ed., Islamic Political Ethics, p. 211; Tabari, Ta’rīkh, I, 1850, quoted in Khadduri, War and Peace, p. 102 and in As-Sallaabee, The Biography of Abu Bakr, p. 327.
Surah 6:151 and 17:33.

Surah 5:33-34.

Surah 5:8 (and see 5:2).

Surah 3:134.

Fatoohi, *Jihad in the Qur’an*, p. 73.


Surah 43:88-89.

Surah 16:125-128.

Surah 49:13. The clause in parentheses is a contextual explanation by the translator.

Surah 5:69.


Surah 25:52.

Fatoohi, *Jihad in the Qur’an*, p. 87.


Cf. Chapter V in Khadduri, *War and Peace*.

Christianity, the West and Just War in the Twenty-First Century

By Dr Peter Lee

The past two decades have witnessed a number of military interventions by US, UK and other allied forces in theatres as diverse as Kuwait, the Balkan region of Europe, Iraq and Afghanistan. At different times over this period President Bill Clinton, President George W. Bush and Prime Minister Tony Blair have made recourse to the vocabulary of just war in a bid to convince their respective peoples to support the deployment of military hardware and personnel in pursuit of political ends. Just war is characterised by a number of criteria that have been codified and embedded in Western war discourse over many centuries and are understood and spoken of beyond the abodes of the powerful and the planning rooms of the armed forces: just cause, right intention, last resort, legitimate authority, proportionality, discrimination of combatants and so on. This article explores early Christian influences on the just war tradition before discussing how the ongoing relevance of secularised versions of these ancient ideas is influencing why and how war is fought in the twenty-first century.
Introduction

On 12 August 1880, in a speech at Columbus, Ohio, General William Tecumseh Sherman captured the essence of humankind’s fascination with war: “There is many a boy here today who looks on war as all glory, but boys, it is all hell.” No poet or philosopher – either before or since – has encapsulated in so few words what it means when people or states seek political solutions through the use of military force. We honour the heroes, avert our gaze from the hideously wounded and maimed, and speak, often too glibly, of the sacrifices made on the field of battle. I have never experienced war first-hand: the gut-wrenching, heart-pounding cocktail of fear and exhilaration, tragedy and triumph that leaves its indelible mark on those who have found themselves in the firing line. I have, however, glimpsed the hell that war brings. In 2003 I was a military chaplain and glimpsed that hell in the eyes of a widow as she received the news of her fallen husband, and in the eyes of her children as they struggled to comprehend that daddy would never be coming home. I heard echoes of hell in the wavering voice of a young soldier who refused to believe that his new wife might still love him, having left half an arm in the sands of Iraq. I smelt the rancid stench of hell in the weeping bandages of the wounded whose eyes had been searching for the enemy one moment, only to re-open in the bed of a military hospital in another country.

A number of these soldiers professed some form of religious belief, Christian or otherwise; some were implacably opposed to any notions of God or religion; while others appeared not to care much either way. What united almost everyone I spoke to was a desire to understand whether Prime Minister Tony Blair had been right in sending them to war and whether they had conducted themselves properly or let down their comrades. When discussing the justification of the 2003 Iraq invasion or the conduct of individuals involved, the soldiers with whom I dealt, who had little or no philosophical schooling, instinctively resorted to ideas that have been associated with just war for many centuries. They asked questions and made statements like: Did we go in for a good reason? I still think we went for the oil! We should have waited. I don’t know why we’re here – it doesn’t make sense. My CO said we had to go in and that’s good enough for me! In these and other comments ancient just war criteria were the subject of debate once more, criteria that include just cause, right intention, last resort, legitimate authority, proportionality and discrimination of combatants. Not once did the notion of religious war surface, yet the terms in which war was discussed have ancient roots in Christian thought.

This article will provide an overview of some early Christian ideas on just war and their subsequent codification, before going on to consider the ongoing relevance of these ancient concepts, for Christians and non-Christians, in examining why and how war is fought in the twenty-first century. The types of war fought by UK and allied military forces over the past two decades, and the reasons for fighting them, have been different to many of those wars fought in the twentieth century:
the two World Wars, the Falklands War and even the Gulf War against Iraq in 1991. Struggle for national survival and defence of sovereign territory has been replaced recently by counter-insurgency wars far from home in Afghanistan and Iraq. These campaigns have been promoted by the British government as a means of improving the security of the UK, whilst at the same time threats from international terrorist organisations against the UK have increased: with those threatening the UK blaming British military involvement in Muslim lands as a primary motivation. In order to assess the place of just war in today’s rapidly changing global security context the remainder of this article will take the following shape. The first section will look at the place of war and soldiering in the bible, drawing attention to some practices that might still be relevant today and other practices of war – particularly from the Old Testament – that should not only be abandoned but opposed. The second section will consider some ideas of the great theologians Augustine and Aquinas concerning the Christian and war, showing how aspects of the just war tradition came to be codified in a way that is still recognisable in its secular form today. The final section will address the relevance of these ancient just war ideas in the current national and global security environment by analysing Prime Minister Blair’s justification of military intervention and the challenges facing those engaged in battle in Afghanistan. Not only will key ideas from both the bible and great Christian thinkers of the past be applied to contemporary challenges, the limitations of some of these ideas will also be pointed out, based on differences between past and present in the secularisation of just war and way that the international political system is structured.

The Old Testament and War

War is one of the most ancient of all human activities, with depictions of battle being found in sources as diverse as early cave paintings, stone carvings and the tombs of Egyptian Pharaohs. To that list can be added the Old Testament: the books that Jesus would have studied in scroll form throughout his life. He would have been very familiar with the history of Israel, built as it was on many occasions at the point of a sword. Such was the emphasis on the great battles and warrior kings of Israelite/Jewish history that the long-awaited Messiah was expected by many Jews of Jesus’ day to be some kind of freedom-fighter who would use force to set them free from the yoke of Roman domination.

Many of the wars recorded in the Old Testament, even those commanded by God, do not always provide the modern Christian, or anyone else, with the most helpful inspiration for service in the armed forces. Take, as an example, Joshua and the battle for Jericho. After the death of Moses, God commanded Joshua to take the Israelites across the Jordan River to the land that God was going to give them: ‘territory [that] will extend from the desert to Lebanon, and from the great river, the Euphrates – all the Hittite country – to the great see on the West’. The battle of Jericho is recalled in a song that was originally a Negro Spiritual sung by enslaved black Christians; a song that is still sung by children in
Sunday School and regular school assemblies as a way of recalling the suffering of caused by slavery, as well as the ancient battle. The song includes the words:

*Up to the walls of Jericho*
He marched with spear in hand;
Go blow them ram horns, Joshua cried
’Cause the battle is in my hands.

*Then the lamb ram sheep horns began to blow,*
The trumpets began to sound;
Old Joshua shouted glory
And the walls came tumblin’ down.

Contrast this romanticised taking of Jericho with a few blasts of ram horn and trumpet with the events recorded in the book of Joshua:

*About forty thousand armed for battle crossed over [the river Jordan] before the Lord to the plains of Jericho for war ... Then the Lord said to Joshua, “See, I have delivered Jericho into your hands, along with its king and its fighting men.”... so every man charged straight in, and they took the city. They devoted the city to the Lord and destroyed with the sword everything living in it – men and women, young and old, cattle, sheep and donkeys.*

No matter how strong an attachment Christians today may have to their spiritual forebears at Jericho, the actions of Joshua’s army would now be described as genocide or ethnic cleansing: exactly the kind of activity that UK and NATO forces opposed in Kosovo in 1999. Even more mystifying, the mass killing of the people of Jericho – whilst following God’s instructions – happened after God had provided Moses with the Ten Commandments: including, ‘Thou shalt not kill’. The meaning of this seemingly obvious commandment, sometimes translated as ‘You shall not murder’, clearly did not extend to killing in the course of battle authorised by God. Yet if any army conducted an attack like Joshua’s on Jericho today, its Commanding Officer would be probably be regarded as insane and those involved would – should – find themselves liable for prosecution at the International Criminal Court.

As well as capturing numerous examples of this kind of battle the Old Testament also points to a future that is less bloody and more optimistic – though we may have to wait a while before it arrives. Isaiah writes: ‘In the last days ... Nation will not take up sword against nation, nor will they train for war any more’. The difficulty for the Christian today is that these last days marked by peace and tranquillity appear no closer today than they would have appeared to the Israelites more than two thousand years ago. For the non-Christian who does not recognise either the authority of the bible or the God that it represents these words read as little more than wishful thinking. A more accurate description of the circumstances in which we live, a description that would be recognised by most people regardless of their views on faith or religion, can be found in the poetic words of Ecclesiastes: ‘There is a time for everything ... a time to kill and a time to heal ... a time for war and a time for peace’. These can be read as simple statements of fact, unlike the prophetic words of Isaiah that require a dimension of personal faith or belief if they are to hold meaning in the present: ‘For to us a child is born, to us a son is given, and the government will be on his shoulders.”
And he will be called Wonderful Counsellor, Mighty God, Everlasting Father, Prince of Peace’. The promised Messiah would be a Prince of Peace whose function would be to usher in God’s kingdom on earth: at which point nations would not stop taking up arms against other nations. Christians therefore find themselves in a far-from-perfect in-between place, believing that the kingdom of God has been promised in the Old Testament and subsequently inaugurated on Earth by Jesus. However, the perpetual peace that has been promised will not be finalised until some unspecified point in the future: the last days. In this in-between place tyrants still inflict suffering on the innocent; nation still makes war on nation; and numerous groups resort to indiscriminate violence as a means of influencing the political process and furthering aims that can be driven by ideology, religion, or social and economic marginalisation. What then are the implications for, and responsibilities of, the person who would take up arms in defence of his or her country or the vulnerable citizens of the world? To begin to address some of the issues raised by this question let us turn to the New Testament and the words of Jesus himself.

Jesus and the New Testament

The first difficulty anyone faces when turning to the words of Jesus in the gospels as a source of guidance on war in the twenty-first century is that he did not even offer guidance on war in his own century. Isaiah had prophesied that the Messiah would come as a Prince of Peace, but when Jesus commenced his public ministry, as recorded in Luke’s gospel, it was not the words of Isaiah 2:4 that he claimed to fulfil but another, later prophecy recorded in Isaiah:

“The Spirit of the Lord is on me, because he has anointed me to preach good news to the poor. He has sent me to proclaim freedom for the prisoners and recovery of sight for the blind, to release the oppressed, to proclaim the year of the Lord’s favour ... Today this scripture is fulfilled in your hearing.”

Given that the land of Israel was occupied by a foreign power and controlled by the Roman Army, if ever there was a time for Jesus to provide clear instructions on participation in war, or the rejection of participation in war, this was it. The priority, instead, was to proclaim the year of the Lord’s favour and declare: “The kingdom of God is near.” As part of his bringing in of the kingdom of God, Jesus emphasised non-violence on a number of occasions. For example, he said: “Do not resist an evil person. If someone strikes you on the right cheek, turn to him the other also.” Again, like the Ten Commandments, there is an elegance about these words. However, like the brutal wars instituted by God after he gave his people the Ten Commandments to follow, things are not as straight forward as they seem. For example, in advocating that resistance should not be offered to evil people and the other cheek turned instead, Jesus refers to individual actions and not to the assembled ranks of soldiers on the field of battle. Should an individual turn the other cheek when faced with the sword of a good and honourable soldier on the battlefield? Such an ethical choice appears to fall out with the constraints set out by Jesus.
There are have always been a number of Christians who have held the view that the path of non-violence is the only ethical way to live and who would not defend themselves, or others, with force when faced by personal attack or a rampaging enemy. Supporting this view is another example of Jesus encouraging a non-violent attitude; this time towards the end of his life as he was being arrested in the Garden of Gethsemane in the build-up to his crucifixion:

Then the men stepped forward, seized Jesus and arrested him. With that, one of Jesus’ companions reached for his sword, drew it out and struck the servant of the high priest, cutting off his ear. “Put your sword back in its place,” Jesus said to him, “for all who draw the sword will die by the sword.”

The first thing to note is that the crowd that came for Jesus did not represent the civil (that is, Roman) authorities: it was sent by the ‘chief priests and the elders of the people,’ and the members of the crowd had armed themselves with swords and clubs. No one in this dispute had any right to take up arms, neither the individuals seizing Jesus nor the person who sought to protect him. Contrast Jesus’ stern rebuke of the companion who tried to defend him with a sword with Jesus’ attitude towards the centurion who came to him on another occasion seeking healing for his servant. Jesus said to the centurion: “I have not found anyone in Israel with such great faith ... Go! It will be done just as you believed it would.” Jesus had called many of his disciples to leave their previous careers and livelihoods to follow him, and he had also called others to give up lifestyles that did not conform to the requirements of the kingdom of God. Yet Jesus’ encounter with the centurion resulted in only praise for the soldier’s great faith and no instruction to hang up his sword or seek a new non-violent career.

The basis of the disparity in Jesus’ response to the companion who defended him with the sword and the centurion who wielded the sword professionally is found in his attitude to the authorities (civil authorities, not religious authorities). Jesus – who on one occasion took a whip and violently drove out traders and money-changers who were desecrating the temple in Jerusalem – instructed that taxes should be paid to the authorities, saying, “Give to Caesar what is Caesar’s, and give to God what is God’s.” The centurion bore his sword as a soldier whose authority to do so was granted by Caesar himself. The individual rebuked by Jesus had no such right to wield a sword. Jesus’ attitude to the legitimate and illegitimate bearing of arms is reinforced later in the New Testament by the apostle Paul, who also wrote about the Christian’s responsibility to the authorities: ‘Everyone must submit himself to the governing authorities, for there is no authority except that which God has established’.

The linking of authority and legitimacy concerning the bearing of arms is crucial, not only to Jesus and Paul in a Christian context but to those who would take up arms on behalf of their states today. Furthermore, since the time of Jesus the issue of legitimacy and authority has been central to debate surrounding when, and how, a
Christian should serve as a soldier: in what we now know as the just war tradition. It is to some of the key writers and ideas in the just war tradition that we now turn.

The Just War

In the fourth century worship of the Christian God replaced the traditional worship of Roman gods as Christianity became the official religion of the Roman Empire. This prompted one practical difficulty for the Roman emperors and those in authority: how to maintain the might of the Roman Army, upon which the security of the Empire depended when many Christians would not, or felt they could not, serve. In the centuries since Jesus lived and died the Roman army had been used on a number of occasions as a tool with which to persecute Christians. Even Christians who served as soldiers had been persecuted. Perhaps not surprisingly, the legacy of this abuse was reluctance on the part of many Christians to serve in the army. In addition, some of the early Church Fathers emphasised the aspects of Jesus teaching that promoted non-violence (‘turn the other cheek’ and ‘put your sword back in its place’ already mentioned above), and many early Christians supported their views. Matters were complicated even further when, in 410, Alaric and his army of Visigoths sacked Rome: resulting in criticism by many citizens of the Christian God’s ability to protect Rome as the traditional gods had in the past. In this complex political, military and cultural environment, Augustine – Catholic Bishop of Hippo and theologian – defended Christianity against charges that God was failing to protect Rome and her people, as well as addressing the issue of whether or not Christians could serve in the army.

In his book City of God Augustine addressed the challenge to God’s authority by those who accused God of being unable to protect the city and people of Rome. Based on a biblical understanding of the kingdom of God, as well as Jesus’ statement that his followers ‘are not of the world, even as I am not of it,’ Augustine described the two cities that define human existence: the Earthly City and the City of God. These refer to an earthly, physical existence and an eternal life with God. He also set out how citizenship or membership of either city was to be determined: ‘I classify the human race into two branches: the one consists of those who live by human standards, the other of those who live according to God’s will.’ The priority for the Christian was to seek to belong to the City of God through both faith and good action, while those who did not know God, or rejected him, belonged to the Earthly City. Christians were therefore not to worry unduly about the city of Rome but instead focus on the City of God, the place where they, through faith, would ultimately reside with God for all eternity.

Possibly the most important of Augustine’s ideas for Christians in both the fifth and twenty-first centuries, and for anyone else who would serve in the military today, is his argument that there is such a thing as a just war. The purpose of a just war, as opposed to an aggressive war fuelled by greed or ambition, is the pursuit of a better state of peace: ‘Peace is not sought in order to provoke war, but war is waged in
order to attain peace’. Such wars are fought against tyrants or other power-hungry rulers that would threaten their neighbours:

The desire for harming, the cruelty of revenge, the restless and implacable mind, the savageness of revolting, the lust for dominating, and similar things – these are what are justly blamed in wars. Often, so that such things might also be justly punished, certain wars that must be waged against the violence of those resisting are commanded by God or some other legitimate ruler and are undertaken by the good.

According to Augustine, the pursuit of a better state of peace must therefore be for a good cause – such as overcoming the ruler with a savage lust for domination and a desire to harm others – and must be authorised either by God or a legitimate, and good, ruler. We can also see here the beginnings of an influential distinction Augustine makes in separating the moral responsibility of the king or ruler who takes a nation or empire to war from the responsibility of the soldiers who fight those wars. Of the moral responsibility of soldiers Augustine wrote:

Therefore, a just man, if he should happen to serve as a soldier under a human king who is sacrilegious, could rightly wage war at the king’s command, maintaining the order of civic peace, for what he is commanded to do is not contrary to the sure precepts of God ... perhaps the iniquity of giving the orders will make the king guilty while the rank of servant in the civil order will show the soldier to be innocent.

There are two aspects to Augustine’s argument about the moral responsibilities of the soldier. Firstly, Augustine was not primarily concerned with war per se, he was concerned with producing good Christians who would spend eternity with God and whose conduct on earth should reflect the values of God’s kingdom on earth. Therefore, as a general principle, individuals could only be held morally accountable, before God, for actions that they are directly and individually responsible for undertaking. Since the soldier has no say, and this remains as much the case today as it was 1600 years ago, in whether or not a war will be undertaken (because that decision is taken by the ruler or sovereign) the soldier cannot be held morally accountable for the decision. It is only for actions on the field of battle that the soldier will be judged by God. In the quote from Augustine here he goes further: even if the decision to go to war is wrong and taken by a sacrilegious king, the soldier remains morally innocent because he has upheld God’s civic order. This part of Augustine’s argument is based on Paul’s command in his letter to the Romans mentioned above: ‘Everyone must submit himself to the governing authorities, for there is no authority except that which God has established.’

While the modern political structure of the UK bears little resemblance to that of the Roman Empire in the fifth century, the idea of submitting to the authorities is one that is still relevant to all soldiers. The United Kingdom’s armed forces do the bidding of the civil authorities: the elected government of the day. In turn, junior ranks submit to the
authority of senior ranks. Submitting to authorities is not some ancient, Christian, irrelevant notion, it is set out very clearly in the Queen’s Regulations for the three Services: as are the punishments to be handed down for breaches such as desertion or insubordination or refusing to carry out a legal order. No matter how strongly a serviceman or servicewoman feels about some act of violent injustice, either in his or her own country or elsewhere, that individual has no right to take up arms and intervene under their own volition.

We should not think that Augustine happily tolerated those who made bad, or immoral, decisions to go to war. He was as concerned for the soul of the ruler as he was for everyone else’s souls. On making the decision to go to war he writes: ‘But the wise man, they say, will wage just wars. Surely, if he remembers that he is a human being, he will lament that fact that he is faced with the necessity of waging just wars; for if they were not just, he would not have to engage in them.’

Central to Augustine’s concept of the just war, an idea that remains as important to just war thinking today as it has in every century since, is the idea that a war should only be pursued for a just cause: the most important of which is defence of which Augustine calls ‘the common well-being’, or what we might refer to today as defence of the realm or national self-defence. He wrote:

\[
\text{it makes a great difference by which causes and under which authorities men undertake the wars that must be waged. The natural order, which is suited to the peace of mortal things, requires that the authority and deliberation for undertaking war be under the control of a leader, and also that, in the executing of military commands, soldiers serve peace and the common well-being.}
\]

The most important of Augustine’s ideas on the just war, which were largely unstructured and scattered throughout his extensive writings, were later taken, added to, and presented in a much more concise and coherent structure by Thomas Aquinas in the thirteenth century.

Aquinas, like Augustine, was both a monk and a priest whose chief concern was for Christians to live in a way that would honour God on earth and lead to an eternity with God in heaven. He wrote extensively on how Christians should live and conduct themselves, addressing a vast array of issues: from Christian doctrine to individual moral conduct. In his writings, Aquinas brought together ideas from a huge number of sources, the most important Christian influence being Augustine and his most important philosophical influence being the Greek philosopher Aristotle: both of whom had written on the notion of the just war. It is worth noting that Aquinas was only able to incorporate Aristotle in his writings because the works of Aristotle had been preserved by scholars in the Middle-East and translated and brought to Europe during the Crusades. Having weighed up the key arguments of the theologians and philosophers who had come before him, Aquinas succinctly codified the conditions to be satisfied for a war to be considered just:

\[
\text{In order for a war to be just, three things are necessary. First, the authority of the}
\]
The just war criteria that Aquinas set out – legitimate authority, just cause and right intention – are still at the heart of just war debate in the twenty-first century. However, there are some important differences to be taken into account. One of the differences between Aquinas’ time and the present is the relationship between political authorities and religious authorities. Aquinas wrote: ‘The secular power is subject to the spiritual, even as the body is subject to the soul.’ It was important to him that war should be authorised and commanded by the sovereign (and thus being granted legitimacy) as well as being fought for a just cause. The sovereigns in Europe at that time were usually kings and princes who owed their religious allegiance to the Pope and the Catholic Church, and one of Aquinas’ reasons for trying to limit when wars could take place was to preserve the life of Christians who would therefore meet in battle. In contrast, there are few sovereigns in the modern world who could authorise war in the way that Aquinas described, and even fewer, if any, who would submit to religious authority.

With regard to Aquinas’ second criteria, just cause, it is the United Nations (UN), and in particular the UN Security Council, that assesses the causes of war and decides whether or not a particular war is legitimate or justified in the twenty-first century. Individual states still have the right to self defence: ‘Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations.’ However, even that right only applies until the UN Security Council decides how to respond to an act of aggression against a member state of the UN. The third of Aquinas’ criteria for a just war, right intention, is very difficult to assess in a state-centric international system. With so many competing interests it is difficult in most political settings to determine the intentions of the actors involved. In reality there are usually multiple layers of motivations that underpin the intentions of any state that sets out to make war on another, even a defensive war.

Aquinas’ emphasis on right intention also has implications for soldiers who fight in battle. He took the biblical view that killing is wrong but, like Augustine, made an exception when it came to the soldier taking life in battle. Not only was killing in war acceptable for Aquinas, in the right circumstances it was positively the ethical thing to do. He wrote: ‘The common good of many is more Godlike than the good of an individual. Wherefore it is a virtuous action for a man to endanger even his own life, either for the spiritual or for the temporal common good of his country.’ In other words, the soldier who endangers his own life, or who takes the life of another in battle, is carrying out a virtuous act: as long as the killing is for the common good, such as defence of the soldier’s country or those who cannot...
defend themselves. Even then, killing in battle is only justified if it is absolutely necessary. The soldier must be committed to upholding the common good by winning in battle. If the soldier’s intention is to kill as many people as possible, regardless of whether they are combatants engaged in the war or simply innocent bystanders, then that individual should be subject not only to God’s eternal punishment but to legal punishment on earth as well. Aquinas words on the use of force are relevant to both soldiers and civilians today:

*Wherefore if a man, in self-defense, uses more than necessary violence, it will be unlawful: whereas if he repel force with moderation his defense will be lawful, because according to the jurists ... "it is lawful to repel force by force, provided one does not exceed the limits of a blameless defense."*

Soldiers on the field of battle today will be held legally accountable if they exceed the level of force authorised in their Rules of Engagement. Few will care about Aquinas’ notion of divine punishment but in the case of a war crime being committed an individual could be prosecuted at the International Criminal Court. British soldiers have stood trial in British courts in recent years as a result of illegal actions in the face of the enemy in Iraq, such as the beating and even killing of prisoners. In the centuries since Aquinas wrote about just war, many other great thinkers have contributed to this tradition of thought. In recent centuries increasing emphasis has been placed on the conduct of soldiers in war and the two just war terms that guide such conduct, legally as well as ethically, are discrimination and proportionality. Discrimination, in the just war sense, stresses the importance of targeting only legitimate combatants and avoiding the killing of civilians or noncombatants. This idea is captured in the Geneva Conventions, non-religious international humanitarian law to which the UK is a signatory, as well as individual combatants’ Rules of Engagement. A noncombatant is anyone not legitimately engaged in war. So, for example, once a soldier has been taken as a prisoner of war he or she is no longer a combatant. Similarly, a wounded enemy soldier who is disarmed and taken to hospital for treatment is a noncombatant.

Yet it is clear that the kind of interventionist war being fought in Afghanistan, like the recent war in Iraq, is not between two armies whose soldiers are clearly identifiable as such.

The final section of this article will examine some of the particular ethical challenges surrounding war in the twenty-first century by exploring Tony Blair’s justification of the 2003 Iraq invasion, before going on to examine the ethical implications for combatants fighting against a highly motivated insurgent enemy. What becomes apparent is that while some of the philosophical underpinnings of just war remain in political and military discourse in the West (such as the pursuit of justice and the prevention of unnecessary death or suffering), the theological motivations that helped shape the tradition over many centuries are no longer applied and state policies are not dictated by a desire to enter the Christian’s heaven.
War in the Twenty-First Century

To begin to understand Blair’s justification of Iraq in 2003 it is necessary to comprehend the moral implications of the almost aggressive internationalism he advocated at the conclusion of the twentieth century. In April 1999, as NATO bombarded Yugoslavia with the intention of forcing Slobodan Milošević to stop his soldiers’ attacks on Albanian Kosovars, Blair set out his internationalist credentials:

*Globalisation has transformed our economies and our working practices. But globalisation is not just economic. It is also a political and security phenomenon. We live in a world where isolationism has ceased to have a reason to exist. By necessity we have to co-operate with each other across nations ... We are all internationalists now, whether we like it or not.*

Blair did not simply want to increase global trade or cultural exchanges and he did not seek to expand migration or make travel across borders easier. He sought to expand the concepts of globalisation and internationalism to include the strengthening or reforming of international institutions so that the rights of oppressed peoples could be protected: by force where necessary. He continued:

*Many of our domestic problems are caused on the other side of the world... These problems can only be addressed by international co-operation ... We cannot turn our backs on conflicts and the violation of human rights within other countries if we want still to be secure ... We need new rules for international co-operation and new ways of organising our international institutions.*

Blair’s internationalism was presented in terms that prioritised the protection and even enforcement of individual human rights. On one level he could be commended for adopting an ethical position that prioritises concern for the vulnerable and downtrodden of the world. Such an attitude reflects the biblical injunction: ‘Love your neighbour’. During his time as Prime Minister Blair’s advisors sought to play down any impact his Christian beliefs may have had on his decision making for fear of causing outrage or offence. Yet throughout his tenure he worshipped in church regularly and was attended regularly by a personal chaplain. Shortly after his resignation as Prime Minister he converted to Roman Catholicism. More recently Blair acknowledged: ‘I believe, as someone of Faith that religious faith has a great role to play in an individual’s life’. Despite this, he probably did not invoke internationalism as an expression of his own religious belief and practice but he did draw upon a moral discourse – the responsibility for the strong to look out for the weak and vulnerable – that has ancient Christian connections and general acceptance in secular society. The difficulty of adopting such an approach is that it contradicted the rights of states to exist free from external interference: rights which, according to international law enshrined in the Charter of the United Nations, should be considered inviolate: ‘All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations’.
Despite the constraints set out in international law, Blair suggested new rules that could govern intervention in other states:

So how do we decide when and whether to intervene. I think we need to bear in mind five major considerations: First, are we sure of our case? … Second, have we exhausted all diplomatic options? …Third, on the basis of a practical assessment of the situation, are there military operations we can sensibly and prudently undertake? Fourth, are we prepared for the long term? … And finally, do we have national interests involved?40

The five criteria for military intervention that Blair set out correspond remarkably with the jus ad bellum criteria that had characterised the just war tradition for centuries: just cause, last resort, reasonable chance of success, proportionality and right intention.41 However, no matter how commendable or otherwise Blair’s internationalist aspirations were, he could only achieve his aims if he ignored, changed or somehow circumvented international law. This, in turn, posed a significant dilemma for Blair when it came to justifying the UK’s involvement in the 2003 Iraq invasion.

One of the reasons the US/UK-led invasion of Iraq in 2003 caused so much controversy around the world is that it was not explicitly authorised by the UN Security Council. It was not authorised because three permanent members of Security Council, and some others, were not satisfied that there was sufficient cause to justify such action at the time it was taken: the only legal basis for war in the UN Charter being national self-defence. Saddam Hussein was not co-operating with UN weapons inspectors but, equally, it could not be shown conclusively (and events subsequently proved opponents of the invasion correct) that he posed a direct threat to the UK, the US or even his neighbours. In addition, many people remained unconvinced that the intentions of the UK and US matched up to what was being said in public by senior government officials. The publicly stated intentions of the UK and US leadership included the following: to rid Iraq of weapons of mass destruction (WMD) and make the world safer; regime change; getting rid of Saddam Hussein; promoting democracy in Iraq; and keeping the people of Iraq safe from Saddam’s brutality. Even granting that Blair and Bush were genuine in their concern for oppressed Iraqis in 2002/3 neither they nor previous administrations in the UK or US had shown the same degree of concern in 1988 when the worst of the atrocities took place: the chemical bombing of Iraqi Kurds in Halabja. Adding to the complexity of the issue of intention was Iraq’s location above one of the biggest oil deposits in the world. As a result the accusation of ulterior motives was, and still is, levelled against the Americans, the British and their allies.

Although Blair used ancient and widely accepted Western just war ideas in his proposed new interventionism in 1999, the world by and large remained sceptical. Despite his apparently well-intentioned plea and the seemingly sound moral arguments that it was based upon, other Western states failed to rally behind him. In addition, in many non-Western states Blair’s ideas were interpreted as a new form of Imperialism. This scepticism was
subsequently borne out in relation to Iraq when Blair failed to satisfy a number of the conditions he himself had proposed in 1999:

First, are we sure of our case? ... Second, have we exhausted all diplomatic options? ... Third, on the basis of a practical assessment of the situation, are there military operations we can sensibly and prudently undertake? Fourth, are we prepared for the long term? ... And finally, do we have national interests involved?42

Had Blair followed more stringently his own guidelines here for military intervention he may have had to either cancel or postpone the UK’s involvement in the March 2003 invasion. The UK’s two most senior international lawyers at that time were Sir Michael Wood and Elizabeth Wilmshurst, Legal Adviser and Deputy Legal Advisor to the Foreign and Commonwealth Office. Appearing before the Chilcot Iraq inquiry in 2010 they have both been critical of the government’s approach to the legal basis of the 2003 intervention. The Inquiry received a Minute to the Foreign Secretary’s office dated 23 January 2003 and written by Sir Michael Wood:

> a further decision of the Security Council is necessary if the use of force is to be lawful ... I hope there is no doubt in anyone’s mind that without a further decision of the Council, and absent extraordinary circumstances (of which, at present, there is no sign), the United Kingdom cannot lawfully use force against Iraq to ensure compliance with its Security Council Resolution WMD obligations.43

Sir Michael’s position was reinforced by his deputy Elizabeth Wilmshurst who was similarly dissatisfied with the legal basis action against Iraq. She resigned over the issue on 18 March 2003, the eve of the invasion, and in her resignation letter wrote: ‘I regret that I cannot agree that it is lawful to use force against Iraq without a second Security Council resolution to revive the authorisation given in SCR 678 [for the 1991 military action against Iraq].’ 44

The passage of time has not, however, altered Blair’s view of his approach. In a television interview on 13 December 2009 he was asked:

**Britton:** If you had known then that there were no WMDs, would you still have gone on?

**Blair:** I would still have thought it right to remove him. I mean, obviously, you would have to ... deploy different arguments about the nature of the threat.45

This line of reasoning is echoed by Blair in his autobiography where he concludes his account of the 2003 Iraq intervention as follows:

> All I know is that I did what I thought was right. I stood by America when it needed standing by. Together we rid the world of a tyrant.46

Blair clearly considers the removal of Saddam Hussein as his key achievement in relation to Iraq. However, he was advised by the Attorney General in July 2002 ‘that regime change was not a basis for legal – for lawful use of force’.47 The matter is complicated further by his evidence to the House of Commons Liaison Committee in July 2003 where he stated unequivocally: ‘I accept entirely the legal basis for action was through weapons of mass destruction’.48 Such a change in
emphasis over time by Blair – from ridding the world of WMD to ridding the world of Saddam Hussein (when regime change runs contrary to international law) – has done little to allay concern amongst the British public and many members of the armed forces that the 2003 Iraq intervention was not justified as satisfactorily as it could have been. One consequence is that it will be more difficult for a future Prime Minister to take the UK into even the most just and justified of wars. Regardless of the outcome of the ongoing Chilcot Inquiry into the 2003 Iraq War history is unlikely to be kind to Blair on the matter. This will not be a consequence of the failure of just war ideas in the twenty-first century: it will be a consequence of Blair’s failure to satisfactorily apply just war principles that he had previously advocated.

Moving on from ad bellum concerns to in bello challenges, the final section of this article now examines some of the ethical difficulties facing US, UK and other NATO combatants in their long campaign against a highly motivated insurgent enemy in Afghanistan. Alongside Iraq, the war in Afghanistan has defined the early years of the twenty-first for the British and allied armed forces. UK forces entered Afghanistan as part of a collective NATO response to the attacks on the United States in September 2001. These attacks, in turn, were planned by Al-Qaeda cells that had been allowed to freely operate training camps by the Taliban regime at that time, at least partly motivated by an extreme, anti-Western version of Islam.

Militarily, the might of the US, UK and other NATO forces that entered Afghanistan in 2001/2 was overwhelming. As with the subsequent invasion of Iraq the conventional war was won in a matter of weeks. In both Iraq and Afghanistan short, sharp conventional wars gave way to lengthy counter-insurgency wars against highly motivated enemies who were, and are, determined to remove what they see as occupying powers from their lands. All of the military advantages provided by aerial reconnaissance, precision guided missiles and other high-powered airborne weapons, tanks and heavy armour, count for very little against an enemy that is hard to find and expert at laying well hidden and highly effective roadside bombs. In Afghanistan, more than 1800 coalition military personnel have been killed to date, with numbers continuing to rise quickly. Complicating the matter further for the allied combatant in 2010 is the uncertain nature of the mission in Afghanistan. If the initial invasion was a reaction to the 9/11 attacks on the US and a denial of training grounds to Al-Qaeda, recent reasons given by the UK and US governments for continued engagement in Afghanistan include: support of a fledgling democracy; making Europe safe from terrorist attack; promotion of human rights, especially for women and girls; reduction of the export of heroin; and advancement of regional stability. In the midst of this political uncertainty members of the British armed forces are asked to expose themselves to considerable risk.

So what is the relevance, if any, of just war principles to British combatants serving in a campaign that looks
increasingly unwinnable, against the backdrop of public opinion that is increasingly opposed to their ongoing involvement and a government whose support appears fragile, time-limited and cash poor? The first answer to this question can be found in the written guidance on the law of armed conflict that is issued to every combatant:

*All personnel must be aware of the basic rules of the law of armed conflict, including the practical application of the principles of military necessity, proportionality, distinction and humanity... [And] Comply with the law of armed conflict and with Service law.*

These instructions provide explicit guidance on how combatants emerge as just in the conduct of war: ‘Comply with the law of armed conflict’. Such legal requirements include the responsibilities of combatants set out in the Geneva Conventions to which the UK is a signatory. I want to consider two aspects of this instruction: the means by which such compliance is achieved and the just war discourses that this instruction draws upon.

The Geneva Conventions stipulate that combatants should be taught the law of armed conflict as part of the requirements of international humanitarian law. Conformity to the Geneva Conventions should, according to the guidance provided by the International Committee of the Red Cross, be enforced through military instruction based on military manuals and informed by ‘military pedagogy’: ‘in exactly the same way as the preparation for combat’.

A number of supplementary instructional methods are specified: ‘lectures, films, slides, audio-visual methods, war games including questions and answers etc’. The British armed forces, like many others around the world, use such techniques to ensure that their combatants are familiar with the law and know how to act in conformity to it. As a result, the soldier emerges as just through adherence to the law, reinforced by disciplined repetition and training.

The aspects of law with which combatants must be concerned include: ‘the practical application of the principles of military necessity, proportionality, distinction and humanity’. These principles can all be found in the just war tradition and their meanings have remained reasonably stable over the centuries. However, closer examination of one of these factors will be sufficient to show how the ideas that underpin just war have changed. Take, for example, ‘military necessity’. For Augustine, 1600 years ago, the just warrior would only carry out such actions on the battlefield as are required by ‘stern necessity’. However, it is not the execution of ‘necessary’ actions in war that constituted Augustine’s soldier as ethical. Augustine’s primary concern was for the soul of the Christian, in this context the soldier. He encouraged the Christian to live a good life on earth with the aim of achieving eternal life in the heavenly City of God. In contrast, British Rules of Engagement no longer have a religious basis: they are based on the requirements of secular law. While modern notions of necessity, proportionality, distinction and humanity owe their heritage to Christian just war writers over the centuries in the West, their current
framework is non-religious and law oriented.

It is easy to demand that combatants exercise proportionality and discrimination when they are engaged in war fighting but the nature of war so far in the twenty-first century has made this increasingly difficult. In Afghanistan, like Iraq, it is almost impossible to tell friend or foe because of a lack of military uniforms. The insurgents are civilians, members of Afghan society, and they launch attacks on NATO forces from amongst their fellow civilians. Yet soldiers are still required to distinguish between legitimate targets and innocent bystanders. Furthermore, such tactics by Taliban or Al-Qaeda fighters can only be successful if UK and other NATO personnel are restrained in their responses and not indiscriminate in reprisal attacks. Those who choose to delay, even slightly, before returning fire, dropping a bomb or launching a missile, in order to protect the innocent, may well increase the risk to themselves. However, that is what just war and international humanitarian law demands: combatants should accept additional risk to reduce the danger to the noncombatant.

Conclusion

As a result of the tactics adopted by the Taliban and Al-Qaeda some would argue that ‘the gloves need to come off’, suggesting that increased aggression and less discrimination by NATO forces would be more militarily effective. On the surface such an approach is appealing, especially for combatants who stand in the firing line and politicians who want quicker results. Such a temptation must be resisted because it would simply ensure a bigger loss for the UK and its allies. The loss would take a number of forms. I suggest that the first loss would be military defeat, which may still happen anyway. If the UK knowingly unleashes a brutal war fighting machine on the civilians of Afghanistan, some of whom might be Taliban fighters and some not, the remaining fragile support for the campaign by the British public would evaporate. With the UK being a signatory to the International Criminal Court British politicians and military commanders who advocated such an approach would leave themselves open to prosecution. As Carl von Clausewitz, the great Prussian strategic theorist, pointed out two centuries ago in his book On War, the military needs the moral and material support of the people and the political support of the government if it is to successfully engage in war. The second loss that the unrestrained use of force would incur would be the loss of British self-identity that for most citizens is characterised by a sense of justice and fair play. For the British people to have to see themselves as deliberate purveyors of indiscriminate destruction would be a demand too far. Finally, any claim that the UK could make to being a force for good, particularly in Afghanistan, would be ridiculed around the world. The long-term consequences for a country that is rich in history but small in size and poor in natural resources could be severe.

The only practical option, therefore, for the UK in making war in the twenty-first century is to engage with
just war principles. One consequence of the ongoing doubts about Prime Minister Blair’s justification of the 2003 invasion of Iraq is a sense among the British people that they were somehow misled. If or when the time comes that the present, or a future, Prime Minister believes it to be essential for the UK to go to war again it is likely that the British people will demand a higher burden of proof than might previously have been the case. In the execution of war, especially interventionist wars like Afghanistan, proportionality and discrimination will be essential if support for war is to be maintained and a positive outcome achieved. If the constraints of engaging an enemy in a just manner results in a sense of fighting with one hand tied behind our backs so be it. This is a price that must be paid if the values that Britons claim to cherish are not to be sacrificed on the altar of military expediency.

Notes

1 Joshua 1:4. Unless otherwise stated, all bible references are taken from the New International Version.
2 Text from Joshua 4:13; 6:2; 6:20, 21.
3 Exodus 20:13, King James Version.
4 For example, the New International Version.
5 See also 1 Samuel 15: ‘This is what the Lord Almighty says: “I will punish the Amalekites for what they did to Israel when they waylaid them as they came up from Egypt. Now go, attack the Amalekites and totally destroy everything that belongs to them. Do not spare them; put to death men and women, children and infants, cattle and sheep, camels and donkeys.”’
6 Isaiah 2:4.
7 Ecclesiastes 3:1, 3, 8.
10 This declaration is also found in Mark 1:15 and Luke 10:11, though in Matthew’s gospel Jesus is recorded as referring to the kingdom of heaven, rather than the kingdom of God. A difference usually attributed to the cultural and religious differences in the audiences for which the respective gospels were intended.
11 Matthew 5:39.
12 Matthew 26:50-52.
13 Matthew 26:47.
14 That the crowd had no legitimate authority for their actions is evidenced by what happened after Jesus had been brought before the religious authorities: he had to be taken before the Roman governor Pilate who, alone, could authorise punishment for his alleged crimes.
15 Matthew 8:10, 13.
16 See Matthew 4:18-22; Mark 2:14; John 1: 35-51.
19 Romans 13:1.
20 John 17:16.
23 Augustine, Against Faustus the Manichean, Ch. XXII.74, in Fortin, E.L. and Kries, D. (Eds.) Augustine: Political Writings, Trans. Tkacz, M.W. and Kries, D. (Indianapolis: Hackett,

Romans 13:1.

Augustine, City of God, XIX.7, p. 861/2.

Augustine, Against Faustus the Manichean, p. 81.


Matthew 5:43.


Blair, op cit.


Blair, 1999, op cit.


Blair, Interview with Fern Brittan, Broadcast Sunday 13 December 2009, BBC 1 TV.


Id.

Aide Memoire, op cit.

Id.
Prevention is better than Cure: What is the Utility of Air Power in Conflict Prevention?

By Group Captain Clive Blount

Against the aspiration for an ‘adaptable Britain’ and a need to get maximum value from a taut force structure, the flexibility and adaptability of air power provides decision-makers with a key crisis management tool – across the whole spectrum of conflict. In this article, Gp Capt Blount examines this utility, asking how air power can be used to prevent recourse to war to solve conflict. After first describing the range of conflict prevention, from upstream engagement - such as defence diplomacy or security sector reform - to deterrence and coercion, he then goes on to describe the attributes of air power that make it uniquely suited to support conflict prevention activity. Using historical examples, he demonstrates that air power provides decision makers with strategic choices unavailable from the deployment of other force types. Blount then summarises with a list of the key properties of air power as a conflict prevention tool.
Introduction

The National Security Strategy clearly states\(^1\) why the UK must attempt to influence events abroad in order to safeguard its security at home. This policy, combined with such liberal interventionist strategies as ‘A Force for Good’\(^2\), has led to a series of major expeditionary operations by British forces in recent years, several of which have led to long-term commitments from which disengagement has been increasingly difficult. As the character of conflict has changed - from that of wars between opposing armies, fighting for their respective national wills and seeking destruction of the opposing army, to that of ‘War among the People’ where the aim is to influence the will of those people in the national interest - the outcome of intervention has become indecisive, generally resulting in a change of conditions whilst leaving the underlying conflict and fundamental causus belli intact; this is illustrated by the fact that of the 39 current conflicts, 31 are re-emergences of previous conflicts.\(^3\) Whilst the UK Military Instrument should always be ready to fight for our National Interest, and indeed a high-end combat capability must absolutely remain our raison d’être, the old adage ‘Prevention is better than Cure’ suggests that use of military capability to prevent conflict is a preferable option.

Conflict Prevention in the national interest is a strategic level activity that must, by its very nature, involve all elements of national power to engage in a region and to bring influence to bear. It will range from early engagement, to develop an early understanding of the region and to build UK influence, through an entire spectrum of engagement in, and national commitment to, the region, to actions just short of full military intervention in a war. It should always be remembered however, that prevention has its practical limits and is very much enabled by a credible threat… traditional ‘hard power’.\(^4\)

Air power, with its inherent strengths of speed and reach, has a flexibility and agility that gives it wide-ranging utility across the whole spectrum of conflict and is likely to play a full part in any future conflict prevention activity. My intent in this article is to look first at the spectrum of activity involved in preventing a possible conflict, and then describe some of the stages that may be followed in an attempt to contain an emerging crisis. I will then examine each stage in turn to establish possible roles that air power may play in support of that activity. I will conclude by summarising the key properties of air power as a conflict prevention tool.

The aim of conflict prevention activity must ultimately be containment of an emerging crisis before it becomes conflict. However, early engagement by the UK in a region may be effective in influencing regional tensions at an even earlier stage. Generally, early engagement should be driven by UK Foreign and Security objectives (ie. the national interest) and should be co-ordinated activity across government, including such departments as the FCO, DfID and the DTI, as well as the MOD. Early engagement visibly demonstrates the UK’s interest in the region and could send early deterrent messages to a potential aggressor. Activities in which Defence capabilities may play an effective role include capacity
building, (including training and support to Defence Sales) key leadership engagement, security sector reform and support in developing key infrastructure. The UK has a history of being widely respected for excellence in the defence arena, both in equipment terms and with a reputation for being a ‘fighting nation’, so any offer of UK military capabilities in support of engagement activities would doubtless be most attractive. It must be noted, however, that reputations can be fragile, and credibility must be protected if engagement is to form part of national strategy. In addition to these focussed activities, engagement in a region enables us to be immersed in the local culture, environment and politics, enabling a much more in-depth understanding. Even if engagement activity does not prevent a conflict, this understanding will be key to effective crisis management and would enable us to be much more effective if intervention is eventually required. Finally, trust and cooperation amongst friends and allies cannot be surged in time of crisis - they need to be nurtured in advance; mutual understanding, friendship and partnership building are central to this early engagement.

As a crisis develops, our involvement will turn from that of building influence to the aforementioned containment of the growing situation. Given that our engagement activity has, hopefully, enabled us to influence allies and partners not to escalate any disagreement, our aim must be to deter or dissuade a potential adversary from taking an escalatory path or, indeed, to coerce or persuade him to change course to a more acceptable course of action. As both these activities are essentially targeted at the decision-making apparatus of the adversary in an attempt to manipulate his will, the methods used must be agile enough to adapt as the adversary reacts, either turning the ‘heat’ up or down as required, and should ideally be scaleable to allow varying levels of commitment on behalf of UK decision-makers. The aim must be to control the process - which is rarely as linear as providing a straightforward threat/consequence calculus (the adversary ‘has a vote’) – we must ensure that our use of power is intelligent in order to avoid unwanted escalation or circumstances that allow the other side to manipulate our decision processes. It is very much a dynamic process, the aim of which has been described as escalation dominance and defined as ‘The ability to increase the threatened costs to an adversary while denying the adversary the opportunity to negate those costs or to counter-escalate’. Finally, as containment activities approach the more aggressive end of the spectrum and the possibility of conflict increases, the use of military power in coercive activities may also be used to provide a ‘shaping’ effect in preparation for future conflict.

Air power has a number of unique attributes that provide strategists and policy-makers with a flexible engagement tool which can easily be scaled, both in terms of ‘military’ effect and level of commitment. Let us now discuss the utility of air power at several points in the crisis management spectrum in an attempt to establish the particular attributes of air power that make it useful in conflict prevention.
The first area in which brings a unique capability is that of early engagement. The speed and reach of air power enables it to be used in a scaleable fashion across the crisis spectrum. The deployment of small numbers of aircraft, ‘flying the UK flag’ in support of diplomatic or economic activity, could be achieved quickly and with a small host nation support (HNS) requirement or logistic footprint. Scale can easily be increased to larger deployments - such as squadron exchanges or exercises - or, perhaps just as usefully, can be scaled back rapidly in the event that political direction requires it. The influence effect of, for instance, a deployment of fast jets to a country unused to such aircraft can far outweigh the small cost of such a deployment. Air power can be employed rapidly, in a militarily low-key fashion, but can achieve significant effect. In 1988 a unique operation, EXERCISE GOLDEN EAGLE, was undertaken by 29(F) Sqn from RAF Coningsby. The exercise, spread over 11 weeks, involved flying four of the recently introduced to service Tornado F3s 26,500 miles around the world via Malaysia, Thailand, Singapore, Australia and the USA. The event was principally designed to prove the long range reinforcement capability of the Tornado F3 by deploying in support of the Malaysian Peninsular Five Power Defence Arrangement but also provided a demonstration of Royal Air Force planning, airmanship and logistics support. More recently, in Autumn 1998, NATO was holding a Partnership for Peace Exercise, EXERCISE CO-OPERATIVE BEST EFFORT 98 in Macedonia. The exercise was intended to be a tactical infantry section-level exercise for NATO and partner nations but became more strategically significant as the crisis in Kosovo to the North began to escalate. SACEUR, General Wesley Clark, directed that measures should be taken to develop the exercise in order to declare NATO interest in the region and to reassure Macedonia and neighbouring countries of NATO resolve. Air power was the chosen instrument and, within a number of weeks, an air display was arranged for the opening of the exercise with a small number of fast jet flypasts, a parachuting display and a demonstration of a NEO operation by the US 22nd Marine Expeditionary Unit. The event was widely publicised and covered by the regional media. While it is difficult to assess the direct effect of this action, as it was just one of many airpower demonstrations and several ongoing diplomatic and military activities aimed at coercing Milosevic but, by the end of October, large numbers of Yugoslav forces has been withdrawn, an OSCE mission had been deployed, and SACEUR claimed victory for coercion by air power. The events of the following year perhaps subsequently proved otherwise, nonetheless the utility of air power to provide rapid influence effect is unquestioned. Furthermore, the subsidiary effect of exposing the somewhat basic Macedonian ATC services and armed forces to the issues involved in co-ordinating NATO air power undoubtedly paid dividends a year later during OP ALLIED FORCE and during the country’s eventual accession process to NATO.

As the last example has shown, a key part of early engagement is that of
building indigenous capability. In capacity building, and in developing broader wider influence, air power can again provide an agile tool. Unlike other forms of military power, there is a subtle difference between military aircraft and military air power. Many people are interested in military aircraft without being particularly interested in warfare; most aviation magazines cover, equally, military and civil topics. It is possible therefore for air power to have a positive effect without necessarily appearing overtly combative in nature, and this may be a useful property for strategists to exploit. For example, the training of military pilots from other nations in elementary and advanced flying has long been a UK strength, most recently evinced by the training of Afghan helicopter pilots at Boscombe Down, but the development of deployable military experts to develop indigenous civil aviation capability – in the absence of a local aviation authority or ‘deployable CAA’ – provides a valuable option for the diplomatic and economic lines of operation. The role of RAF Gibraltar, whilst a key part of the PJHQ-run Permanent Joint Operating Base established for contingency operations, uses spare capacity to provide a vital service to the Colony as ‘Gibraltar Airport’. A Colony of less than 30,000 persons would be unable to afford to run a civil airport, without which its independent status would be much undermined. The presence of an RAF airfield provides the UK Government with a useful tool to influence diplomatic, military and economic affairs in the region. Along the same lines, but in less-established areas, the ability of an air force to deploy to austere operating strips with no control infrastructure, and to develop these as capable operating bases, is a unique capability existing in very few non-military organisations. Whilst a dedicated deployable airfield activation party, along the line of the RAF Construction Wings and Servicing Commandos of the Second World War, is likely to be uneconomic, military skills in this area, such as those now provided by the Royal Engineers and such units as Tactical Comms Wing, may prove to be a key means of building influence in a region. Again, it is clear that air power provides scaleable effect; assets can be deployed to immediately boost indigenous capability by adding that ‘Air Power Advantage’ to less developed or militarily capable countries. It was to achieve this effect that the USAF provided air power support to South Vietnam in the early stages of John F Kennedy’s presidency in 1961 under such auspices as Operation FARM GATE. Under such schemes, squadrons were specifically trained to fill the role of providing air power support to developing nations, in order to counter the perceived threat from communism under Khrushchev’s ‘Wars of National Liberation’. Known colloquially as ‘Jungle Jims’ these forces consisted of a number of bespoke mobility, attack and specialist COIN aircraft and had personnel capable of operating alongside, or training, indigenous forces. They were used overtly to send a message of US intent by equipping and training indigenous forces or, as in 1961, relatively covertly as ‘advisers’ to the South Vietnamese military.
Strategically, however, the perception that the crisis was largely communist in nature – rather than nationalist and anti-colonialist – and the behaviour of the government in Saigon undermined any conflict prevention activity. As the crisis in Vietnam deepened, so did US commitment, and there was a move from conflict prevention to counter-insurgency - with advisors being cleared to take a gradually more aggressive role, eventually participating in combat operations. On a less ambitious level, and rather more commonplace, the provision of loan service personnel has always been a cost-effective measure of building capability, reassurance, influence and, indeed, understanding.

As a threat begins to emerge, it becomes important to provide reassurance to our Allies in the region – both to send a message of UK intent to potential adversaries, but also to influence our friends’ policy choices. (For instance, to prevent our allies from taking precipitate steps out of fear or for self-preservation). As stated previously, deployments of military aircraft are a quick and straightforward way of demonstrating intent and, again, provide policy-makers with flexibility; the effect may range from the totally unthreatening - such as the Red Arrows (a clear demonstration of Britain’s skill and airmanship) - to an obvious signal of intent sent by the arrival of a package of armed fighters; multi-role capability enables aggressive intent to be rapidly adjusted from, say, the defensive posture of Typhoons in the Air Defence-role, to an aggressive stance by arming the same aircraft with attack weapons. In a broader sense of multi-role capability, many military aircraft can have much utility in non-military roles; ISR support of border and customs authorities by patrol aircraft and disaster relief and support to development agencies by mobility platforms, are but two examples of how air power can reassure and support a foreign government under pressure. Furthermore, air power may be the only way to rapidly deliver aid to a starving population on the verge of revolution, as part of a comprehensive approach to supporting a regime and maintaining regional influence. The strategic effect of the Berlin Airlift in demonstrating intent and providing succour to the starving, besieged, West Berliners is well documented; in more recent times, the rapid use of air power to reassure was evinced by the deployment of Tornado F3s to Lithuania to fill a QRA role in 2004 - demonstrating NATO resolve to protect the newly acceded Baltic States. Indeed, Control of the Air is likely become of increasing importance as it is a key enabler to many of the activities that follow, should the crisis develop, so early deployments of Air Defence aircraft and battlespace management assets are highly likely, and have much utility, in many scenarios.

The deployment of air power can aid the development of a regional ‘picture’ to build understanding of the area and the issues surrounding the crisis. Deployment of air ISR assets enable early intelligence picture building and have great utility in providing information to aid strategic decision-making. The deployment of Canberra PR9 ac to Central Africa in 1996 provided early indications that a feared resurgence of the Hutu/Tutsi
massacres - much predicted by the media and accompanied by heavy public pressure that the UK ‘must do something’ - was actually not taking place, enabling UK decision-makers to hold back from commitment until confirmation proved that UK troops were unnecessary. The operation of even non-specialist ISR capabilities add a deal to the wider understanding of a region and is invaluable in partnership building – particularly if conflict prevention fails. As stated in the introduction, once a threat becomes clearly apparent, conflict prevention activity naturally turns to containing that threat. Thinking on the use of military power in activity such as this, particularly outside of the traditional nuclear arena, is still very much in development but the potential of the use of co-called soft national power is clearly recognised. This paper will now discuss the utility of air power in deterrence and coercion activity. Whilst military power can play a significant role in both of these activities, it should be remembered that the ‘target’ is essentially the mind of an adversary. The aim is to influence the decision-making process and to manipulate the will of an opponent and, as such, must remain firmly in the realm of a comprehensive approach using all the components of national power. However, as will be shown, air power’s unique attributes enable it to contribute in many areas.

Deterrence represents the effort to dissuade an adversary from taking an escalatory path. Again, high profile air deployments might quickly, and relatively cheaply, demonstrate intent. The speed at which this can be achieved with air power was clearly demonstrated in 1991 when, within 48 hours of Saddam Hussein’s invasion of Kuwait, in an attempt to show support for Saudi Arabia and to deter Saddam Hussein from driving his forces further south, Tornado F3s were patrolling in support of the air defence of Saudi Arabia in conjunction with US aircraft, followed into theatre some 24 hours later by Jaguars attack aircraft. Again, this rapid effect was built on to eventually provide a robust air power force for the subsequent liberation of Kuwait, although it could just as easily have been scaled back quickly if the political situation had so demanded. This illustrates a unique advantage of air power over other military capability; the time that it would take to deploy a land battle group by sea does not afford decision-makers the agility to be able to recall, and maybe, redeploy as a situation rapidly changes over time. Once deployed in theatre, the level of air power activity can be controlled to, again, achieve a scaleable effect. This enables policy-makers to control and direct the development of a burgeoning crisis. Exercises, patrolling and firepower demonstrations can all be conducted at varying levels of visibility. Furthermore, air power can be used to support cross-government activity ranging from MACP-type activities, or in support of NGOs, through parades and other diplomatic activity in order to demonstrate UK intent and support.

The psychological effects should not be discounted, particularly in less technologically-inclined nations or nations not used to large deployments of military air power, and again speed, reach and ubiquity
enable an early psyops campaign to be heavily supported from the air – which, as demonstrated by the use of airborne broadcast speakers during the Malaya campaign and again by the psyops assets of the FARM GATE deployment, can be particularly effective in areas where accessibility by other means is limited (by terrain, for example). The psychological effects of the use of air power as the crisis develops should also not be overlooked; we are becoming increasingly familiar with the tactical use of air power in shows of force etc, but the ability to operate at will over enemy territory and to strike ground targets, seemingly without counter, has a significant effect on enemy morale and will to fight. Conversely, we must be cognisant of the potential negative effects of air power, particularly unmanned systems, and specifically the risk of appearing as a ‘hi-tech bully’ - giving the enemy military, and populace, a rallying point against a distant enemy, unwilling to face an ‘honourable’ death. Inability to counter the ‘cowardly threat’ that modern air power presents is likely to become the key driver for an asymmetric response - which may change the nature of the conflict and certainly complicates the policy-makers’ problem.

Coercion is often seen as the harder end of containment but, even though kinetic effect may play a key part in coercive activity, it should still be remembered that the target is the opponent’s mind. It is often difficult to distinguish between pure brute force operations to destroy a target and coercive attacks. For instance, the Israeli attack on the Osirak reactor was intended simply to destroy the Iraqi nuclear programme. However, the clear demonstration that Israel had the ability to strike at will, deep in Iraqi territory, probably influenced Saddam Hussein’s decision-making processes in the following years. The BLACK BUCK raids on the airfield at Port Stanley, whilst designed to deny the runway to Argentinian reinforcements, had a significant coercive effect on Argentinian decision-makers by demonstrating that Britain had the capability to strike at extreme range - particularly targets on the Argentinian mainland. Likewise, although the US struck a range of political and military targets during ELDORADO CANYON which doubtless hindered President Gaddafi’s ability to exercise regional power, the success of the operation was really demonstrated by the change in his subsequent behaviour and his ceasing to sponsor terrorism (although relatives of the victims of Flight Pan Am 103, may disagree). Much has been made previously of air power’s speed and reach, but it is as a crisis develops that another fundamental characteristic of air and space power comes into the equation; namely, height. Air power can look ‘over the wall’ into a potential enemy’s territory and can be used both to gather information and, in due course, to deliver selective effects at range as part of a coercive strategy. Space, obviously, provides the ultimate high ground, with little restriction on overflight and the ability to gather information about an adversary with minimal political risk of escalation. Developments of a future ability to attack targets on the ground from space, whilst subject to serious legal debate, take this
capability to the ultimate coercive tool. It should not be forgotten, however, that air power was effectively the sole military tool used to coerce Saddam Hussein’s Iraq for over 10 years during Operations NORTHERN WATCH and SOUTHERN WATCH. In addition to providing a range of scaleable effects both in terms of footprint and military effect, air power can also provide scaleable effect in terms of political visibility. For example, Unmanned Aircraft are being used to kill key Al Qaeda foreign fighters in Northern Pakistan, where a land force to achieve a similar effect would be politically unpalatable. Similarly, it is widely thought that, in 2007, Israeli air power intercepted and destroyed convoys of arms shipments in Somalia that were destined for Hezbollah, and was also responsible for the destruction of nascent Syrian nuclear facilities – although Israel has never publicly accepted responsibility for these actions. Intriguingly, the Syrian attacks were most probably aided by significant cyber operations, which rendered the Syrian IADS impotent, an early indicator of how important such activities may become in the future.

Finally, In addition to deterrent or coercive effect, air power actions can be used to shape the battle space to prepare for war in the event that conflict prevention fails. Targets, kinetic or otherwise, chosen to produce a coercive effect may also be key in preparing for any future campaign, so consideration should be taken to the wider campaign when planning the early stages. Attacks on air defence systems, for instance, as a show of kinetic intent during a coercion effort, will also have utility if it is required to suppress enemy air defences as part of war-fighting operations if prevention fails. Again, any ISR effort to develop understanding during prevention operations will be key to planning future war-fighting campaigns.

Summary of the Properties of Air Power as a Tool in Conflict Prevention

So then, air power has inherent qualities that make it a unique instrument that strategists and policy-makers can deploy in order to influence future events, manage crises and potentially prevent conflict as part of a comprehensive UK response. This utility can be summarized as a number of key ‘headlines’; they are:

**Agile Commitment.** Air power provides an agile instrument that may be applied in a controlled manner by policy makers. Its effect is scaleable, in that a wide range of military (and other) effects may be delivered as size, type, basing and support options are highly flexible. This allows rapid adjustment and strategists are able to ‘turn the volume knob’ either up or down to control the degree of effect and thereby control escalation. Its effect is rapid, in that the inherent properties of speed and reach enable air power to be brought to bear rapidly, thus allowing more decision time – the commitment decision can be delayed until the last safe moment.

**Freedom of Political Choice.** The inherent agility of air power described above keeps political options ‘open’. Decisions may be taken late and it is possible to ‘turn up’, ‘turn down’ or ‘turn off’ with relative ease. Scale and effect of air power contribution can be rapidly varied and can be both
military in nature or can support the other lines of operation.

**Effects at Range.** Air power can provide a range of kinetic and non-kinetic effects and, if necessary can be available at range. Air power can therefore influence a potential opponent from afar and without crossing sensitive borders. Emerging technology and space capability will extend influence and understanding over the horizon and could be selective in terms of visibility to further aid the strategists.

**Wider Effects.** Air power used in conflict prevention activity may also have the secondary effect of preparing the battlespace. The whole range of conflict prevention activities will build understanding, as previously discussed, but assets can be used for contingency planning purposes whilst engaged in wider deterrence or influence activities. ISR assets, for instance, could be tasked for specific surveying or reconnaissance tasks for contingency purposes or, more traditionally, kinetic effect delivered as part of a coercive campaign could be so targeted to ‘write down’ enemy capability in the event of a failure to prevent conflict. Air power also delivers a series of psychological effects, either by its inherent nature or with specific technical capabilities, which must not be discounted.

**Supports Cross-Government Activity.** In addition to military effect, air power can provide support to all the major lines of operation as part of a comprehensive approach.

It makes sense that emerging crises should be tackled as early as possible and that the UK should bring its influence to bear rapidly and sensitively to prevent conflict. Early and flexible engagement is the key to this activity, a strategic level activity that must, by its very nature, involve all elements of national power. Such actions could range from early engagement, perhaps with an emphasis on diplomatic and economic activity, in order to develop an early understanding of the region and to build UK influence, through an entire spectrum of engagement in, and national commitment to, the region, potentially escalating to actions just short of full military intervention in a war. Air power, with its inherent strengths and supported by emerging technology, has a flexibility and agility that gives it wide ranging utility across the whole spectrum of conflict. It provides effects that are scaleable - in terms of military effect, logistics footprint, and host nation support requirements - and is relatively cheap to deliver. Above all, air power maintains political freedom of choice as, not only can it be deployed rapidly, its effects can be readily adjusted as the crisis waxes and wanes. The wide – ranging utility of air power is therefore likely to guarantee it a key role in any future conflict prevention activity.

**Notes**

3 ‘The distinction between inter-state war and intra-state war, and between regular and irregular warfare, will remain blurred and categorising conflicts will often be difficult.’ [DCDC Global Strategic Trends IV, p.84](Available through www.mod).
DCDC ‘Future Character of Conflict’ p36 (Available through www.mod.uk/dcdc)


Daniel Byman and Matthew Waxman, ‘the Dynamics of Coercion:American Foreign Policy and the Limits of Military Might’ (CUP:Cambridge, 2002), p 38

Generally referred to in NATO at the time as the ‘former Yugoslav Republic of Macedonia’ but recognised by Turkey by its constitutional name, ‘Macedonia’.

Non-Combatant Evacuation Operation.


In March 1925 the R.A.F. was presented with a unique opportunity of testing the utility of air control against the mountain strongholds of Mahsud tribesmen in South Waziristan. The successful 54 day operation, under the command of Wing Commander Richard Charles Montagu Pink, was the only independent air campaign on the North-West Frontier of India, despite a number of ambitious schemes for the fledgling Service to take full control of the region. Known simply as ‘Pink’s War,’ this article overviews events prior to the start of operations, and offers a detailed account of R.A.F. bombing and strafing activities from 9 March to 1 May 1925. It concludes by analysis the outcomes of the mission, which ultimately resulted in the tribal leaders seeking an honourable peace, with the loss of only two British lives.
Don't you worry there's nought to tell
'Cept work and fly and bomb like hell
With hills above us and hills below
And rocks to fill where the hills won't go
Nice soft sitting for those who crash
But WAR you call it? – don't talk trash
War's a rumour, war's a yarn
This is the PEACE of Waziristan

Wing Commander R.C.M. Pink,
chorus to 'Waziristan 1925'

Introduction

Before the arrival of the aeroplane in India, there was only one method of applying armed force on the North-West Frontier when political initiatives or the threat of force failed: the employment of ground forces, either temporarily or permanently, in tribal territory to restore order or to inflict a sharp lesson on the tribesmen. These so-called 'punitive expeditions' – referred to as 'Burn and Scuttle' or 'Butcher and Bolt' operations – killed innumerable tribemen and sort to achieve a considerable amount of damage: villages were burnt or razed to the ground; cattle were confiscated or killed; and in some cases fruit trees, irrigation channels and wells were destroyed or poisoned. This was an unsophisticated, protracted and expensive means of enforcing discipline.

The emerging technical capabilities of the aeroplane, for the first time, enabled the government the potential to enforce compliance upon the tribesmen in a timely, inexpensive, comparatively humane, and relatively safe manner from the air. This was especially true against law-breakers in remote or mountainous locations. Even the most isolated tribes could now be reached with relative ease. The employment of aeroplanes – with their speed over great distances, complete indifference to the state of ground communications and detachment from prying war correspondents – was to secure a 'change of heart' with the minimum amount of force. By reacting selectively and without procrastination to tribal disturbances, it was hoped that operations could occur without the loss of life, through continuous and even prolonged air activity.

This outcome was achieved by interrupting the normal pattern of life of the tribes to such an extent that a continuance of hostilities became intolerable. Known as 'air control,' in which the tribesmen were often blockaded out of their territory instead of into it, the tactic aimed to compel a tribe to abandon their grazing grounds and villages. This forced them to hide in caves or relocate themselves (and their herds) as unwanted guests in a neighbouring village, preventing harvesting and other work, until a volte-face occurred. Unlike a traditional retaliatory army expedition, the R.A.F. hoped that operations would be conducted against an empty village or vacated area. Such an approach also prevented the tribesmen from having a fight on equal terms; the only truly honourable occupation of a tribesman. It also negated the prospect of loot, particularly capturing a good British service rifle, or replenishing their supply of accurate ammunition.

Unsurprisingly, the employment of airpower in this manner was not
without its critics, limitations or challenges.\textsuperscript{7} It was, however, an attractive option and an intelligent way of securing the R.A.F.'s future against a backdrop of a post-war struggle for resources between the three services. Moreover, at a time when the military defeat of the tribesmen was the principal objective of army operations, the R.A.F.’s goal of attacking the morale of those who had disturbed the peace to hopefully secure long-term political stability and pacification was exceedingly attractive in some quarters. Air Commodore C.F.A. Portal D.S.O., M.C. points to the apparent subtlety and dexterity of the air method:

\textit{The problem, then, is to get this change of heart without occupying the country of the delinquent tribe, and indeed without having any physical contact with them at all. If you can avoid even temporary contact, which means fighting, your remedy has the great advantage that it does not in itself inflame passions and obscure reasons, nor does it extend the original trouble to tribes that may have had nothing to do with it in the first instance, and the whole basis of this police method is that the idea of military occupation and, if you like, of military supervision, rankles much more with a proud and independent people than does the idea of observing the Government’s standard of law and order, and that if you can avoid the former you will more easily achieve the latter.\textsuperscript{8}}

In March 1925 the R.A.F. was presented with a unique opportunity of testing the utility of air control against the troublesome Mahsuds in South Waziristan. This article overviews events prior to the start of operations, and offers a detailed account of R.A.F. bombing and strafing activities from 9 March to 1 May 1925. It concludes by analysing the outcomes of the 54 day mission, which in due course became known simply as ‘Pink’s War.’

\textbf{Events Prior to the Start of R.A.F. Operations}

The Mahsuds were a constant source of turbulence and unrest to the Government of India, primarily due to the inaccessibility of their country and their insolent, aggressive and warlike behaviour. Prior to 1919, their territory had not been visited since 1901-02, when a series of military operations against the tribes for raiding and murder resulted in the subjugation of the tribe, the restoration of order and the construction of new motorable all-weather connecting roads.\textsuperscript{9} Although unsettled by these events, the resulting ‘peace’ remained largely unchanged until the outbreak of the Third Afghan War of 1919,\textsuperscript{10} when the somewhat hasty evacuation of most of the forward militia posts in the Gomal and Tochi areas, especially in Wana,\textsuperscript{11} resulted in over a 100 well-planned raids and offences being conducted by the tribesmen. With authority in Waziristan – lying on the western border of the Indian Empire, and forming the connecting link on the Afghan frontier between the districts of Kurram and Zhob – increasingly tenuous, the situation looked bleak for the government. As a result of the deteriorating security situation it was deemed necessary to undertake punitive operations against the Mahsuds to restore order. These occurred throughout 1919, 1922 and the beginning 1923 resulting – after some extremely bitter fighting – in peace
terms with the majority of the tribal sections, but not the intractable Abdur Rahman Khel; the last remaining pocket of tribal resistance. The R.A.F. took an active part in all operations over the period, not only in direct action against the tribesmen, but also in raising Army morale and lowering that of the tribes.12

The Abdur Rahman Khel, therefore, became the chief section against whom most R.A.F. activities of 1925 were directed in South-East Waziristan. A turbulent sub-section of the Nana Khel Bahlolzai tribe, the Abdur Rahman Khel included a significant proportion of young hotheads ineligible to receive government allowances – determined to make mischief and almost professional trouble-makers – as well as a number of bothersome fugitives, known as hamsayas, who had committed crimes inside the administered districts bordering tribal lands.13

Of significance, many of the tribesmen possessed grazing land in Afghanistan, and summer migration across the permeable international border was commonplace.

On 27 December a full Bahlolzai jirga (assembly or parliament of tribal representatives) was held at Tank to make clear government terms to the tribesmen. This sought to obtain compensation for offences committed and for the ‘exaction of promises to prevent further offences.’14 Used as a means to resolve civil, criminal, and intertribal conflict, a jirga possesses neither a dominant leader nor chairman; participants sit cross-legged in a circle in order to avoid a prominent position and decisions are reached through dialogue and consensus. The democratic character of the Bahlolzai meant that the jirga had little control over the hot-headed elements and therefore was not truly representative of tribal opinion. Regrettably, the gathering was unsuccessful. On 16 January, a group of Abdur Rahman Khel representatives was interviewed. The deputation demanded an official pardon for recent offences, an increase in allowances from Rs. 3,000 to 6,000 and unconstrained access to their tribal share: these demands were dismissed outright. Thereafter, the Abdur Rahman Khel, assisted by the Guri Khel, Maresai and Faridai sections of the Manzai Mahsuds, committed further offences and outrages. The first occurred on the night of 24/25 January, when four Hindus were kidnapped from Manzai. This was followed by a second incident during the hours of darkness on 1/2 February, when two more Hindus were abducted from the coolie (unskilled labour) camp at Spli Toi. Eighteen days later, the Gomal Post was raided by a gang containing members of the hostile tribes. During the initial break-in, 27 European .303 Lee Enfield service rifles belonging to the police were stolen and taken to the Spli Toi area.

Prior to these events, on 16 December, the Resident in Waziristan asked the government to sanction the employment of airpower against the intractable sections.15 Keen to establish the R.A.F.’s credentials, the request was reinforced by Air Vice-Marshal Sir Edward Ellington K.C.B., C.M.G., C.B.E. who had recently become the Air Officer Commanding (A.O.C), India, and who was a strong advocate of Sir John Salmond’s policy of ‘air control’ and wider R.A.F employment on the frontier.16
He believed that, if properly used, the squadrons on the frontier could achieve results out of all proportion to numbers and to effort expended. The official account of events recalls the growing necessity of the request and initial moves: ‘By the end of this month it appeared probable that operations would be necessary; a plan was therefore drawn up by No. 1 Wing, and the force to be employed was decided on.’\textsuperscript{17} Jirgas with the affable sections of the tribes were undertaken, but despite demonstrations conducted by R.A.F. units on 7 and 24 February, outrages continued, and the hostile elements still persisted in unrealistic demands and bargained for time.

On 1 February the Resident applied for the go-ahead to warn the Guri Khels that, unless they agreed and complied with the terms to be stated, air action would be undertaken against them. Judging that hostilities were now inevitable, Headquarters, R.A.F. approved the use of airpower and allocated the force to be employed. Following two further outrages, the government sanctioned the issue of a final warning to the sections concerned by coloured warning leaflets on 25 February; these were printed in the tribal language – \textit{Pashtu}. Only five days before, Wing Commander R.C.M. Pink C.B.E., the officer commanding No. 2 (India) Wing, had flown to Rawalpindi for a conference with the Northern Command Headquarters’ Commanders to discuss the nature of independent air operations. As the appointed commander, and with operations at least agreed in principle with the army commanders, Pink set about re-deploying his forces and forward based supplies. The official report notes:

\begin{quote}
Explosives were forwarded from the Ordnance Depot, RAWALPINDI; petrol, oil and other supplies came from the Depots at PESHAWAR, KOHAT, RAWALPINDI and LAHORE. All supplies for both MIRAMSHAH and TANK [the two main operating stations] were delivered at MARI INDUS, transported across the river INDUS to KALABAGH and forwarded by rail either to TANK direct or to BANNU for MIRAMSHAH. The average time taken for the delivery of supplies by this route was 14 days for TANK and 21 days for MIRAMSHAH.\textsuperscript{18}
\end{quote}

On 2 March the advanced parties moved to Tank and Miramshah.\textsuperscript{19} Although some 60 miles apart, resulting in certain administrative difficulties, it was deemed necessary to employ two airfields as there was insufficient room for the number of aircraft required for the operations at either location. The squadrons selected moved to their respective operating stations on 3 March. This consisted of three squadrons:\textsuperscript{20} one Bristol F.2 B Fighter and two de Havilland D.H. 9A’s.\textsuperscript{21}

On 5 March Pink’s Operational Headquarters was established at Tank. The establishment of the aviation headquarters coincided with the issue of demands to the tribes in the clearest possible terms.\textsuperscript{22} The alternatives to being bombed were:

\begin{itemize}
  \item Abdur Rahman Khel – a complete \textit{jirga} of Abdur Rahman Khel, including hostile tribesmen, as well as the Jalal Khels and others, who lived with the Abdur Rahman Khel, was to gather at Jandola at 12:00 hours on 7 March,
\end{itemize}
bringing the two captive Hindus. In the event of nonconformity disciplinary measures would start after sunrise on 9 March.

- Guri Khel – the Guri Khels were required to comply with the terms already announced to them. For the Karim Khel sub-section, this was: Rs. 1,600; two government rifles; the return of three bullocks and seven camels; and the deposit of eight country rifles as security. For the Biland Khel sub-section eight government rifles and the deposit of four tribal rifles was demanded as security. In both cases, compliance was demanded by 12:00 hours on 7 March. In case of disobedience, punitive measures would start after first light on 9 March.

- Faridai – a complete jirga of Faridais was to assemble at Jandola at 12:00 hours on 7 March. In the event of non-compliance retaliatory measures would start after daybreak on 9 March.

- Maresai – a complete jirga of Maresais was to convene at Jandola at 12:00 hours on 7 March. In the event of non-cooperation castigatory measures would also start after dawn on 9 March.

As no reply was forthcoming from the Abdur Rahman Khel, and the Faridai, Maresai and Guri Khel simply attempted to negotiate, it was decided on 8 March to begin air action against all sections concerned at sun-up on 9 March, based on the tribal principle of communal responsibility for crimes committed. The rationale behind this approach was that each tribe, sub-tribe, village, malik (a tribal leader or elder) or mullah (a religious leader who takes prayers) was responsible for its own people and for what went on in its area. There was no distinction between combatants and non-combatants or those who were guilty or innocent.

**Area of Operations and Tactics**

The planned area of operations was *circa* 50-60 square miles of wild mountainous terrain, precipitous gorges and isolated small valleys, including approximately 40 targets varying in height from 3,000 to 6,000 feet above sea level. This necessitated aircraft with full war-loads to limit fuel loads to approximately 60 per cent in order to attain bombing heights. The targets varied from good-sized villages consisting of mud-built flat-roofed houses and fortified watch-towers, relatively susceptible to bomb attacks, of the Faridai and Maresai, to the inaccessible cave homes of the Abdur Rahman Khel, furnished with personal belongings, food and water, and the distributed huts and enclosed compounds of the Guri Khel. Most sections lived by necessity as independent economic units. Tribesmen in the open or their livestock were equally fair game. However, as was customary in Waziristan, all villages possessed access to a protective cave system nearby, where tribesmen and their families could live in comparative comfort for long periods. Furthermore, all tribes possessed a sizable head of livestock. Throughout the hostilities these were mostly secured in the surrounding caves.
during daylight hours and watered and fed under the cover of darkness. At the headquarters in Tank, all objectives were carefully numbered on a master map, with specific targets allocated to the squadrons. For the air staff, this proved to be a primary means of recording and conveying information, calculating moves and directing action. Pink quickly knew every inch of the map as if he had been flying over it daily for weeks.

The tactical unit employed against the tribesmen was a ‘flight’ of three machines, as the targets were so small that it was often not economical to attack with more than three aircraft at a time, with bombing normally occurring at a height of 3,000 feet over the target on a signal from the formation commander. The tactics employed could roughly be divided into: **intensive air attack**, **air blockade** and **night bombing**. In each case, every effort was made to avoid setting patterns, in order to keep the tribes in a constant state of insecurity and apprehension. Taking tactic each in turn:

**Intensive air attack** was regularly conducted by a series of coordinated flight raids. The hours of daylight were divided into periods and these periods were allocated to squadrons in rotation. This form of attack varied by directing more than one squadron on a selected target during a defined period, thereby increasing the intensity of the attack by concentrating all available force at a predetermined time and place. Attempts were made to achieve tactical surprise by altering the times and order of attack on targets.

**Air blockade** consisted of deploying aircraft over the target area at irregular intervals during the hours of daylight to attack certain objectives, or to assault any target which might present themselves with 112 lb and 20 lb high explosive anti-personnel bombs. The *raison d’être* behind this method was to harass the tribes constantly, thus creating a general feeling of uncertainty, insecurity and apprehension. Such activities sought to encourage the tribesmen to capitulate by causing intolerable inconvenience to their daily lives, cutting off communication, and preventing them from cultivating their crops or grazing their flocks for an indefinite period. Routes were carefully planned so that tribes with a history of trouble making were also covered; aircraft often descended over them to leave the villagers in no doubt that they were being watched.

**Night bombing** (30 March onwards), although limited, was undertaken by individual aircraft employing moonlight to enable pilots to fix their positions accurately. Attacks took place either against an observed target, or on localities where it was advantageous to enforce the blockade. Reconnaissance flares were used to assist the pilot in identifying targets, but it was recognised that ‘no great material damage’ could be expected from night bombing. To be effective, night bombing
had to be continuous. However, the tactic prolonged the blockade into the hours of darkness, and in consequence disorganised the normal pattern of life of tribesmen still further. On nights when bombing was not viable, the R.A.F. relied on delay-action bombs dropped during the previous day.

To prevent pattern setting, a number of variations to the above methods were introduced during the campaign. For example, ‘desultory’ bombing was carried out for a number of days, followed by an intensive and focused assault. Orders were also given to stop all raids at a set hour, in order to give the impression that attacks for the day had ceased, before a resumption of activity prior to last light. Moreover, the times of attack were continually varied, as were the type of bombs employed, the time of delay-action fuse used, and the number of aircraft selected. Night bombers were ordered to attain maximum height over the aerodrome and then to ‘throttle down’ their engines in order to appear over the target as silently as possible and a reserve was always maintained at high readiness to permit a heavy attack against an identified target. In addition, and to help negate any forced landings in tribal territory, raids were carried out at sufficient height to allow pilots a realistic chance of being able to reach one of the three emergency landing grounds adjoining the operational area, should they encounter engine failure.

Forced landings in tribal territory were something to be feared. Capture by the tribesman could entail mutilation, followed by death; although more routinely pilots were held for ransom. The prospect of being found or rescued was negligible; aircraft carried bedding, emergency rations and water. Moreover, ‘every officer-airman carried a letter in Pashtu [and Urdu], signed by the Chief Commissioner, … offering a reward of Rs. 10,000 to any tribesmen who brought the bearer to safety in the event of his having to make a forced landing in tribal territory.’ These safety certificates were known commonly as ‘gooli chits,’ as castrations without the benefit of anaesthetic was not unheard of. However, the actual treatment of the captured aircrew depended greatly on individual circumstances and particularly on the role they had just been undertaking.

Behind the scenes, preparations for the forthcoming operations continued apace. Chaz Bowyer recalls in RAF Operations, 1918-38 that:

Pink wasted no time, and once Miramshah [Fort] had received its squadrons he flew to the fort from Tank to brief all personnel on the imminent operations – in itself a somewhat novel procedure at the time. Seating all crews, air and ground, in a semi-circle around him Pink proceeded to explain in detail the tactics and objectives intended – to such good effect that on concluding his talk the whole audience, quite spontaneously rose to their feet and actually clapped their applause!

Bowyer goes on to recollect that: ‘This unprecedented gesture of appreciation momentarily took Pink aback – in the words of one NCO present, “Pink became scarlet – but I don’t think he was displeased really ...”’
The Terror that Flies: Operations Commence

As the government was absolutely sure of the culpability of the tribes, activities began on 9 March with heavy attacks against all sections concerned; any movement, human or animal, seen within the proscribed area was liable to be bombed or machine-gunned from the air without warning. As expected, the main focus of activity during the initial stage of the operation was directed against the Abdur Rahman Khel, who had sensibly taken to the hills, moving everything they could. A number of villages in Dre Algad were set ablaze and a fortified watch-tower was completely destroyed in the Spli Toi area. Four days later operations came to a temporary halt, as various hostile sections, after expressing contempt for the effects of the bombings, promised to comply with government demands. This was a ruse by the defiant tribesmen to buy time, and air attacks resumed on 14 March.

The following day two captured Hindus were brought into Spli Toi Post, and on 17 March the Abdur Rahman Khel jirga arrived at Jandola for negotiations. As was normal, operations against this section were immediately suspended to allow negotiation to take place. During the ensuing jirga, the Resident announced the terms to the tribesmen, ‘and an agreement was in sight when internal dissentions caused a breakdown of negotiations.’ Operations against the Abdur Rahman Khel were immediately reinstated and those against the remaining intractable sub-sections continued. However, under the tribal code of pashtunwali, and specifically the tenet of nanawatai, the obligation to offer open-handed sanctuary without thought of reward, it was found that various friendly villages were giving shelter to the hostile tribesmen and their flocks; these villages were promptly warned by the Resident to cease such support.

During the following days, the friendly section of the Abdur Rahman Khel departed the Spli Toi area altogether, convincing various hostile sections to return to their own tribal areas. R.A.F. operations had by this point forced the majority of unreceptive tribesmen into hiding and completely upset their routine pattern of life.

On 21 March, Flying Officer N.C. Hayter-Hames and E.J. Dashwood, while carrying out a bombing raid in a D.H. 9A biplane from No. 27 (B) Squadron, were forced to crash land in hostile tribal territory from an unknown cause; most probably accurate rifle-fire, although The Times reports simply that the ‘machine caught fire.’ Flying Officer Hayter-Hames, 23, was killed during the heavy landing, which completely destroyed the aircraft. Flying Officer Dashwood, 22, the youngest son of Sir George and Lady Mary Dashwood, who was thrown clear, fell into the hands of Guri Khel friendlies and died shortly afterwards. Chaz Bowyer recounts the incident:

Dashwood immediately went into the burning wreck attempting to extricate his pilot [Hayter-Hames] but suffered serious burns. Dashwood was then taken in hand by some friendly Guri Khel who lavished elaborate care on the mortally injured man, even slaughtering several of their precious goats and using the goat fat and skins to wrap the dying
Dashwood – an example of a form of chivalrous mercy for any brave man sometimes displayed by the mountain tribesmen even to his foes. 39

Flying Officer Dashwood’s body was brought into Sorarogha on 22 March, despite considerable opposition from the Karim Khel. Three days later, the Karim Khels, after serious haggling, recovered Flying Officer Hayter-Hames’s body with a number of rifles. Subsequently, a jirga occurred at Jandola, where the Karim Khels surrendered their leading malik as security for the payment of the money fines.

Despite a number of small successes, it became clear that operations were likely to become drawn-out. Social fragmentation and economic backwardness made the efficient imposition of collective punishment difficult. It was, therefore, deemed prudent to restrict the intensity of the attacks in case further operations became obligatory, or that the present operations had to be conducted for an indefinite period. Attacks on the tribes now developed into an air blockade, conducted by a pair of aircraft patrolling a designated area. However, the Abdur Rahman Khel remained a focus of activity, particularly as rumours suggested that they were planning on migrating across the Afghan border for safety. 40 In addition, routine activity continued unabated against all hostile sections, but often with only limited short-term success. For example, the R.A.F. destroyed a prominent fortified watch-tower in a Maresai village, which proved to be a catalyst for negotiations. As was customary, bombing was suspended against the tribe for one day to allow their jirga to appear at Jandola. However, despite some positive signs of a breakthrough, nothing came of the meeting and operations resumed.

On 30 March a single Bristol Fighter from No. 31 Squadron, Ambala, commanded by Flying Officer Reginald Pyne and fitted out for night-time flying, arrived at Tank to carry out night bombing raids. With ground crew despatched to the landing grounds at Sorarogha and Khirgi, employing searchlights and paraffin landing flares, the first flight occurred on 4 April with notable results. Prior to this attack, the tribesmen had considered themselves relatively safe under the cover of darkness, and the discovery that the R.A.F. could operate effectively at night proved alarming, playing on the minds of the tribesmen. Confident by the success of this new tactic, two more Bristol Fighters were flown from Ambala to Tank for further night sorties. The arrival of these machines resulted in a partial re-organisation of the operational force. 41

To achieve a greater effect and to give evidence of the force which lay behind the government’s word, the government decided to launch a large offensive on 4 April immediately prior to the first hours of darkness raid. Accordingly, 38 aircraft raids were coordinated during the hours of daylight, totalling 52½ hours flying. The combined action resulted in numerous tribal casualties, with the night-time raid killing an infamous Faridai, named Tormarchai. However, the attack occurred with one incident of note involving Squadron Leader T.F. Hazell, who had only recently been appointed Officer Commanding
60 (B) Squadron.

... shortly after taking off from Miramshah he [Squadron Leader T.F. Hazell] noticed the engine cowling of his [de Havilland] DH9A coming loose. Jettisoning his two 230 lb bombs – which landed near an army scout post to the alarm of its troops – Hazell decided to land as quickly as possible and chose Sorarogha where its sloping landing strip ended abruptly in a sheer drop into a deep nullah (valley). With no option but to land down the sloping strip Hazell skilfully ran his Ninak into a stone breastwork on the very edge of the precipice. The DH9A was a write-off but Hazell and his petrified gunner walked away from the wreck with minor bruises.\(^{42}\)

In addition, the official report recalls that on 4 April: ‘A friendly ABDUR RAHMAN KHEL jirga appeared at TANK on this day with various irrelevant suggestions which were rejected.’\(^{43}\)

Five days’ later an afternoon patrol sighted a large gathering of Farida tribesmen moving up the Dre Algad in open country. This slow-moving target was immediately engaged by bomb and strafing machine-gun fire, with additional aircraft from Miramshah reinforcing the ongoing assault. With numerous casualties inflicted on the dispersing tribesmen, and the opportunity for a rout at hand, the weather took an unexpected turn for the worse, making it impossible to press home the attack. The circling aircraft reluctantly returned to base. This was the only reported gathering of hostile tribesmen encountered in the open during the entire operation.\(^{44}\)

By this stage in the operation, a number of friendly tribes were beginning to refuse refuge to the radical tribesmen and their flocks, but some still persisted in offering sanctuary, despite the dangers. As a result of multiple source information received from the political authorities, warnings were issued to the following villages: Galli Punga, Pasti Khan, Jullamdar Pari Khel, Jemadar Didai’s village, Shinkai and Wazirgai. Intelligence reports also suggested that a large number of hostile Abdur Rahman Khel were sheltering with friendly tribesmen in the Sarela, and a warning was issued to the district on 12 April. At about this time information came to light to suggest that hostile families were sheltering in the Barwand area, and that the Abdur Rahman Khel were likely to move to the Baddar Algad en route to Afghanistan. Authorisation to extend the operation to all these areas was requested in writing; however, this was approved for the Baddar area only on 20 April.

With operations continuing at a brisk pace, representatives from the Abdur Rahman Khel proposed a peaceful conclusion to events on 12 April. These proposals were considered to be genuine by the Resident and, as a result, bombing of the Spli Toi area was stopped from 14:00 hour on 13 April to midnight on 14 April. A jirga subsequently appeared, but no agreeable outcome was obtained, despite extensive negotiations; calculating the tribesmens’ bluff and sifting the wheat from the chaff during a jirga was a trying experience. Operations resumed the following day, with 57\(\frac{3}{4}\) flying hours expended. Two more night raids were also undertaken.
Around this time contradictory reports were being received of the proposed intentions of the Faridai and Maresai sections. To clarify matters and to avoid unduly prolonging operations, the political authorities despatched a representative to Ahmedwam to attend a tribal jirga. A brief message was received on 15 April from the envoy that the jirga would only convene under certain conditions, which were immediately dismissed. However, on the morning of 18 April, the fine of seven government rifles was met and three rifles looted from the Gomal Police Post were then turned in. At this point, operations ceased against these sections. Meanwhile, a constant reconnaissance was maintained over the Baddar area to identify signs of tribal migration. Constant bombing of the Abdur Rahman Khel hostiles continued.

On 17 April, a deputation of Abdur Rahman Khel mediators presented peace terms to the authorities, but their proposals were deemed unrealistic and, therefore, unacceptable. They returned at night-time on 20 April, this time was an agreeable promise of security, and they were granted a 24-hour lull in operations. The official report notes:

*It was now discovered that the hostiles had actually left the SPLI TOI for BADDAR, but had been turned back by sections living en route who were afraid of being bombed. This forced them to return either to SPLI TOI or BARWAND, and it was reported that, if peace was not conceeded, they intended to go direct to AFGHANISTAN via KHAISORA, to avoid further bombing. The three security rifles were not produced by the* time allocated, and bombing was begun again, only to be suspended the same evening on the receipt of the rifles.\(^{45}\)

This was followed by a preliminary meeting with both hostile and friendly members of the tribe at Sarwekai on 23 April, followed by a representative jirga on 28 April at Jandola. After three days of prolonged and exhausting discussion, due to the conflicting interests of all parties, terms were agreed on 1 May in Jandola, with practically no ill-will.\(^{46}\) The full fine of 16 rifles was accepted and guarantees for payment within a practical timeframe given. An honourable – if fragile – peace ensued.

After 54 days of unremitting air action, and with all government terms accepted, except for one rifle which was remitted to the Biland Khel as a reward for their assistance in recovering Flying Officer Dashwood’s body, R.A.F. operations ceased against all hostile sections. Having barely covered the campaign, *The Times* reported: ‘The operations of the Royal Air Force in Waziristan have been crowned with complete success.’\(^{47}\)

The total number of casualties inflicted on the tribesmen was never officially quantified, not least as tribal losses were usually concealed and there were no reliable means of confirming rumours. However, in a despatch from the government to the Secretary of State from India dated 15 October 1925, it was ‘estimated’ that there were ‘11 human casualties only, killed and wounded, caused by 154 tons of bombs and 100,000 rounds of ammunition,’ as most tribesmen left their villages and took shelter, with their livestock, in caves, only allowing their cattle to graze under the cover of
darkness. Additionally, there was considerable damage to tribal flocks, but only moderate harm to houses; although constructed only of mud brick, tribal homes were remarkably resilient against even the heaviest bombs. In comparison, The Times report of a routine punitive reprisal in 1922 notes: ‘On the 17th [December] a column of ground troops from Kotkai attacked a hostile Mahsud gathering two hundred to three hundred strong. At least eight Mahsuds were killed and twelve wounded. Our casualties were six killed and twenty-eight wounded, all Indian.’

The contrast was stark. Moreover, operations in Waziristan over six-months in 1919-1920 alone cost the government 1,800 lives, 3,675 wounded and 40,000 sick casualties.

The wider psychological effect of the action on the tribesmen was also difficult to determine, but the inconvenience of denied access to his villages was great, ‘especially when some vigorous and unforeseen allies of the Raj, myriads of fleas, made life in the caves unendurable.’ A feeling of helplessness and an inability to reply effectively to the constant attacks was particularly soul-destroying. Moreover, the official report notes with some assurance: ‘The moral effect of the bombing on tribesmen not included in the actual area of operations has also been considerable: various fines which were imposed before and during the present operation have been paid up, and the decision of the Political Authorities have been carried out with exemplary promptitude.’

This included the Bahadur Khel and Shabi Khel paying outstanding fines, and a section of Malikdina, led by an infamous outlaw, Shamdai, handing over 13 rifles as well as paying an outstanding fine. Therefore, there appeared little doubt in the effectiveness of becoming subject to air operations. In summarising the R.A.F. operations of 1925, the Official History of Operations on the N.W. Frontier of India, 1920-35 notes: ‘They were an instance of complete success being achieved in securing submission of N.W. Frontier hostiles by air action alone, thus achieving the desired result at very small cost in casualties and money by comparison with a punitive expedition carried out by the Army ...’

As was to be expected from an operation of this magnitude, a number of gallantry and distinguished service awards were approved by the King and officially gazetted. Squadron Leader A.J. Capel, later to reach the rank of Air Commodore, was awarded the Distinguished Service Order. Flight Lieutenants J.W. Baker, already in receipt of a Military Cross, W.N. Cumming, and Flying Officer R. Pyne all received the Distinguished Flying Cross. Three sergeants, of whom two were pilots, a corporal, and a leading aircraftsman, were awarded the Distinguished Flying Medal. In addition, 14 R.A.F. personnel were mentioned in dispatches, including Wing Commander R.C.M. Pink C.B.E. In addition, he was granted accelerated promotion to Group Captain as a reward for his skilful handling of the campaign, ‘apart from being accorded a form of immortality in RAF annals by having these operations thereafter referred to as ‘Pink’s War.’ Moreover, all those who had served under Pink during the period 9 March to 1 May 1925 inclusive became entitled to wear
the India General Service Medal, 1908 with a clasp imprinted ‘Waziristan, 1925.’ This was by far the rarest clasp given with the medal and was only awarded after Sir John Salmond succeeded in overturning the War Office decision not to grant the decoration. Forty-seven officers and 214 airmen received the award.

**Events in Perspective**

Although the campaign was a success, it was not without its lessons. The first important deduction was that the period of time over which the campaign was conducted was unfavourable. Final approval for the start of operations was issued by the government on 25 February, with the first attacks against the tribesmen occurring on 9 March. By early March the worst of the cold weather was over, and flying had to be undertaken in ever-increasing temperatures (April was unusually hot) and seasonable storms added considerably to the strain on the aircrew and supporting ground personnel. The timing also made the blockade more bearable for the tribesmen and their families, as daily conditions were ever more pleasant and agreeable. Likewise, as the passes into Afghanistan were now open, those who owned land or had somewhere to stay in Afghanistan could simply leave the area in question uncontested.

However, there were more profound challenges with the timing of operations. By early March the R.A.F. was nearing the end of a particularly busy training season, which had made considerable demands on aircrew and on the reserves of ageing fabric-covered machines, engines and technical stores. The official report notes poignantly: ‘This [the training season], combined with an under-estimate of the financial requirements of the R.A.F. in India for the year 1924-25, resulted in a shortage in the necessary number of serviceable aeroplanes and engines: on the eve of the operations this amounted, for the R.A.F. as a whole, to 27 aeroplanes and 40 engines, the former being due to the latter.’ Cannibalisation and local improvisation were commonplace in order to bring a single aeroplane up to flying standard for operations, and workshop shifts were kept going day and night to enable the squadrons to have aircraft available. Despite these challenges, 2,700 hours were flown during the campaign over a demanding 54 day period; a significant achievement by

---

**Operational Statistics**

<table>
<thead>
<tr>
<th>Squadron</th>
<th>Total hours flown inclusive, plus one hour to operating stations</th>
<th>War flying including travelling flights</th>
<th>Machine flights</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Hours 671 Minutes 5</td>
<td>Hours 463 Minutes 20</td>
<td>Number 363</td>
</tr>
<tr>
<td>20</td>
<td>558 35</td>
<td>405 55</td>
<td>139</td>
</tr>
<tr>
<td>31 (night flying)</td>
<td>97 0</td>
<td>46 20</td>
<td>29</td>
</tr>
<tr>
<td>27</td>
<td>661 45</td>
<td>554 50</td>
<td>333</td>
</tr>
<tr>
<td>60</td>
<td>724 45</td>
<td>600 30</td>
<td>358</td>
</tr>
<tr>
<td>Totals</td>
<td>2713 10</td>
<td>2070 55</td>
<td>1222</td>
</tr>
</tbody>
</table>
any standards. Nevertheless, by 1 May this shortage had increased to 85 aeroplanes and 44 engines. A breakdown of flying hours over the period of operations by squadron is shown in the table on page 110.

Equally, there were challenges with the number and experience of available aircrews. All the knowledgeable pilots due to be rotated out of India in the trooping season of 1924-25 had departed, and those who had replaced them were not available to take part in the operations, ‘since they had not had time to complete their training under Indian conditions, which differ from those at Home on account of the low density of the air and the height of the landing grounds.’

For those travelling by troopship to India a flying break of over two months needed rectifying. This initially occurred at the Aircraft Depot at Karachi, before transferring to the squadrons and the mentorship of an experienced pilot, enabling the aircrew to become familiar with the aircraft, local conditions and the unusual layout of the frontier stations. This could take up to a month to complete, including a series of solo flights, until deemed ready for operations.

Despite such practical challenges, a total of 2,700 flying hours in antiquated aircraft only resulted in one fatal incident on 21 March, resulting in the death of Flying Officers Dashwood and Hayter-Hames. However, there were a number of recorded crash landings. In addition to Squadron Leader Hazell’s heavy landing on 4 April at Sorarogha, Flight Lieutenant R.C. Savery also made an emergency landing at Sorarogha on 8 April, while on 15 April a third aircraft force-landed with engine trouble in open country. Although exclusively referring to death of Flying Officers Dashwood and Hayter-Hames, the official report notes positively: ‘... previous experience of frontier fighting shows that this is a small price to pay for enforcing our will on such hardy mountaineers as the tribes concerned, living in the difficult country of WAZIRISTAN. Nor do I believe that the cost would have been less had any other method of coercion been employed, indeed I think it must have been much more.’

In spite of the impressive tally of flying hours, on several occasions during the campaign, bombing was temporarily stopped to conduct peace jirgas or to allow property to be collected as security; primitive methods of tribal communication and transport often resulted in significant breaks in operations to permit effective dialogue with tribal emissaries. In a number of these instances, the sections failed to comply with the stated conditions within the specified timeframe and attacks resumed. The official report notes: ‘The disadvantages of such respites are obvious; they enable the enemy to recover from the strain which the bombing attacks inflict, they facilitate the removal of valuable property [and flocks to a place of safety], they give the tribesmen the impression that our resolution is weakening and provide opportunities for those who wish to do so, to slip away out of reach of further attacks.’

Of significance, on more than one occasion the tribes came to terms without any initial break in activity, or after bombing had been resumed.
on the cessation of a respite. For example, between 15-18 April the Faridai and Maresai complied with government terms without a pause of operations against them. Similarly, the Abdur Rahman Khel surrendered three rifles required as a guarantee of peaceful behaviour on 21 April after bombing had recommenced against them. These examples demonstrated to the authorities that a lull in activity was not always necessary and, whenever possible, that operations should continue unabated, until the initial terms had been complied with in whole or adequate security for the fulfilment of the conditions given. However, as soon as the period of apprehension and the initial shock waves are over, evidence suggested that it was not the way force was applied but its effectiveness that was feared the most.

As to be expected ‘with a method that was often criticized on the score that it was brutal ...’, the thorny issue of the delineation between hostile and friendly tribesmen reared its head in the official report. This was noteworthy as the operations appeared to have few constraints placed upon them; the idea was simply to get the tribesmen to come to terms in the quickest time possible. Pushing the issue firmly to one side with a preamble that states: ‘It is unnecessary to deal at length with the difficulties which are created for the Royal Air Force by the division of the MAHSUD tribes into hostile and so-called friendlies,’ the official report notes, ‘all are agreed that such differentiation is undesirable, and that full tribal responsibility should be enforced.’ The issue is concluded simply by saying: ‘It is hoped that such a policy will prove practicable in the future.’ However, the reality was that the well-disposed elements of the tribe suffered by necessity with those whose transgressions had brought about the operations in the first instance. This was despite a perceived familiarity of the terrain and tribesmen. The Times notes optimistically: ‘In consequence of the detailed knowledge of the country acquired since the occupation, it has been possible to isolate the offending tribes, and the result has been greatly to increase the effect of the operations.’ However, this was not always true. A lack of information was an important factor in prolonging operations. As this was the first time that independent air action was used on the frontier, the inadequacy of the R.A.F. intelligence structure and poor mapping and photographic intelligence played a major role in the extended duration of operations.

Conclusion

In 54 days the R.A.F. demonstrated that a proven alternative to costly, protracted and elaborate punitive expeditions existed to control the frontier tribes: no ground troops were used. Against a particularly intractable section of the Mahsuds, the continuous operations of the air arm, despite severe aircraft and engine shortages, also secured considerable respect from the army and the civil authorities. This was particularly noteworthy as air control was often opposed in that it was thought to be solely punitive and contrary to a policy that aimed to ‘civilize’ the tribes through personal contact. Many senior British officers, including some viceroys, disliked the concept of airpower
for this reason alone. Moreover, the lessons learnt from operations against the Abdur Rahman Khel and other Mahsud tribes ensured that the technique of air control in the future would be even more effective and efficient. The official report concludes by stating:

*This is the first occasion in INDIA that the R.A.F. has been used independently of the Army for dealing with a situation which has got beyond the resources of the political officers. It is at present too early to judge how lasting will be the effect or how permanent will be the impression of this display of air power on the stubborn tribesmen of the North-West Frontier, but it is claimed that the operations prove that in the R.A.F. the Government of INDIA have a weapon which is more economical in men and money and more merciful in its action than other forms of armed force for dealing with the majority of problems, which arise beyond the administrative frontier. That they have not been without effect on sections of the MAHSUDS who were not included in the area of operations is shown by a number of settlements which have been effected during the progress of the operations, notably the case of the surrender of the rifles looted from the GOMAL Police Post.*

It is significant that during the next eleven years, a combination of regular troops, scouts, kassadars (tribal policemen) and the R.A.F. succeeded in substantially reducing the violence in Waziristan, with only minor tribal raids to upset the peace. The political authorities realised that air power, when properly employed, provided an effective means of helping control the tribesmen. However, despite a number of well-argued proposals, the army high command never again gave the R.A.F. responsibility for an independent air campaign on the frontier, confining Pink’s War to the chronicles of history.

Notes

3 Hostilities against aircraft were poor sport, resulting in few casualties. Although one flying officer wrote in 1928 that ‘their [Mahsud] rifle fire … was uncomfortably like that of a machine-gun, and almost as effective.’ _____, “The Mahsud Operations, 1920 (No. 31 Squadron),” *The Hawk: The Annual Journal of the R.A.F. Staff College*, vol. 1, no. 1 (1928): 127.
4 This generally followed a predictable pattern. Initially the tribesmen were excited, defiant and boastful of the revenge they would take afterwards. Next came internal quarrels, blaming each other for having caused the trouble in the first instance, and fierce protests at the injustice of the government. This was followed by boredom and frustration as the tribesmen watched their homes being destroyed and crops deteriorate from the relative safety of their caves. Finally came the stage of reluctant – but often good-natured – peace offers, generally by sections in order to save face and avoid complying with
government terms.  
5 As a means of controlling the Empire’s outer reaches within the economic constraints of the day, air control became the system by which an area was dealt with primarily by air action, in which the R.A.F. was the predominant arm and the responsible commander an airman. This method was honed over time in response to complex situations on the frontier, disorder and banditry in Iraq, disturbances in Aden, and uprising in Palestine and Transjordan.  
7 For example, consecutive British Ministers in Kabul disputed the effectiveness of air control and questioned the morality of its employment. Sir Francis Humphrys believed that aerial attack would increase the extreme dislike and bitterness of the British amongst the tribes. Sir R. Maconachie, Humphry’s successor, believed that the R.A.F. was simply unable to distinguish from the air between friendly and unfriendly villages.  
9 To open up the country a central road was built from Bannu to Razmak, headquarters of a brigade group; then to Wanna on the west of the Mahsud territory, and from Wanna a circular road to connect up with the Derajat frontier.  
11 The British were compelled to retire from Wana Fort, where a small element of the South Waziristan Militia mutinied and seized the armoury, capturing 1,200 rifles and approximately 700,000 rounds of ammunition.  
13 Of note, during 1910 1,000 Mahsuds were allowed to enlist in the Regular Army and in 1911, owing to a drought that resulted in the failure of the autumn harvest, 2,000 Mahsuds were given work on the construction of the Pezu-Tank branch of the Kalabagh-Bannu railway.  
15 The head of the political hierarchy on the frontier resided in Peshawar. He wore two hats: he was Chief Commissioner (in 1932 upgraded to Governor) of the cis-frontier districts, but in his dealings with Tribal Territory he was Agent to the Governor General (AGG), having under him the Resident, Waziristan (Waziristan had been under military command since 1919 but on 31 March 1924 a political resident was appointed), established in Dera Ismail Khan, and Political Agents for North Waziristan in Miramshah, South Waziristan in Tank, and the Kurram in Parachinar. Under the Political Agents were Assistant Political Agents in Wana, Sararogha and Miramshah.


Ibid., 7596-7.

Built at the end of 1924 as an extension to a scouts’ fort, Miramshah was to become a favourite outpost with the air and ground crews. A fort strongly reminiscent of the film ‘Beau Geste,’ with strong outer walls and battlements, it had an inner ‘keep’ into which aircraft were wheeled at night and secured. The ground outside the fort was levelled on the north and west to give an L-shaped landing area, the surface being fines stones on rock.

The force was located as follows:

No. 5 (A.C.) Squadron – Bristol Fighter – Tank (10 airplanes, 14 officers and 69 airmen); No. 27 (B) Squadron – D.H. 9A – Miramshah (8 airplanes, 15 officers and 58 airmen) and; No. 60 (B) Squadron – D.H. 9A – Miramshah (8 airplanes, 13 officers and 67 airmen). Including the Headquarters in Tank (5 officers and 20 airmen) the total force consisted of 26 airplanes, 47 officers and 214 airmen.

The Bristol F.2 B Fighter was a two-seat biplane fighter and reconnaissance aircraft, which had seen service on the Western Front. Often referred to as the ‘Brisfit’ or ‘Biff,’ the F.2 B proved to be an agile and manoeuvrable aircraft, with a maximum speed of 123 miles per hour. It was capable of carrying 240 pounds of bombs and had a forward-firing Vickers .303 machine-gun and a movable Lewis gun in the observer’s cockpit. The de Havilland D.H. 9A, also known as the ‘Ninak’ (from the designation ‘nine-A’), was a single-engined fighter and reconnaissance biplane powered by a 400 horse power Liberty engine. In contrast with its predecessor, the D.H. 9, the D.H. 9A had an enviable reputation for reliability. The aircraft had a maximum speed of 123 miles per hour and could carry up to 740 pounds of bombs on under-wiring and fuselage racks. It also had one Vickers gun facing forward and a Lewis gun mounted aft.

This included a warning that long-delay action bombs would be used (set to explode at uncertain intervals), and that it was advisable to remove women and children from tribal villages should operations commence.


After a number of experiments, the best bomb-load for the purpose on the D.H. 9A was found to be eight 20 lb bombs under each plane and two 112 lb bombs under the centre section. The 20 lb bombs were used for harassing action generally, and the 112 lb bombs against any major targets observed.

Blockade action was frequently extended to include ‘wireless telegraphy’ patrols, which signalled back news of any important activity to reinforcing flights standing by at ten minutes notice to move.


Ibid.


Ibid.
This was relatively unusual occurrence, but it was far from unique. Frank Baines recalls a more common outcome: ‘And then there was the story of the Hindu baniya who was caught outside Mirali …. He had the skin from the soles of his feet slit off, and, having been deprived of his sandals, was sent back sixteen miles into camp where he arrived after two days, covered in flies, having crawled every inch of the way, in a temperature of 105° in the shade, on his hands and knees and his belly.’

F. Baines, Officer Boy (London: Eyre & Spottiswoode, 1971), 145.

The tribesmen regarded the aeroplane as an impersonal agent of government. It is worthy of note that throughout the campaign the attitude of the jirgas was relatively friendly, and for officers of the R.A.F. the Mahsuds showed a marked respect based on admiration for the work they conducted.

“Pacification of Waziristan,” The Times, 4 May 1925.

Air Historic Branch, Principles to be adopted in flying on the frontier, Despatch from the Government of India (Foreign and Political Department), (No. 11 of 1925), to the Secretary of State for India, 15 October 1925, 1.

Searchlight Party – Sorarogha; and Searchlight Party – Khirgi.

Baker performed 69 hours of war flying, including 35 bombing raids; Cumming undertook 72 hours of war flying, including 41 bombing raids; and Pyne conducted 9 night-time raids.

In July 1931 Pink was promoted to Air Commodore but was taken ill shortly after and eventually died of cancer on 7 March 1932.

The British Government awarded a campaign medal, or a ‘clasp’ to an existing medal, for the following campaigns: Waziristan, 1894–95; Chitral, 1895; Malakand, 1897; Samana, 1897; Tirah, 1897–98; Waziristan, 1901–02, Mohmand, 1908; Third Afghan War, 1919; Mahsud, 1919–20; Waziristan, 1919–21; Waziristan, 1921–24; Waziristan, 1925; North-West Frontier, 1930–31; Mohmand, 1933; North-West Frontier, 1935; Waziristan, 1936 and; Waziristan, 1937–39. The Waziristan campaign of 1925 was the only one to be conducted solely by the R.A.F., without army participation.

Except in the morning and evening, atmospheric turbulence made accurate bombing problematic. The official report notes: ‘MIRAMSHAH is 3,000 feet high and is surrounded by hills. It is liable to very sudden and serve storms, which, when accompanied by hail, made flying both difficult and dangerous. These storms usually came up about 12 noon and lasted until 3 p.m. The aerodrome was rendered unserviceable for a long or short period after such storms according to their intensity and endurance. TANK was not affected by these storms, but was very much hotter than MIRAMSHAH, recording shade temperatures over 100 degrees during part of March and April. Operations were interfered with on 6 occasions by rain and hail storms. Atmospherics interfered considerably with the W/t communications between MIRAMSHAH and TANK.’


Captain J.B. Glubb notes that ‘… like all mechanical devices, aeroplanes require a certain amount of time for overhaul or repair. Should the minimum time necessary for such attention not be allocated to the machine, their efficiency very rapidly decreases.’ J.B. Glubb, “Air and Ground Forces in Punitive Expeditions,” in *Journal of the Royal United Service Institution*, vol. LXXI (1926): 779.

Ibid.

Ibid.

Ibid. However, breaks in operations also allowed the squadrons to: conduct necessary aircraft maintenance, complete a multitude of routine – but important – administrative tasks and; bring their intelligence up-to-date.


“Ipacification of Waziristan,” *The Times*, 4 May 1925.


Towle, *Pilots and Rebels*, 40–43.

False Start: the Enduring Air Power Lessons of the Royal Air Force’s Campaign in Norway, April-June 1940

By Group Captain Alistair Byford

2010 marks the seventieth anniversary of the expeditionary campaign that was fought in Norway in the spring and early summer of 1940. Although the operation was eclipsed at the time by the *Blitzkrieg* in France and then subsequently by the Battle of Britain, it is worthy of study as a significant milestone in the development of air power; the *Luftwaffe* demonstrated, for the first time in modern warfare, how all four air power capabilities – control of the air, intelligence and situational awareness, air lift and attack – could be brought together to influence a joint campaign decisively. In contrast, the RAF’s activities were much less successful, primarily because it was neither organised nor equipped to undertake expeditionary warfare, but it still contributed more to the campaign than is generally acknowledged. In particular, air operations around Narvik played a part in the Allies’ relative success in the far north, and act as a useful point of comparison with the disastrous experience in south-central Norway. This essay argues that considered analysis of Norway 1940 highlights many lessons that are still of real contemporary relevance; in particular, the critical importance of control of the air in enabling all other activities; the psychological impact of air power; and air power’s potential as a force multiplier, providing mobility and firepower to small bodies of troops in extremely difficult terrain. But the limits of the air weapon were also evident, especially its dependence on force protection and secure basing in a campaign that was dominated by range and distance, time and space, and the paucity of useable airfields.
Introduction

In 2010, historic commemoration within the Royal Air Force has focused almost exclusively on the seventieth anniversary of the Battle of Britain. This is understandable, because as John Terraine notes, this iconic event remains ‘the one indisputable victory in a recognizable air battle of decisive importance.’ Yet in the historiography, analysis of the RAF’s contribution tends to be superficial, and is coloured by a pervasive impression of hopeless gallantry in a lost cause: of outdated biplanes flown from frozen lakes in the face of overwhelming German air superiority; or the tragedy of the loss of two fighter squadrons when the aircraft carrier evacuating them was sunk, a particular irony after the triumph of the unrehearsed deck landings that seemed to have guaranteed their unlikely escape. In reality, the RAF’s experience in Norway was far more complex and nuanced, and the campaign highlights many lessons that are still of real contemporary relevance; indeed, few operations demonstrate the enduring verities of air power with quite such stark clarity.

Furthermore, the Luftwaffe’s activities, if not always the RAF’s, marked a step change in the development of air power, presaging the way in which the collective employment of the whole panoply of air power capabilities can be employed to generate decisive effects that can fundamentally influence the outcome of an entire campaign.

Strategy and Plans

Following the outbreak of war, Britain and France had sensibly adopted a posture of strategic defence while they continued to mobilized and rearm. But as the ‘Phoney War’ dragged on through the winter of 1939, pressure began to mount for some sort of initiative to be taken, although there was absolutely no
appetite for any action on the Continental mainland that might precipitate a reprise of the horror of the trench warfare of 1914-18; instead, a limited, expeditionary adventure to a remote theatre seemed to be a far safer and more palatable alternative, and the ‘Winter War’, which had broken out between Finland and Germany’s then ally, the Soviet Union, focused attention on Scandinavia in general and Norway in particular. At one level, this was simply a case of access to resources. Over two-thirds of the iron used by Germany’s armaments industry originated in Scandinavia and although it was mined in Sweden, it had to be shipped through the ice-free Norwegian port of Narvik. This meant that German cargo vessels could then take advantage of Norway’s strict neutrality by making passage down the coast through the Norwegian Leads, effectively free of the fear of British attack. But more fundamentally, Norway’s geographic position meant that it dominated the North Sea, and this imbued it with huge strategic significance: either as a potential base for British attempts to blockade Germany, or for German attempts to sever Britain’s supply routes. Consequently, both Germany and the Allies developed plans to secure Norway, either to promote their own strategic interests directly, or to counter any potential move by their opponents.

Winston Churchill, the First Lord of the Admiralty, was the most vociferous advocate of intervention in Scandinavia. Despite Finland’s eventual defeat in the Winter War, he continued to champion the idea of an expedition to Norway throughout the spring of 1940, eventually gaining approval for the less than inspiringly named Operation Wilfred. This was a scheme to mine the Leads and thus force the iron ore ships out into international waters, where they could be engaged and destroyed by the Royal Navy. As this would almost certainly provoke a German reaction, a contingency plan (‘R.4’) was developed to accompany Wilfred. This aimed to shore up Norwegian resistance to any attempted German occupation by deploying a British Expeditionary Force to hold a number of key ports. But R.4 was purely reactive, the allocation of forces was pitifully small - and the Wehrmacht acted first.

The German operation was prompted initially by the Altmark incident. On 16 February, the destroyer HMS Cossack had intercepted the Graf Spee’s supply ship deep in Norwegian territorial waters, liberating the 300 British prisoners carried aboard to the famous cry “the Navy’s here!” This convinced Hitler that Britain was ready to flout international law whenever it suited her to do so, and reinforced his instinct that he needed to move quickly to forestall any larger-scale Allied encroachment on Norwegian neutrality. His response was Operation Weserübung (the ‘River Exercise’), which aimed to secure Norway once and for all. This was the first genuinely joint air, land and maritime operation to be attempted in modern warfare, with each component depending totally on the others to achieve operational success. Quite correctly, the German planners assessed that the outcome would depend on the huge distances involved, the difficulty of the terrain, and the paucity of suitable airfields and ports. They concluded that a
closely coordinated joint assault was required, not just on Norway, but also on Denmark, to secure mounting bases and the lines of communication into the operational theatre. The power of the Luftwaffe would be used as an antidote to British naval supremacy, and shock and surprise (subsequently described by the British as ‘gangster tactics’) would be employed ruthlessly to mitigate the very real risks involved. Grossadmiral Raeder, commander-in-chief of the Kriegsmarine, summarised the intention in his Operational Instruction: ‘The prerequisites for success are surprise and rapid action executed with boldness, tenacity and skill.’ The aim was to use overwhelming force to complete the mission as quickly as possible, so that the forces employed could be made available as soon as possible for Fall Gelb (‘Case Yellow’), the Blitzkrieg on France; the key to success would be the seizure of the few available ports and airfields at the outset, as this would then make it extremely difficult for the Allies to mass sufficient combat power to mount an adequate response. The first German naval units sailed on 7 April, and Weserübung itself was launched on 9 April 1940, forestalling Wilfred just as the British operation was about to begin.

Policy and Force Structure: the RAF in 1940

The RAF’s organisation in 1940 demonstrates the impact of policy on strategy, doctrine and force structure. British inter-war policy was based on the concept of ‘Limited Liability’. Driven by the imperative to avoid the mass casualties of the Great War, Limited Liability decreed that there would be no large-scale commitment of ground forces to any future continental war; instead, the British contribution would be confined to the RAF and Royal Navy, operating from secure bases in Great Britain itself. Although this policy was abandoned in March 1939 - when the German invasion of the rump of Czechoslovakia finally demonstrated that a British Expeditionary Force would have to be established to support the French on the Continent - by this stage it was simply too late to alter the priorities that had been set in the rearmament programme, or to restructure the RAF for a different sort of war to the one that had been anticipated during pre-war expansion.

One consequence of Limited Liability was the RAF’s decision (implemented in 1936) to structure itself into three, mono-functional, commands: Fighter, Bomber and Coastal. This created a framework that was ideal for managing single-role campaigns fought from well-found, permanent bases in the metropolitan homeland, where little inter-command cooperation was required: examples were to include the Battle of Britain, the RAF’s contribution to the Battle of the Atlantic and the Strategic Bombing Offensive against Germany. But as events in Norway and then France were to demonstrate, the single-role command model did not provide a structure that could be readily used to deploy and support an expeditionary air component in the field, or integrate the balanced mix of air power capabilities required by a joint force – a requirement that had never been envisaged in the era of Limited Liability. It is telling that
when British forces again engaged the main force of the enemy by land, multi-function air commands (such as the Western Desert Air Force in North Africa and 2 ATAF (Allied Tactical Air Force) for the north-west Europe campaign) had to be created; but these had no equivalent in 1940, and this meant that the organisation of the RAF’s expeditionary capability in Norway would inevitably be extemporised and *ad hoc*.

Although this Ju 52 transport met a premature end at Trondheim, air lift was critical for the Wehrmacht, not just in supporting land operations, but also in seizing and then supplying the captured air bases that underwrote the Luftwaffe’s ability to control the air.  

The lack of an air transport fleet was another example of the way that Limited Liability had skewed the RAF’s force structure. With limited time and resources available for rearmament, priority in the pre-war expansion plans was naturally given to the interceptor fighters and long-range bomber aircraft required for a strategic air force intended to fight from Great Britain. There seemed to be little point in investing in air lift, when policy dictated that there would be no expeditionary force requiring this capability. Consequently, other than a few obsolete Bristol Bombays, there was no British counterpart to the cheap and reliable German Ju 52/3m tri-motor transports that were to have a huge influence on the campaign.

In contrast to the RAF’s structure, the *Luftwaffe* was organised into balanced, multi-role air fleets or *Luftflotten*, which were ideal vehicles for the delivery of tactical air power, if less effective for conducting strategic air campaigns. *Luftflotte 5* was created specifically for *Weserübung*: it was allocated over 500 combat aircraft for the operation, including 50 reconnaissance aircraft, 150 single and twin-engine fighters, and 330 medium and dive-bombers. 571 Ju 52 transports were also included as organic elements of its battle order, and these were to fly 3,018 sorties, carrying vital supplies and 29,280 troops over Norway’s difficult terrain and endowing the Wehrmacht with a tempo and flexibility that the Allies never came close to matching.

**The German Assault**

At dawn on 9 April, Ju 52s transported paratroops and air landing battalions to assault the three most significant Norwegian airfields: Stavanger-Sola, Oslo-Fornebu and Oslo-Kjeller. The slow and highly vulnerable transports operated with relative impunity thanks to the escorting long-range Messerschmitt Bf 110 fighters, which quickly overwhelmed the tiny
Norwegian air defence force of just one squadron of nine Gloster Gladiator biplanes. At Fornebu, the Gladiators managed to shoot down a Ju 52 and two Bf 110s before they were destroyed, an early indication of the vulnerability of these unwieldy twin-engine fighters, even to obsolescent biplanes. However, the airborne troops were still able to secure all three airfields quickly. German air superiority was then reinforced by further judicious employment of the air transport fleet, which was used to fly fuel, weapons and servicing crews into the captured bases immediately, permitting short-range tactical aircraft to be refuelled and rearmed as close to the fighting as possible. Highly capable Messerschmitt Bf 109 single-engine fighters and Ju 87 Stuka dive-bombers were flying out of the Norwegian airfields within six hours of the start of the operation, reducing mission times and increasing sortie generation rates in a model that was repeated to similar effect a month later in the Blitzkrieg in France. The net result was that control of the air had been achieved throughout southern Norway at the very outset of the campaign; the whole range of air power effects could now be exploited to the full.

Simultaneously, a series of amphibious landings (escorted by virtually all of Germany’s small surface fleet) successfully occupied Norway’s six most important ports, although not without loss: Norwegian coastal defences sank the heavy cruiser Blücher at Oslo, while the Royal Navy used its freedom of manoeuvre in the far north - where it could operate beyond the range of Luftflotte 5’s bombers - to sink much of the Kriegmarine’s destroyer force in two separate battles around the key strategic port of Narvik, although not before the German occupying force had already been landed. Meanwhile, the bloodless occupation of the Danish peninsula secured the strategic air and sea supply routes into theatre. This meant that despite the Royal Navy’s overwhelming numerical superiority, by noon on the first day of the operation the Wehrmacht had occupied every air or sea port of any consequence in Norway itself, and had also established a secure mounting base only 200 miles away. These were critical successes in a campaign that was to be dominated by range and distance, and the Germans were now free to start the process of consolidation by beginning to link up the bridgeheads.

The Allies’ response to the invasion was to create an ad hoc expeditionary force based on the British units already allocated to Plan R.4, but including significant French and Polish elements: the battalion of Chasseurs Alpins were later acknowledged as the most effective Allied troops in Norway. But from the outset, as Terraine laments, Allied operations displayed ‘an amateurishness and feebleness which to this day can make the reader alternately blush and shiver.’ The putative objective was Trondheim in south-central Norway, because this was a natural choke-point and communications hub at the narrowest part of the country, where any further German advance to the north could be easily blocked. But in reality, the location was determined by German air power, as a landing further south would have exposed
the Allied expedition to the full force of the Luftwaffe bombers now firmly established around Oslo.

A twin-pronged advance on Trondheims was planned from the small ports of Aandalsnes and Namsos, but whereas the Germans fielded seven divisions, the Allied Expeditionary Force was of only divisional strength, split into three weak, roughly brigade-sized groups. This was typical of a piecemeal approach where no main effort was ever apparent: it was planned that two of the brigade-groups would secure the ports, while the third would be deployed ‘somewhere else to forestall the Germans.’ Meanwhile, a separate and subsidiary operation codenamed Rupert aimed to retake Narvik, where the small German landing force had been cut off following the naval actions. Although earlier plans for Norway had included a significant air component, amazingly enough, in mountainous, snow-covered country where land movement was extremely difficult, it was decided that ‘with regard to air forces…none should accompany the expedition in the first instance.’

This curious decision may have been due to a lack of appreciation of the significance of air power in modern warfare, notwithstanding the example of Poland, as although the Chiefs of Staff acknowledged that ‘the German air threat is great,’ they still downplayed its importance. The Navy was particularly confident about the efficacy of the fleet’s anti-aircraft fire, and it was therefore decided that the risk of deploying an expeditionary force to Trondheims without air cover was acceptable. Unsurprisingly, this rose-tinted view was not shared by the Chief of the Air Staff, who intervened to force his peers to acknowledge the difficulty of maintaining an expeditionary force in Norway if the Germans could establish airfields in the country first. Although the full significance of air power may well have escaped at least some of the decision-makers, it is likely that the failure to provide adequate air support was a result of a recognition of the practical difficulties involved in supporting a capability in theatre, given the distances involved and lack of suitable airfields, and an acknowledgement that scarce air assets would have to be conserved for greater tests ahead. The Joint Chiefs noted that ‘air support for such an expedition could only be provided at the expense of our Metropolitan Air Force. The allocation of fighter squadrons would be a particularly serious commitment and we could not afford more than a token protection of the land forces.’

It is clear, however, that the planners recognised that it was absolutely critical to forestall the Germans, as it would be impossible to dislodge them once they dominated the lines of communication, the ports and the airfields. In particular, it was understood that ‘German aircraft operating from Norwegian airfields would be the most serious threat.’

The wisdom of continuing with the operation must, therefore, be open to question, once the Germans had established exactly those conditions that the progenitors of the expedition had predicted would lead to its ultimate failure.

The problems of distance and basing became abundantly clear as the British attempted to cut the
Wehrmacht’s lines of communication in advance of the Allied landings. Whereas the Germans were now operating over short, secure and easily defensible supply routes, the RAF and Royal Navy were faced with a contested transit of between 600 and 1000 miles to reach the scene of action. Although Coastal Command Sunderland flying boats located the heavy units of the Kriegsmarine as they returned from the landings, subsequent air attacks achieved little in return for heavy losses. Fleet Air Arm Skua dive-bombers sank the light cruiser Königsberg on 10 April (the first occasion that a major warship was sunk by air action in combat), but RAF’s Bomber Command suffered terribly. The German warships were difficult and highly mobile targets. This meant they had to be attacked in daylight, and the distance from British airfields meant there could be no fighter escort. Nos. 44 and 50 Squadrons were subject to a particularly grisly ordeal, graphically recounted by Guy Gibson in Enemy Coast Ahead.15 Their turret-less Hampdens had no beam defences, so Luftwaffe Bf 110s were able to take position at co-speed just outside the bombers’ formation, using their wireless operators’ sideways firing machine-guns to pick off the bomber pilots at point-blank range as they sat helplessly in their cockpits. Half of the Hampdens were ‘hacked down from the wingmen inwards’ in what was little more than a process of cold-blooded execution. In an act of desperate defiance, one pilot slid back his canopy and shot at the German fighters with his service revolver before he received the inevitable ‘machine-gun serenade in the face.’16 The chastened survivors eventually managed to escape into a cloud-bank.

The Second Phase: Allied Landings in Central Norway

Following the failure to destroy the German fleet on its return voyage, British air operations switched to attacks on the captured airfields in a forlorn attempt to write-down the Luftwaffe’s control of the air in preparation for the Allied landings. The most important German bases were at Oslo-Fornebu, the key to any German advance northwards, and Vaernes, near Trondheim itself.
However, these airfields were between 580 and 760 miles from the nearest bomber bases in Great Britain, and only the slow and vulnerable Whitleys of No.3 Group could operate over these sorts of ranges. Whitleys could not fly in daylight with any hope of survival, but were unlikely to be able to find the landlocked enemy airfields - located deep in the mountains - at night. Consequently, raids were concentrated against Stavanger-Sola, which was a much less significant airfield in operational terms, but could be reached by all of the British bomber types and was easier to identify, as it was situated on the coast. Stavanger was first attacked on 11 April and bombed regularly thereafter, with little overall effect on the campaign.

German control of the air therefore remained largely unchallenged, and the Luftwaffe was free to take prime responsibility for thwarting the British advance on Trondheim following the Allied landings at Namsos and Åndalsnes. The reconnaissance aircraft and bombers of Luftflotte 5 were able to identify and attack targets at their leisure, and there were ample resources available to provide close air support for the German army units advancing north against the Allied lodgement. Within five days of the initial landings on 14 April, Namsos had been virtually destroyed by aerial attack, forcing Major General Carton de Wiart V.C, the British commander (and legendarily brave Boer War veteran), to signal the War Office ‘that there was no alternative to evacuation unless German air operations could be restricted.’ The second prong of the British force came under similarly intense pressure as it tried to push on from Åndalsnes. The brigade consisted of a high proportion of raw troops and was ‘ludicrously short’ of anti-aircraft guns. In unusually fine weather, the British soldiers were peculiarly vulnerable to air attack as they struggled up the narrow, snow-bound valleys with no air defences, sparse cover and little room to manoeuvre.

By now it was abundantly clear that the position was completely untenable unless fighter protection could be provided, but no RAF units had been nominated to deploy, all known airfields were held by the Germans, and it would be very difficult to find a useable landing ground in mountainous terrain covered almost entirely in snow. But patently, something had to be done, and the aircraft carriers Glorious and Ark Royal were sent north to mount a number of fighter patrols over both Namsos and Åndalsnes, while Fleet Air Arm Skuas and Swordfish attacked targets around Trondheim, including Værnes aerodrome, on 25 April. However, it was clear that shore-based fighters were also required if German control of the air was to be seriously contested, and Glorious had hastily embarked the eighteen Gladiators of the RAF’s No. 263 Squadron (from RAF Filton) as she sailed. The squadron had only been formed in December 1939 and still lacked its full complement of ground crew, but was selected for the task on the basis that its obsolescent biplanes would be easier to operate from rough landing grounds than more modern fighters. But the squadron was completely unprepared for expeditionary operations; its personnel had no inkling that they were due to deploy until the day...
before embarkation, when they were told to find some warm clothing and the pilots were issued with pistols.19

A potentially suitable landing site was identified at a frozen lake, Lake Lesjaskog, but because Fighter Command was configured to operate from well-found, static bases and not for mobile operations, the support equipment was inadequate, there was no establishment of M/T (motor transport) and no means of preparing a runway surface on the lake – in the end, a passing Lapp herdsman was co-opted into using his reindeer to trample the snow flat in exchange for a bottle of naval rum.20 The squadron’s servicing party arrived on the cruiser *HMS Arethusa* with fifty tons of high-octane aviation fuel as deck cargo. This meant the warship could not fire its anti-aircraft guns because of the danger of flash-fire, and the captain was – unsurprisingly – eager to see the back of the RAF contingent as soon as possible, particularly as Åandalsnes was now under almost continuous air attack. In the absence of M/T, horse sleighs were commandeered to move supplies from the shore-line of the lake through half a mile of deep snow to the landing strip, and the squadron tradesmen had to work entirely in the open, fully exposed to both the elements and enemy attack, after the fighters arrived on the evening of 24 April. The lack of spares and proper equipment meant the Gladiators had to be refuelled by hand, using milk jugs borrowed from local farmers, and the starter carts were unusable, because no acid had been brought for the batteries. Additionally, there was no observer screen or means of communication, so effective command and control was impossible and sorties would be purely reactive, flown in response to the arrival of *Luftwaffe* aircraft overhead.21

Given the scale of these problems, the commanding officer, Squadron Leader Donaldson, decided that he could not provide any support for the Army, but ‘that squadron aircraft must be used solely for the defence of its very existence.’22 Thus far from contributing in any material sense to the joint campaign, the air component would be employed purely in a battle for its own survival. Donaldson’s bleak analysis proved to be well-founded, because German bombers began to attack the landing ground in relays from dawn onwards.

Donaldson later claimed the raids began so early because of poor operational security, as he had overheard Wing Commander Keens, who was responsible for the administration of the small air component, using an open telephone line to report the Squadron’s arrival, numbers and location the previous evening. He was also not surprised that the air headquarters at Åandalsnes was bombed, as it was un-camouflaged and marked ‘RAF HQ’ in large white letters.23 The Gladiators’ carburettors had iced up and the flying controls frozen solid overnight, so only two aircraft could be scrambled initially when the *Luftwaffe* began to attack at first light. Despite the servicing problems and constant raids, nearly forty sorties were flown on 25 April, but only five aircraft survived the day. A few missions were flown on 26 April, but only one damaged Gladiator with no fuel was left by the evening; this was burned and the remaining personnel evacuated on 27 April. The Squadron
had been destroyed after just two traumatic days of operation; forty-nine missions had been flown and six kills claimed (post-war analysis indicates that two Heinkel He 111s were destroyed), but little had been achieved other than the diversion of some of the Luftwaffe’s bomber effort away from the British forces in the field. The Squadron’s withdrawal was equally dramatic, as the ship evacuating it was repeatedly bombed and strafed, and one of the pilots was badly wounded by bomb splinters as he helped man an anti-aircraft gun.

By now, German air power had achieved a psychological dominance that repeatedly shredded the moral cohesion of the British force. This aspect of air power is a subject of real contemporary interest, with ‘shows of force’ by fast jets proving their value as a means of coercion or deterrence in recent operations in both Iraq and Afghanistan. In Norway, British soldiers and airmen were completely unprepared for the effects of concentrated bombing and, as in Poland, the Ju 87 Stuka, with its wailing air siren, was particularly effective in generating an impact on morale out of all proportion to the actual physical damage it was able to inflict.

For example, on 25 April many of No.263 Squadron’s ground crews abandoned their posts following the raids at Lake Lesjaskog, and could not be induced to return to duty despite the example set by the pilots, who had to refuel and rearm their own aircraft between sorties. Pilot Officer Purdy’s experience was typical. His face and hands were badly burned when his aircraft was bombed and strafed while he was sitting at cockpit readiness, but refusing treatment, he insisted on staying to help service and start up two other aircraft while the ground crew ‘crouched in the woods.’ He then manned an abandoned machine-gun to provide covering fire as the Gladiators took off in the teeth of another German raid. The historian Bernard Ash excuses the ground crews’ behaviour on the basis that:

_They were not truly even soldiers at all: they were tradesmen, theirs was the problem the R.A.F. has had to face as the only one of the three services in which only a small elite go into battle._

The premise that the bulk of the RAF is effectively composed of civilians wearing a blue uniform has been an enduring source of frustration to generations of the RAF’s leadership, and is clearly unsustainable in the current operational context, where there may be no obvious front-line or safe rear areas. The ‘war-fighter first, specialist second’ philosophy (initially adopted following experiences in Bosnia in the 1990s, and subsequently reinforced by the need to meet the greater demands of Iraq and Afghanistan) is a recent effort to address this problem; it explicitly acknowledges the requirement in contemporary, non-linear battle-spaces for all personnel to be trained and psychologically prepared to be able to defend themselves and continue to operate, even in the most hostile of environments.

In Norway, the problem was magnified by the decision to send non-formed unit personnel to act as squadron tradesmen. The ground crews were ‘strangers to the squadron’, and this denied No. 263 Squadron the spirit and unit ethos
that might have acted as an antidote to the shock of combat. Wing Commander Keens acknowledged this in his after-action report: ‘instead of sending a ‘scratch’ servicing party, it would be better if the squadron provided its own key servicing personnel and equipment, to be augmented according to the particular requirements of its destination.’ The current ‘Expeditionary Air Wing’ construct is a contemporary response to the enduring problem of integrating non-formed unit personnel into composite formations, and seeks to reinforce overall cohesion by providing a tangible operational focus for disparate force elements lacking their own unit identities.

The Army was equally prey to panic induced by aerial attack. The RAF liaison officer at Ålandalsnes, Squadron Leader Whitney-Straight (ironically, himself later seriously injured in a bombing attack), observed that ‘to begin with, the braver British officers and men made an attempt to carry on, despite the bombs. This was soon abandoned, and all ranks took to the woods and cellars as soon as any aircraft approached…I would say that the average man can stand no more than one week’s bombing, as experienced at Ålandalsnes, before his nerves are affected.’ The British experience at Ålandalsnes demonstrates that the psychological domination imposed by air power is potentially at the heart of its utility as a tool of coercive military force; yet subsequent events in Norway, and later in France, indicate that this effect may quickly evaporate. The first experience is visceral, but the target audience may quickly become desensitized with increasing exposure as the novelty of air attack wears off: Terraine comments that ‘before the year was out, airmen, sailors, soldiers and civilians would all display a fortitude far beyond what the squadron leader predicted.’ It would appear, therefore, that non-kinetic air power effects can be overplayed, unless the fear of air attack is leavened with periodic demonstrations of its actual physical lethality; and there is no reason to assume that the human psychology underpinning this phenomenon has changed fundamentally across the intervening seventy years.

The Commander-in-Chief of the Expeditionary Force, Lieutenant General Massy, considered the destruction of No. 263 to be decisive. The deployment of the fighter squadron had represented the only realistic prospect of preventing the total destruction of Namsos and Ålandalsnes by the Luftwaffe, and there was now a real danger that if the ports were rendered unusable, his lines of communication would be cut completely, making evacuation impossible and total surrender inevitable. Massy therefore recommended immediate withdrawal to the Chiefs of Staff as soon as he heard of the fate of the Gladiator squadron. With their approval, the evacuation began the next day, just two weeks after the first naval party had landed.

The RAF attempted to mitigate enemy air activity during the evacuation by bombing the German-held airfields, but the results were negligible. Stavanger-Sola was attacked regularly, while a few sorties were also flown against Oslo-Fornebu and the Danish airfields of
Aalborg and Rye. The heaviest raid was on 30 April, when twenty-eight Wellingtons and Whiteleys bombed Stavanger at a cost of five aircraft. This did have some sort of effect, as by 1 May Stavanger was being used for emergency landings only, but the Luftwaffe was still operating from its most important bases at Fornebu and Vaernes as it pleased. The RAF also sought to provide a measure of long-range fighter cover, but the only aircraft available were one squadron of Blenheim Mk1Fs, a lashed-up and not particularly successful conversion of the light bomber, and these would have to stage through Setnesmoen to refuel. However, this airfield was put out of action by the Luftwaffe before it could be used, so the sweeps had to be flown from bases in Britain. This meant that patrol times over Åndalsnes were strictly limited, and Namsos was completely out of range, so protection here would depend on the Sea Gladiators and Skuas carried by Ark Royal and Glorious, which were due back on station on 1st May.33

At Åndalsnes, the evacuation proceeded as planned, although this was more a function of the Luftwaffe’s inactivity rather than Bomber Command’s ineffectual attacks on its airfield or the scant protection offered by the few Blenheim sorties; the Germans were apparently simply caught by surprise. But in breach of operational security strangely reminiscent of the BBC’s announcement of the attack at Goose Green before it had taken place in the 1982 Falklands Conflict,34 the British Prime Minister, Neville Chamberlain, announced the successful withdrawal from Åndalsnes in parliament on 2 May, before de Wiart’s force at Namsos had even begun to embark. Unsurprisingly, the Germans inferred that if Åndalsnes had been evacuated, withdrawal from Namsos would follow, so the port was subjected to intense air attack. This forced the two aircraft carriers to withdraw, depriving the force of any air cover whatsoever. In the event, the Allies were probably lucky to lose only two destroyers (the French Bison and British Afridi) to air attack during the evacuation.

The Third Phase: Narvik

The disaster at Lesjaskog had underlined the critical importance of control of the air, and the British sought to address this as a priority for Operation Rupert at Narvik. A substantial land-based air component of four squadrons was originally planned, with support including a balloon squadron, an air-stores park, repair and supply units and the protection of over 200 anti-aircraft guns.35 The initial Allied landings at Narvik took place on 14 April, but operations only began in earnest on 24 April, and continued for more than a month after the withdrawal of the Allied forces further south. In the interim, the German attack on France began, and it was apparent that a long-term occupation of northern Norway was untenable when every ounce of military effort would be needed to shore up the Western Front. It was decided that Narvik should still be retaken, but Allied forces would then be evacuated after destroying the port facilities to end the iron-ore trade. Clearly, the air effort would have to be scaled back commensurately, but it was determined that No. 263 Squadron, which had quickly been reformed after the debacle in the south, and No.46...
Squadron, with its more modern Hurricanes, could still be spared. The thirty-six aircraft detachment was to be known as the RAF Component of the North-Western Expeditionary Force and put under the command of Group Captain Moore. He initially established his headquarters alongside the new joint force commander, Lieutenant General Auchinleck, on the SS Chrobry, and later collocated with him on arrival at Harstad. Meanwhile, Moore’s senior staff officer, Wing Commander Atcherley, was despatched by Sunderland flying boat to establish a landing ground near Narvik.

Atcherley’s arrival in theatre was inauspicious. He found the existing commander, General Mackesy, in a half-dressed state retrieving his possessions after his headquarters had been destroyed by a Luftwaffe raid, while the local Norwegian commander had just heard about the evacuation of Åndalsnes, and indignantly demanded that Atcherley sign a formal undertaking that the RAF would not ‘cut and run’ before he would speak to him. Undaunted, Atcherley pressed on with his reconnaissance, identifying the existing Norwegian airfield at Bardufoss as the best location. After a broadcast appeal, some 1,000 Norwegians civilians volunteered their services as labourers, and in the almost perpetual arctic daylight, two existing landing strips were cleared of snow five feet deep and extended in length, requiring trees to be felled and the tundra bush cleared. Next, the six-inch ice-layer beneath was blasted away with gelignite so that drains could be dug, before the surface was flattened by a roller made from forty-gallon drums welded together and filled with concrete.

The Air Ministry was determined to avoid a repeat of the fiasco at Lesjaskog, so Atcherley had been warned that force protection was a priority. He directed that taxy lanes be cut into the heart of the woods, so that the aircraft could be properly dispersed in blast-proof pens built from tree trunks and filled with gravel, while ample numbers of even stronger underground shelters were built across the site for the personnel. Everything was carefully camouflaged, twenty miles of road to the nearest fjord was cleared and repaired to guarantee the logistics supply line, and eighteen 3.7-in heavy anti-aircraft guns and twenty-two 40mm Bofors cannon provided protection. This was all accomplished in less than three weeks, despite the food occasionally running out and a lack of tools. Emergency strips were also prepared at Skaanland and Banak (where ‘1,000 Lapp labourers worked under the inspired direction of one British able seaman’); however, the rough surface at Skaanland proved to be unsuitable for the Hurricanes, and Banak was too far away to be used by short-range fighters, so Bardufoss remained the locus of the RAF effort.

Meanwhile, the pilots of No. 263 Squadron, with a fresh supply of Gladiators, had been waiting aboard Furious for work on the airfield to be completed. They were finally cleared to fly in on 21 May, but visibility was less than three hundred yards and two of the Gladiators crashed when the Swordfish that was navigating led the first section straight into the side of a mountain. As the weather
worsened, the remainder of the Squadron turned back and was forced to undertake an unplanned deck landing. Fortunately, they were able to find the carrier despite the mist and rain, and all of the survivors managed to land safely. The weather improved the next day, and the Squadron successfully established itself at Bardufoss, flying nearly fifty sorties before the brief Arctic twilight halted operations. Fortuitously, another spell of bad weather deterred immediate Luftwaffe intervention, and on 26 May the more capable Hurricane fighters of No. 46 Squadron were flown in from Furious, which had returned to Britain to pick them up after disembarking the Gladiators four days earlier.

The RAF had learned from the experience at Lesjaskog that an early warning network was essential, otherwise inefficient standing patrols would have to be flown, or fighters scrambled late in response to the arrival of the Luftwaffe overhead. Provision was therefore made to deploy an observer screen, but it was found that the Norwegians already had an effective network in place; what was required was the radio equipment to enable communications. Problems were initially experienced in supplying this, because of the lack of M/T and the inadequacy of the standard-issue radio in Norway’s iron-bound mountains, but by the end of Rupert, enemy air movements were being reported to the squadrons through the air headquarters at Harstad within two minutes of being detected by the observers. Some thought was given to supplementing the observer screen with radar, but this was abandoned because of the lack of suitable sites and the number of stations that would have been required to provide coverage in the mountainous terrain.

Geographic Realities (2): The Luftwaffe’s ability to influence the battle at Narvik was severely constrained by the distance to its base at Vaernes, near Trondheim

Subsequent events at Bardufoss demonstrated the threat that a well-established RAF airfield on Norwegian soil posed to German operations. In twelve days of combat, the two fighter squadrons flew over 500 sorties and claimed thirty-seven kills, threatening German control of the air for the first time and prompting real anxiety and debate within the Luftwaffe about the
correct employment of air power. At one level, this was a simple function of geography determining the force-space ratio.\textsuperscript{43} The Germans were facing exactly the same problems - a lack of bases and the range to the operating area - that had neutered British air operations in the south. The nearest German-held airfield was at Vaernes, and this was small, congested and nearly 400 miles distant, which meant that only the Luftwaffe’s medium bombers and Bf 110 long-range fighters could reach the Narvik area, in limited numbers only, and for short periods of time. Furthermore, the 110s lacked the performance to compete effectively with the RAF fighters – even the Gladiators - especially as they had to be fitted with heavy and vulnerable belly fuel tanks.

But at another level, the Luftwaffe did not help itself. An enduring air power lesson is that achieving control of the air is not enough; it must be constantly maintained after it has been initially attained, and Luftflotte 5 was guilty of failing to obey this precept after the RAF had established itself at Bardufoss. Instead of concentrating attacks against the airfield, the Luftwaffe continued to give priority to direct support for the Wehrmacht. This is not surprising, because after the success of the initial amphibious landing, the small German force at Narvik had effectively been cut off by land and sea, so it was utterly reliant on air power for both its logistics life-line and its heavy firepower, especially as it was primarily composed of lightly armed mountain troops. However, air lift missions were hindered by the lack of suitable landing grounds at Narvik, and became completely untenable after the arrival of the RAF fighters at Bardufoss. Although ten Ju 52s landed on a frozen lake, nine were lost through damage or air attack. Air dropping was an alternative, and 387 missions were flown to drop supplies and 600 paratroops to reinforce the garrison, but another thirteen of the vulnerable transports were shot down. Bomber attrition was also becoming unsustainable, and it was finally obvious that control of the air would have to be regained before the Army could be supported effectively. The apportionment and allocation of the air effort was altered accordingly, but Bardufoss was never completely neutralised. Although the RAF could not achieve more than temporary air parity above Narvik, this was sufficient to deny the Luftwaffe the freedom of action it had enjoyed in the south, and enabled the Allied operation on the ground to continue to an eventually successful conclusion.

The Final Phase: Evacuation

Although the outnumbered and isolated German garrison was finally pushed out of Narvik on 28 May, by now events in Norway had been completely overtaken by the disaster enveloping the Allies in France and the Low Countries. With Operation Dynamo, the Dunkirk evacuation, already in progress, the Chiefs of Staff confirmed their decision to withdraw from Norway as soon as the port facilities at Narvik had been demolished, as ‘we need to assemble every available destroyer, fighter squadron and anti-aircraft battery for the defence of the United Kingdom.’\textsuperscript{44} Furthermore, they acknowledged that the costs of the operation were outweighing the
benefits, because Rupert had ‘not obliged the Germans to disperse their forces more than we have dispersed ours.’

The evacuation was marked by the tragedy for which the campaign is now best remembered, at least by the RAF. No. 46 Squadron had been ordered to burn its ten surviving Hurricanes, as it was deemed impossible to land high performance fighters on an aircraft carrier’s deck without arrestor gear, especially as none of the pilots had received any training. However, conscious of the desperate need for modern fighters to defend Britain, every pilot volunteered to make the attempt, and ‘against all chances and predictions,’ all ten successfully landed on HMS Glorious on the morning of 8 June. They joined their comrades of No. 263 Squadron, who had flown their Gladiators onto the carrier the previous evening, a slightly less daunting prospect given the biplanes’ more pedestrian landing speed and the deck-landing experience the pilots had gained following the abortive attempt to fly into Bardufoss on 21 May. Although the Commander-in-Chief Home Fleet subsequently opined that ‘We have made a “false god” of the business of flying on and off a carrier but now it has been done by four R.A.F. pilots in Gladiators at their first attempt and ten Hurricanes have been flown on to a carrier, the matter should be reconsidered,’ this remains an outstanding feat of airmanship.

The Kriegsmarine’s surface fleet had not intervened in Norwegian waters for almost two months, and this had probably engendered a degree of complacency within the Royal Navy. Certainly, Captain D’Oyly Hughes, commanding Glorious, made no attempt to use the carrier’s Swordfish to scout ahead and did not even bother to post lookouts, so it came as a total surprise when the German battlecruisers Scharnhorst and Gneisenau suddenly appeared over the horizon at 1600 hours. With its torpedo-bombers struck below, the carrier was defenceless, and despite the gallant self-sacrifice of the two escorting destroyers, Ardent and Acasta, Glorious was quickly sunk by accurate salvoes from the battlecruisers’ 11-inch guns. 1,474 sailors and 41 airmen died in the tragedy, including Group Captain Moore, the air component commander, and all but two of the fighter pilots who had fought and flown so bravely and skilfully: the survivors were Squadron Leader Cross, the commanding officer of No. 46 Squadron, and Flight Lieutenant Jameson, who were both picked up by a destroyer the next morning after
clinging to Carley floats throughout the night.\textsuperscript{51}

Poor air-maritime cooperation also contributed to the disaster. Following the security breach that had alerted the Germans to the evacuation at Namsos, the Admiralty wanted to keep the withdrawal from Narvik as secret as possible; but this was taken to such extremes that Coastal Command was not informed that the operation was in progress until after \textit{Glorious} had been sunk, when it had Hudson and Sunderland maritime patrol aircraft available that could have detected the German battle squadron. Roskill comments that ‘not for the first time does excessive secrecy appear to have hampered efficiency,’\textsuperscript{52} and getting this balance right proved to be an enduring problem that the British found peculiarly difficult to resolve in subsequent operations.\textsuperscript{53}

The Reckoning

The German forces lost 3,800 killed and 1,600 wounded in \textit{Weserübung}, light losses in the course of a highly risky endeavour that achieved an important strategic advantage. The Allies (Norwegian, British, French and Polish) lost a total of 3,500 men in the land fighting and another 2,500 at sea, and 400 Norwegian civilians also died. The Royal Navy’s losses were significant but sustainable, given its overall strength; in contrast, \textit{Weserübung} was a pyrrhic victory for the \textit{Kriegsmarine}. The surface fleet never recovered from the losses it experienced, and this had two consequences: first, in the absence of a credible surface capability, large-scale submarine warfare was adopted whole-heartedly, intensifying the Battle of the Atlantic; and second, control of the air would now be absolutely critical for any putative operation against England, because the \textit{Luftwaffe} would have to take sole responsibility for protecting an invasion fleet from the Royal Navy, as the post-Norway \textit{Kriegsmarine} was clearly now incapable of doing so. Whether an invasion was feasible or not would therefore depend totally on the outcome of the impending Battle of Britain.

In the air, \textit{Luftflotte 5} lost about 100 combat aircraft and 80 transports, or about 15\% of the total force committed to battle. This was unwelcome wastage, given the greater importance of \textit{Fall Gelb}, but at this stage of the war, sustainable. The RAF lost 112 aircraft in total, including the fighters that went down with \textit{Glorious} and the thirty-one aircraft lost by Bomber Command from the 782 sorties flown in the Scandinavian theatre before it was diverted to support the battle in France after 10 May; the results of these raids were negligible.\textsuperscript{54}

Positive outcomes were few. The aim had been to demolish Narvik so comprehensively that the port would be unusable for at least a year, but in the event, the Germans made the first iron ore shipments through the harbour within six months. However, an unforeseen bonus of real strategic significance was the \textit{de facto} acquisition of the Norwegian merchant marine - then the second largest fleet in the world - and this proved to be a key factor in providing a bare margin of numerical strength during the Battle of Atlantic. At the grand-strategic level, the campaign had immediate and important ramifications. Terraine notes that
‘Churchill’s predilections for forlorn endeavours in remote places were high among his weaknesses as a war leader,’ and the fiasco of the British campaign, ‘with its missed opportunities and squandered victories’ might reasonably have been laid at his door. But in the famous ‘Norway Debate’, Conservative MPs refused to back Neville Chamberlain, leading to his resignation and, ironically, Churchill’s appointment in his stead. Serendipitously for the new prime minister, the full political consequences of the debacle in Norway were masked by the disaster in France that began to unfold on the very same day, 10 May, and in the developing crisis of the summer of 1940, the mismanagement of the Norwegian operation did not attract the critical scrutiny it would otherwise have merited.

**Enduring Air Power Lessons?**

Few operations illustrate with quite such precision the strengths and attributes of air power: the absolute and fundamental importance of control of the air; the peculiar psychological dominance it can impose; the ability to decisively influence the joint campaign through the integration of all four air power roles; and its function as a force multiplier, providing the mobility and firepower to enable small forces to generate much greater effects. However, the Norwegian campaign also highlights the constraints on air power, and its dependencies: particularly the tyranny of distance and time, the need for adequate force protection, and the absolute requirement for appropriate logistics support and suitable basing.

Arguably, Norway witnessed the first completely conclusive employment of air power. As the RAF’s official history comments, while ‘the primary and overriding importance of air power was not new as a conception... it was new as a fact,’ and a fact that was so plain that for the first time, it was properly understood and acknowledged by both the Army and the Navy. The Commander-in-Chief Home Fleet wrote in his post-action report that his ‘ships could not operate in proximity to shore bases operating air forces virtually unopposed in the air...as the campaign progressed, the counter became apparent, viz., the presence of friendly fighters’, while even before the evacuation of south-central Norway, General Massey reported that ‘the dominating factor in this campaign has been air superiority.’ What was abundantly clear was that it was the Luftwaffe’s control of the air that had permitted it to dictate the course of the campaign other than at Narvik, where two squadrons of RAF fighters had held the line against an opponent operating at long range.

This emphasises a point that is particularly timely, because in the current defence debate, a line of thinking has developed that assumes Western air superiority as a free good that will somehow be provided as part of the global commons. Sacrificing the RAF’s ability to gain control of the air would be a highly risky strategy based on this dangerous assumption, and the Norwegian experience clearly demonstrates the acute vulnerability of a joint force without air cover - even to relatively unsophisticated air weapons. This lesson was reinforced during the Falklands Conflict in 1982,
which shares several other features with Norway 1940, not least the risk that was accepted in mounting an operation in the knowledge that the level of air support was, at best, marginal. In Norway, this fatal disadvantage was acknowledged explicitly; indeed, this gives the campaign its special interest, for as the Air Historical Branch narrative notes, ‘it is rare in war that dangers that have been anticipated correspond so exactly to the dangers that eventuate.’

But with the strong political imperative to mount the operation in any case, an unrealistically optimistic view was taken of the available palliatives, particularly the fleet’s ability to defend itself with anti-aircraft fire, and the effects that Bomber Command might achieve against enemy-occupied airfields.

Again, there are clear parallels with the Falklands, where there was misplaced confidence in the fleet’s anti-aircraft missile systems and an expectation that bomber sorties, conducted in small numbers and at extreme range, might render enemy airfields unusable.

Once control of the air had been achieved, for the first time in modern warfare the Germans demonstrated how each of the other three air power roles – intelligence and situational awareness, air lift and attack – could be exploited to the full, decisively influencing the outcome of events.

Richards charts the range of kinetic and non-kinetic effects generated by Luftflotte 5:

*They influenced the battle by reconnaissance activities, by bombing and machine-gunning, and even by the mere threat of their presence; our lines of communication were at their mercy; and they put two of our bases virtually out of action. A more novel employment of aircraft was their use to drop paratroops, though this was done only on a small scale in Norway; to land reinforcements on captured or improvised landing grounds or by seaplane on the fjords; and especially to supply food and munitions to troops in forward areas, notably the garrison of Narvik.*

Here, the genesis of many of the key attributes of air power that are prized so highly today is clear: the ability to act as a force multiplier *par excellence*, creating tempo by providing mobility and firepower to small or isolated forces; the psychological domination imposed, so that even the presence of aircraft may achieve an effect; the importance of reconnaissance in building situational awareness; and when necessary, the unparalleled generation of destructive force, both in direct support of the Army, and in shaping the battle-space, through interdiction of bases and supply routes.

The RAF was not disposed to introspection in 1940. With the disaster in France and the drama of the Battle of Britain totally eclipsing the end of the Norwegian campaign, there was little time and absolutely no appetite for a formal enquiry. Clearly, lessons were learned within the campaign, as a comparison between the approaches adopted at Leskajog and Bardufoss demonstrates, but there is little evidence that experience was assimilated and applied to other campaigns. Norway forms the left-hand panel in a triptych of disastrous expeditionary operations, followed by France 1940 and Greece 1941, which all share common features: an
inadequate organisational structure that did not provide the necessary logistics support to enable an air component to operate effectively in the field, particularly during mobile operations; the employment of second-line equipment, such as Gladiators, Hurricanes, and Tomahawks, for the critical control of the air task, rather than the RAF’s best fighter, the Spitfire; the failure to establish a deployable air defence system to control fighters on expeditionary operations; and the mono-functional command structure, which meant there was no ready-made organisation available to integrate fighter, bomber and reconnaissance operations coherently, or to provide a focal point for the air-land and air-maritime cooperation necessary in a joint campaign.

It is no coincidence that these failures abroad straddle Fighter Command’s shining success in the Battle of Britain in the high summer of 1940, as this was exactly the single-role, strategic air operation that the RAF had been led by interwar policy to expect, plan and prepare for. It was therefore able to fight with its best equipment, from well-found, permanent bases with a secure logistics chain, benefiting from a sophisticated command and control network to direct its activities, and with no requirement to cooperate either with the other commands, or indeed the other fighting services.

With hindsight, it is easy to criticise the RAF of 1940 for learning too slowly, and replicating the mistakes that were made in Norway in France and then later in Greece; indeed, it took Tedder’s empirical work with the Western Desert Air Force to finally establish the precepts required for the successful delivery of tactical air power in joint operations. This slow progress may be because air forces are unusually prone to what may be described as an anti-doctrinal bias, manifest in a reluctance to formally codify operational experience. In this respect, the RAF of today cannot afford to be complacent, and arguably more could - and should - be done to capture the lessons of recent operations in Iraq and Afghanistan more rigorously, as the validity of current doctrine in changing conditions cannot be assessed unless it is tested against a baseline of historical experience. It may be invidious to cherry-pick lessons from history, but while the character of warfare may change, human nature – and therefore the essential nature of warfare itself – arguably does not.

The Norwegian campaign may have been fought seventy years ago, but when Terraine asserts that ‘brutal reality would teach that in a large country with poor communications and notorious weather, air power was decisive,’ he could equally be writing about current operations in Afghanistan. The final word may, perhaps, best be left to Lieutenant General Auchinleck, whose summation of the Norway campaign is pertinent and equally timeless:

The predominant factor in the recent operations has been the effect of air power … the first general lesson to be drawn is that to commit troops to a campaign in which they cannot be provided with adequate air support is to court disaster.

Notes

3 See, for example Joseph Kynoch, *Norway 1940: The Forgotten Fiasco*, (Shrewsbury: Airlife, 2002).
4 Illuminatingly, the RA F currently defines air power in terms of 'influence' and identifies the four air power roles as control of the air, intelligence and situational awareness, air lift, and attack, with control of the air as the essential perquisite; this provides a useful framework for analysis of the Luftwaffe's contribution in Norway. *AP 3000: British Air and Space Doctrine*, (London: MOD, 2009).
7 Image courtesy of Norwegian government archives.
8 Dildy, 35.
9 Terraine, 115.
10 Richards, 78.
12 COS (40)304(S) 25 Apr.
13 COS (40)304(S) *A Review of the Campaign in Norway*, 12.
16 Ibid.
18 Richards, 86.
20 Richards, 89.
21 Dildy, 69.
22 AHB/11/117/4, 63.
23 Ibid.
25 CAS RUSI speech.
27 Ibid.
28 Ibid.
29 II/H5/1/96.
30 AHB/11/117/4, 68.
31 Terraine, 116.
32 Richards, 93.
33 Ibid.
34 ‘How the Falklands War was won’, *The Daily Telegraph*, 27 March 2007.
36 Dildy, p.77.
37 Richards, 96.
38 Macmillan, 208.
39 Richards, 98.
40 AHB/11/117/4, 87
41 Derry.
43 Philip Sabin, 'The Counter-Air Contest', in Andrew Lambert & Arthur Williamson (eds.), *The Dynamics of Air Power*, (Bracknell: RAF Staff College, 1996)
44 COS (40)304(S).
45 Ibid.
46 Terraine, 78.
47 Letter from C-in-C Home Fleet to Secretary of the Admiralty, 15 June 1940, TNA ADM 199/479.
48 Picture courtesy of www.royalnavy.mod.uk
49 Roskill, 195.
50 Didley, 84.
51 Ibid.
52 Roskill, 198.
53 See, for example, Alistair Byford, ‘Executive Fuller: The RA F in the Channel Dash’, *Air Power Review*, Vol 12,
No 3, Spring 2009.


55 Terraine, 79.

56 Richards 105.

57 Brown, 134.

58 COS (40)304(S) 25 Apr.

59 See for example, Sir Stephen Dalton’s lecture *Dominant Air Power in the Information* at the International Institute for Strategic Studies, 15 February 2009.

60 AHB/11/117/4, 101.

61 Richards, p.98.

62 Ibid.


66 Terraine, 78.

67 Richards, 93.
Mobilise it is urged a nice field force, and operate at leisure in the frontier valleys, until they are as safe and civilised as Hyde Park...Only one real objection has been advanced against this plan. But it is a crushing one, and it constitutes the most serious argument against the whole “forward policy”. It is this: we have neither the troops or the money to carry it out.\

The typically sage words of Sir Winston Churchill reflect the persistent policy conundrum posed by the ‘frontier valleys’ that span the Durrand Line, dividing the tribally heterogeneous Pashtun populations of contemporary Afghanistan and Pakistan. The latest iteration of the policy dilemma in the region, the much lauded US led, NATO surge in southern Afghanistan will largely be complete by this time next year. Naturally, it is too early to begin to assess the extent to which it has succeeded in terms of clearing populated areas of Taliban influence and replacing it with a degree of governmental control directed, however nominally and temporarily, from Kabul. Predictably and indeed commendably, there are the optimists among us who sense a tipping point in the campaign.\

At the same time there are more cautious judgments to be found amongst seasoned and justifiably sceptical commentators.\

Highlighting the folly of Hitler, in opening a disastrous second front in 1941 with myopic faith in the ubiquitous virtue of Blitzkrieg, Professor Huw Strachan recently warned of the dangers associated with the assumption that success in one theatre can easily be transposed to another. Afghanistan is not Iraq. Of course, the Afghanistan campaign plan is more nuanced than a simple replication of ‘what worked’ under General Petraeus’ tutelage in Iraq. Nonetheless, it would be misleading to mistakenly invest in linear and paradigmatic visions of future defence requirements based on the contextually unique tactical effects of one campaign. Especially so given the apparently paradoxical logic that equates short term tactical gain with longer term strategic uncertainty. Despite the ‘Petraeus effect’, ‘a stable and secure Iraq remains a difficult and perhaps distant goal’. Indeed, there is a wider, strategic, relevance to this, largely operational, debate that is germane to the British military community and is the focus of this article. That question is as follows: whilst the counterinsurgency (COIN) campaign in Afghanistan is rightly the MODs ‘main effort’, the looming change in focus of the US, and therefore NATO, mission doesn't necessarily support the current force
posture in Afghanistan as a sound foundation for our future financially constrained armed forces.\textsuperscript{8}

\textbf{We Are Where We Are}

The assessment of this paper reflects the apparently prescient thoughts of our own Service chief.\textsuperscript{9}

It is based, \textit{inter alia}, on political noises in Washington concerning the strategic direction of the US military\textsuperscript{10} and more fundamental questions about the efficacy of Western COIN approaches against contemporary insurgency and takfiri extremism.\textsuperscript{11} Indeed Alex Marshall has recently questioned the utility of Western COIN operations from a historical perspective, arguing with some conviction that modern COIN doctrine is predicated on a ‘liberal lie’ that fosters a ‘comfortable but dangerous intellectual illusion’ amongst policy makers with little practical experience of such endeavours.\textsuperscript{12} Highlighting the Russian rediscovery of ‘less constrained’ COIN principles from the 19\textsuperscript{th} century, Marshall reminds us that effective local administrators supported by an inflow of federal cash and local combat fatigue associated with significant levels of repression has been successful in the respect that it achieves all COIN doctrine can ever achieve.\textsuperscript{13} In contrast, in the case of Afghanistan, Western liberal restraint divorces the grammar of COIN doctrine from its inescapable political logic. Indeed it creates the ‘postmodern challenges for modern warriors’ that General Kiszely so convincingly articulates.\textsuperscript{14}

Such challenges to Western policy appear to be compounded by the looming age of austerity and the understandable domestic political considerations that necessarily condition governments. Given such fiscal and political constraint this analysis suggests that any future Afghan commitment will have to eschew extant COIN mantras and entrust legacy operations to mentored indigenous forces whilst a combination of airborne capable Special Forces and combat ISTAR will focus on gathering intelligence on and interdicting any Taliban and Al Qaeda nexuses that are deemed a threat to the Afghan government, specifically, and wider region, implicitly. Of course this should be no surprise given how the threat of ‘takfiri terror’ and broader, possibly related radical Insurgency is currently dealt with in Pakistan, the Horn of Africa and now Iraq not to forget the IDF and Mossad’s protracted efforts in the Levant.\textsuperscript{15} Indeed whilst ‘victory’ is a misleading and unhelpful term when evaluating the success of such a strategy it nonetheless could reasonably be described as adequate in providing a more advantageous outcome than would otherwise be the case: in other words by doing nothing or by sustaining unaffordable regional policemen and large COIN footprints.\textsuperscript{16}

Importantly, the debate has never been more topical as we approach the publication of the new Strategic Defence and Security Review (SDSR). The SDSR is scheduled to be published at the zenith of the campaign effort in Afghanistan, specifically in the south of the country. Consequently the defence community, in the widest sense, must guard against the association of the contemporary image of the Afghan campaign with the likely requirements of future contingencies.
both in Afghanistan and other areas of the world, wherever our parochial or communal interests are threatened. Technology, when sensibly employed, remains our comparative advantage. Whilst it is no panacea it may turn out to be a more effective and necessary long term investment than enduring and equally expensive COIN forces: more so if we can't afford to resource a full range of capabilities. Indeed despite the significant expense involved in sustaining sizeable COIN forces, an understandable lament by commanders in the field is that they could always do with ‘more’. Mass is critical to such endeavours and, as CDS informs us, comes at a premium. This paper will invest in the notion that a flexible and adaptable military instrument, judiciously employed, will offer greater strategic utility to policy makers than a bespoke COIN construct, particularly if the efficacy of the latter option is questionable. The aim of this paper is not to provide a polemic, even less to provoke either inter or intra service debate (indeed given the breadth of the air components employment, the intra service debate stands to be just as fierce) instead it is to propose cold headed consideration of how the Afghanistan campaign may look in the future and what the implications are for the British military. From the outset it should be noted that there will inevitably remain a requirement for capabilities that in Secretary Gates words, ‘can kick in the door, clean up the mess and rebuild the door.’ Moreover, the complexity of the future global (in) security environment is likely to require simultaneous employment of light and heavy forces, mass with technology, as an integral part of joint forces in a combined environment. As Michael Evans notes, war is likely to retain ‘chameleon’ like qualities, manifesting itself in ‘inter-state, trans-state and non-state modes – or as a combination of these’. Nonetheless, it is worth considering two competing alternatives to the broad question posed by the title of this paper. Helpfully, these alternatives have been illuminatingly described by Michael Codner as the Land focused, manpower intensive ‘Global Guardian’ model, consistent with contemporary COIN doctrine; and the technology enabled, globally mobile ‘Strategic Raider’ model, consistent with more discretionary offshore balancing.

Global Guardians

Proponents of ‘new war’ theory, and the term is as widely inconsistent as it is deeply contentious, see little role for technological solutions to political problems. This is axiomatic, however the corresponding argument that manpower intensive, COIN focused ‘global guardians’ are an efficacious alternative is not as sound a premise as some have suggested. Whilst the political nature of the Afghan insurgency is enduring, its post Maoist character may well be an unsuitable structure for neo-classical COIN forces to counter. The post-modern difficulties encountered by ‘modern warriors’ in such profoundly pre-modern environments are well documented. Indeed recent commentary has identified the irreconcilable ‘trilemma’ of Western COIN approaches as a theoretical flaw at the heart of contemporary doctrine. There is, it is argued, an intractable inability to reconcile
force protection with discrimination between non combatants who need to be protected and combatant insurgents who need to be eliminated. This is compounded by the effects of necessarily short tour lengths, the inherent difficulty of large and unwieldy coalitions to operate with any sense of conceptual and physical manoeuvre, and a fundamental domestic aversion to a continual flow of blood and treasure in the direction of what is regarded in some circles as a ‘residual problem’. Naturally, the lack of tangible progress in Afghanistan and the prospect of an unravelling security situation in Iraq serve to augment such perceptions. Indeed they serve to make the prospect of future intervention along similar lines in say Somalia or Yemen, not to mention Pakistan, as unpalatable as they are unlikely.

Moreover, as the doyens of COIN theory and practice contend military force can only succeed in creating the space and providing the time for a political solution to emerge. Afghanistan, like Iraq before it, lacks security because it lacks consensus. The critical problem in Afghanistan is fundamentally political but an inclusive solution remains elusive. The ineluctable reality remains that President Karzai is perceived to be little more than an emasculated ‘unicorn’ of Kabul. In Iraq, the central reality of power was that Baghdad mattered, not least for control of oil revenues, the lifeblood of the economy. Without it there was no incentive for Sunni involvement in an inclusive, if fragile, accommodation. In contrast, Kabul represents a bureaucratic obstacle at best and rubber stamp at worst to generally illicit economic activity predominantly associated with opium production and trafficking. Against such a reality, any investment in political ‘solutions’ in the Afghan capital run the risk of being peripheral to real centres of regional power in the country. Furthermore, hopes for reconciliation and reintegration appear to be a non starter, in strategic terms at least. Sensing that the political clock ticks ever faster in Washington the Taliban have no interest in negotiating from a position of relative weakness.

In any case, returning to the example of Iraq, it is clear that COIN centric ground forces are, like their antithesis in the guise of the Revolution in Military Affairs, no ‘magic bullet’. The old Iraq hand Tom Ricks identifies the de facto ethnic partition of Baghdad, a cease fire with radical Shia militias, increased US military unity of effort and the critical ‘Sunni awakening’ as being at least as significant as the ‘surge’ in troop numbers. This is not to underplay the utility of force demonstrated by the 18 month surge in 2007/2008, quite the opposite. However it is to remind ourselves that force can only have utility if it is conformal with the context in which it is employed. Indeed in the absence of an achievable and identifiable political solution in Afghanistan, or a truly broad based and sizeable International coalition, a strategy of containment might make strategic sense as well as offering a default solution. Even more critically the external financial and internal political constraints that afflict the West may render the mere concept of 'global guardianship' as deeply hubristic. This is a moot point, of course, if such hegemony is
simply unaffordable.

**Strategic Raiders**

Whilst this phrase may purloin strategy’s core meaning it conveys an ability to be fast on ones feet, able to respond to rapidly unfolding scenarios on a global scale. The comfortable criticism of it will point to Clintonian attempts to ‘rearrange rubble’ or run away from a fight as was arguably the case with responses to security dilemmas in Afghanistan and Somalia during the 1990s. Similarly, isolationist responses that glibly talk of ‘fortress Britain’ are vulnerable to the inescapable reality of a globalised, connected and deeply multicultural Britain. Indeed these criticisms are valid and deserve to be incorporated into what must amount to a more harmonious form of ‘selective engagement’ or ‘offshore balancing’ to coin the popular phrase. Heeding such criticisms, and respecting the enduring quest for answers, even if only partial answers, to political problems such a strategy must amount to much more than provision of long range, precision guided kinetic effects. Media images of the ‘Jolly Rodger’ flying on returning submarines with empty TLAM tubes simply won’t suffice. Diplomatic savvy, supported by discrete and realistic deployed military advisors, flexible bilateral partnerships and global reach will be the key enablers. Military capability, people and equipment, that is truly expeditionary and focused on being able to contribute to aiding understanding, rather than more traditional functions of force, will be critical. In this respect the ubiquity of the air and space environment will place significant demands upon the RAF of the 21st Century.

An immediate advantage of such a posture lies in the smaller deployed footprint. This not only reduces the burden on hard pressed ground units but allows for a longer term commitment. Whilst the future of 10,000 troops in Afghanistan is already subject to vociferous cries of ‘bring them home’, a more selective approach will potentially allow for an enduring and dispersed commitment measured in decades rather than years. Indeed progress will similarly have to be framed in generations rather than electoral cycles. Above all such a strategy embraces the fact that realistic, persistent and meaningful change will only emerge from within a society. And it won’t emerge overnight. However well intentioned they are cosmopolitan, pluralistic, perhaps even post modern normative values and models of governance are often resisted by fiercely conservative societies precisely because they appear to be neo-Imperial. This can have the kind of counter productive response that leads to perpetual and self defeating cycles of violence in which force becomes synonymous with both means and ends. With notes from several fields of conflict, Kilcullen emphatically associates these second and third order effects with the ‘accidental guerrilla’ syndrome. More radically, according to John MacKinlay there is even the danger that a corollary effect involves the cultivation and radicalisation of a global ‘insurgent archipelago’, able to strike at will wherever it chooses.

Whilst the threat posed by such a theoretical global web of terror is difficult to quantify, it demonstrates
two critical requirements that reflect our increasingly problematic global (in)security environment. First the flip side of the economically attractive aspects of globalisation, the tangible and virtual, transparent and opaque connections between Britain and the wider world presents policy makers with a geographical challenge. Second, the varied disposition of such adversaries and their reluctance to confront Western militaries on our own terms poses significant limitations on our ability to accurately assess and identify the fundamental intelligence requirements of ‘who, what, where, when and why’. This water is muddied further when we consider the requirement in contemporary COIN to provide accurate answers to these questions on potential adversaries as well as local populations and indigenous security forces. Indeed attempting to understand the complexity associated with such an operational environment in an increasingly uncertain world reflects the broader challenge posed to all elements of the 21st century UK military. Nonetheless, whilst the demands placed by Government and consequent responsibility to deliver will be high, such a requirement to ‘understand’ presents a significant opportunity to the RAF specifically and the wider UK air and space component in general. Unsurprisingly this is reflected in doctrine and in word at the highest level within the service. The Chief of the Air Staff (CAS) reflects this with his emphasis on:

‘Using air power to dominate the timely acquisition of the information, the knowledge of every aspect of the operational environment that is increasingly becoming the ‘vital ground’ in twenty-first century conflict.’

Moreover, the 4th edition of AP 3000 elucidates that:

‘The challenge is to develop situational understanding from the situational awareness created by the technological exploitation of the intelligence provided by air and space capabilities.’

Naturally there remain significant challenges. Not least with respect to the ‘requirement to integrate and synchronise’ the vast amounts of multi spectral information collected in order to produce meaningful intelligence product. Indeed the key will be the integration of air breathing SIGINT and IMINT with judiciously gathered HUMINT from military and security agencies. Technology can help us, but human interaction and the value of our people will remain the critical ingredient. Nonetheless, the challenge is indicative of the centrality of the air and space component in future joint endeavours and undoubtedly offers opportunity.

If it is to succeed, such a strategy must answer the criticisms fairly levelled at earlier manifestations of it. Lawrence Freedman reminds us of the pitfalls associated with long range, time delayed, limited payloads launched on the basis of uncorroborated intelligence that lacks veracity and exhibits the limits of western ‘understanding’. Indeed we could do worse than invest in the political and military agents so evocatively described by Winston Churchill in his account of the Malakand Field Force, quoted at the top of this paper. Such expertise will enable air power which in turn will offer exploitable capability to the deployed experts with their
unparalleled understanding of the ‘ground truth’. As Paddy Ashdown suggests, the services work best when they work together.\textsuperscript{38}

\textbf{A Third Way?}

In reality, and embracing the logic of Lord Ashdown, both approaches are not mutually exclusive. In our non linear strategic experience there will be occasions where containment will not only follow COIN, but will perhaps even run parallel to it. Nonetheless given the practical constraints outlined above and the looming fiscal constraints over the horizon it appears to be self evident that the West will have to prioritise qualitative over quantitative capabilities. This applies to well educated, broadened and ‘invested in’ Army officers and flexible multi-role maritime platforms as much as it does to cutting edge SIGINT technology in the latest UCAVs. As Trevor Taylor reminds us the wider and indeed perennial question remains geo-strategic.\textsuperscript{39} In order to retain a degree of access to the full spectrum of expeditionary requirements do we swap the ‘special relationship’ with a more binding commitment as a client ‘51\textsuperscript{st} state’ in spite of drifting trans Atlantic geo-strategic priorities? Alternatively, does the UK risk ignominy in becoming another piece of the, increasingly peripheral, European jigsaw? Or do we indeed wave goodbye to memories of empire and global status becoming in the process 'little Britain'? Arguably elements of all 3 options have been evident in the past 20 years, but how long this can remain the case for is an open question.

Where does this leave the RAF? Air remains a central component of both strategic options and AP 3000 is as adaptable and flexible as it should be in this respect. As ‘global guardians’ the air component is required to enable the necessarily land heavy joint force, via the four air and space power roles, as is in evidence in contemporary Afghanistan.\textsuperscript{40} As ‘strategic raiders’ it offers the same functional utility but with different emphasis and priorities at the heart of a more discretionary, patient and selective strategy. It is true, as some will counter, that capability offering ‘asymmetric advantage’ one day can ‘contain the seeds of our own destruction the next.’\textsuperscript{41} Of course utility can only be derived from military force if the capability deployed is harmonious with the context in which it is employed. This paper suggests that a future predicated on contemporary COIN doctrine is contextually inappropriate and in itself nurtures and feeds the very seeds of our own destruction. The redoubtable Edward Lucas has taken this argument to the core of his theorising on future US grand strategy. Better, he contends, for Pax America to resemble a cerebrally active and discerningly committed Byzantium than a bone-crushing and over-extended Rome.\textsuperscript{42} Indeed as the consequences of intervention in Iraq and Afghanistan become increasingly evident, it is clear that the International order of the future may be based less on ‘unipolar fantasies’ or ‘multipolar rhetoric’ than on ‘prudent interest’ and an understanding that Western ideas and ideals are not necessarily universally aspired to.\textsuperscript{43}

Returning to the question of Afghanistan, Luttwack would find a Byzantine legacy in Churchill’s
remark that ‘silver made a better weapon than steel’ in the frontier provinces.\textsuperscript{44} The current strategic outlay in the country could fairly be described as a costly combination of both silver and steel. Such a profligate policy option appears to be both unaffordable and of questionable utility.\textsuperscript{45} Our national silver deserves to be used to more advantageous effect. In deciding on what to invest it in the words of Clausewitz are typically adroit when he reminds us that ‘the maximum use of force is in no way incompatible with the simultaneous use of intellect’.\textsuperscript{46} Investing in Combat ISTAR at the heart not just of future RAF capability, but also as an integral part of the UK’s future military contribution in Afghanistan offers to combine force and intellect in line with the national interest. In the realm of security we cannot be selective about where we engage, but we have to be judicious in selecting how we engage. Such selective engagement may not turn Helmand into Hyde Park, but it represents reality and reflects the contextual limitations on what is achievable. Particularly if we consider the wider context in which Afghanistan sits. The combined population of the Af-Pak region is dwarfed by the ‘bottom billion’ from which security challenges emerge across the global commons.\textsuperscript{47} The requirement has therefore never been greater to access, understand and generate positive influence over global and diverse security challenges. Combat ISTAR, within a mobile joint force, will be central to this and will offer a policy option for challenges, like Afghanistan, that are too costly to fully resource but too important to abandon.

Notes
\begin{enumerate}
\item Huw Strachan, Closing Address to ‘Afghanistan’s Next Crossroads: Ten Years of International Intervention 2001-2011’ Conference, Glasgow University, 16 Mar 2010. Available at: \url{http://130.209.8.65/tcs/?id=03606F37-F4BC-402A-8F3B-CE4B0090056D}
\item This question is at the heart of the


12 Alex Marshall, ‘Imperial Nostalgia, the liberal lie and the perils of postmodern counterinsurgency’, Small Wars and Insurgencies, 21:2, June 2010, p.244.


16 On the question of strategy, relative power and ‘victory’ see Lawrence Freedman, ‘Strategic Studies and the Problem of Power’, in Mahnken ed, Strategic Studies a Reader, Routledge, New York, 2008.


25 Of course a 6 month tour in Helmand is perceived as anything but ‘short’ by the average infantryman. Even if doubled, tour lengths would do little to counter ineluctable cultural differences and may serve to significantly undermine the overall effectiveness of soldiers. On coalition warfare and its limitations see Wg Cdr Alistair Monkman, The Manoeuvrist Approach and Coalition Warfare: a Re-examination, Air Power Review, 5:2 (Summer 2002) pp 12-41. On Afghanistan as a ‘residual problem’ see, Steven Simon
32 Kilcullen, Accidental Guerrilla, p.xiv. ‘The local fighter is therefore often an accidental guerrilla – fighting us because we are in his space, not because he wishes to invade ours’.
35 AP 3000 4th ed, p.46.
36 Ibid. p.47
46 Quoted in David Lonsdale, ‘Strategy’ in Jordan et al, Understanding Modern

The article addresses its topic in four parts. First, it shows from past experience how difficult predicting the future is, and assesses whether the UK’s recent National Security Strategy and Strategic Defence and Security Review take adequate account of this unpredictability. Second, it discusses the key characteristics of air and space power relative to land and naval power, by boiling the essential differences down to just four basic factors, and assessing the implications for the aerospace contribution to joint campaigns. Third, it examines the very difficult trade-off between the flexibility of aerospace capabilities (in terms of geographical application, operational utility across the spectrum of conflict, and adaptability of effects) and the high costs and lead times which such flexibility normally requires. Finally, it analyses the human dimension of air and space power, by assessing how advances in simulation, UAV technology and computer networking are changing the roles of human operators, and what this means for the future of aerospace power as a distinctive specialism within military power as a whole.

Introduction

Articles on contemporary defence issues have a very short shelf life, before they are overtaken by events. I am reminded of a book chapter which I wrote in 2001 about the future of air power, which was not published until six months later, by which time the September 11th attacks had transformed the strategic landscape. In such frustrating circumstances, it is very tempting to leave current affairs to journalists and to seek refuge in the relative certainties of the past, and it is no accident that my own two most recent books have focused on the very different field of ancient Greek and Roman warfare! However, it is still worthwhile to seek more enduring insights than are contained in the latest headlines, and aerospace power now has a sufficiently long history that one may identify fundamental patterns and characteristics which seem likely to persist in some form, whatever surprises the future may hold. Although I am writing this article in the immediate aftermath of the UK’s long-awaited Strategic Defence and Security Review (SDSR), I will resist the temptation to dwell on the detailed outcomes of that review, and I will focus instead on broader and more enduring considerations which seem likely to determine the current and future utility of air and space power. I will structure my remarks under four headings. First, I will build on...
the points I have just made by discussing the sheer difficulty of ‘Predicting the Future’, and the implications this has for policy formulation. Second, I will assess what is really distinctive about ‘Air and Space Power’, and hence what its continuing contribution is likely to be within military power as a whole. Third, I will examine the common suggestion that ‘flexibility’ is a key aerospace attribute by addressing ‘The Benefits and Costs of Flexibility’. Finally, I will discuss ‘The Human Dimension’, which remains all-important even though air and space power is so intrinsically bound up with technology. As British airmen and airwomen adapt to bruising force reductions and draw breath after an often bitter struggle for survival over the past few years, I hope that this article will help to refocus attention away from battles over particular systems and facilities and back towards the overall contribution and successful application of aerospace power as an integral element of the UK’s security policy.4

Predicting the Future

Attempts to foresee what might happen in the months and years ahead are routinely prefaced by disclaimers about the enormous uncertainties inherent in such an enterprise, and a common joke is that, ‘Predictions are very difficult, especially about the future!’ This joke actually captures an important truth, since I would argue that the best way to look when trying to predict the future is not forward at all, but rather backwards into the past. This is for three principal reasons. First (as I discuss in my next book, Simulating War), the past offers a rich tapestry of experience about how conflicts can actually unfold, whereas theoretical speculations about possible future clashes like the one now simmering over Iranian nuclear activities inevitably tend to be dominated by technical military considerations such as targets, ranges and air routes rather than by less quantifiable human aspects.5 Not until a conflict is actually under way does this broader dimension become fully apparent (as happened in both Iraq and Afghanistan), so vicarious understanding of past conflict dynamics is a key way of preparing ourselves for the inevitable shock and surprise. Bismarck put it very well when he remarked that, ‘Fools say that they learn by experience. I prefer to profit by others’ experience’.

The second invaluable contribution of historical awareness is that it reminds us of the sheer complexity of warfare, and shows how apparent patterns and trends can reverse themselves with alarming frequency. The history of the Arab-Israeli conflict over the past fifty years is a particularly telling illustration. In the wake of the 1967 Six Day war, it looked as though Israeli air and armoured forces enjoyed complete dominance over their more numerous Arab opponents, but in the Yom Kippur war of 1973 these forces received a very bloody nose at the hands of Arab missile defences. Just a few years later there was another stark reversal as the Osirak raid of 1981 and the incredibly one-sided air and air defence battle over Lebanon in 1982 suggested that Israeli air power was more dominant than ever, but very quickly the picture changed yet again as guerrilla tactics first in Lebanon and then in the successive
Palestinian intifadas altered the rules and inflicted severe setbacks despite Israel’s apparently unchallenged conventional superiority. In 2006, the IDF proved shockingly unable to assert its dominance even in a fairly ‘conventional’ war with Hizbollah in Lebanon, but more recently the conflict in Gaza and the long-range IAF strikes against a Syrian nuclear cache and an arms convoy in Sudan have shown that the Israeli military is still very much a force to be reckoned with. Clearly, any assumption that recent experience is a reliable guide to what we can expect in the future is shaky to say the least.

The third, and perhaps the most sobering, way in which looking backwards can enlighten our efforts to predict the future is by reminding us of how blinkered and flawed our similar predictions have been in the past. Just over 20 years ago, I edited a full-length book on The Future of UK Air Power, and re-reading that book today is a very salutary endeavour as we try to peer forward a similar distance into our own future. As I said when addressing this same topic in the RUSI Journal a year ago, ‘Who in 1988, after years of Cold War confrontation, would have dared to suggest that British aircrew would spend almost all of the next two decades engaged in active combat operations over Iraq, or that a bloody and frustrating counter-insurgency campaign would still be being waged in Afghanistan in the first decade of the twenty-first century, but with the NATO alliance as the protagonist rather than the USSR?’ Our lamentable failure to foresee in advance such seminal events as the end of the Cold War, Saddam Hussein’s invasion of Kuwait, renewed ethnic strife in the Balkans, the September 11th attacks, the continuing insurgencies in Iraq and Afghanistan, or the recent disastrous financial crash should make us very humble indeed in our efforts to predict how the world might look in 2030 and beyond. Nicholas Taleb’s 2007 book The Black Swan suggests that the world is so complex that any kind of prediction is a mug’s game, and recent ‘left-field’ shocks such as the BP oil spill and the tragically early death of Air Chief Marshal Sir Chris Moran are a terrible illustration of the force of his remarks.

Judgements about what kind of conflicts the future might hold became a very live political issue during the recent defence review process, because of their direct implications for the kind of forces which Britain most needed to maintain. Future Chief of the Defence Staff General Sir David Richards made an especially bold and challenging speech at the International Institute for Strategic Studies in January 2010, in which he argued that, ‘We have traditionally viewed state-on-state conflict through the prism of putative tank battles on the German plains or deep strike air attacks against strategic sites. While these are still possibilities, they are increasingly unlikely – certainly at any scale... State-on state warfare is happening and will continue to happen but some are failing to see how. These wars are not being fought by a conventional invasion of uniformed troops, ready to be repulsed by heavy armour or
ships, but through a combination of economic, cyber and proxy actions. Modern state-on-state warfare looks remarkably like irregular conflict’. General Richards went on to argue that, ‘Hypothetical situations have been outlined to demonstrate this is not so. One such is a possible attack on Middle Eastern nuclear sites. They don’t. While an initial attack may be conventional, lessons from Afghanistan, Iraq, Lebanon and other places have shown us that the response would most likely include the sponsoring of proxies and terrorists wherever they could be found. Nations will do their utmost to bleed their enemies’ morale for the lowest economic, political and military cost as we have come to expect from non-State actors’.12

Only time will tell whether General Richards’ very clear prediction is borne out by events. It certainly fits closely with recent experience, but as I have just shown, recent experience is a very weak reed on which to rely, and confident assertions about what the future holds are often proved to be disastrously misplaced. I cannot help citing what another very clever soldier, General (now Lord) Charles Guthrie, predicted in his contribution to my own 1988 book. General Guthrie began his chapter on ‘The Future of Battlefield Air Support’ with a ringing assertion that, ‘After the year 2000, much on the Central Front will be similar to today. The conventional threat facing the Allied ground forces will be from mass: superior numbers of tanks and helicopters, supported by guns, rockets and aircraft, whose aim would be to roll over NATO forces and their reserves as quickly as they could’.13

In the event, of course, the Central Front, the Warsaw Pact and the USSR itself all disappeared just a few years after these words were written, and the strategic environment which had seemed so predictable underwent a revolutionary upheaval. Without similar hindsight, it is impossible as yet to confirm or refute General Richards’ more recent vision, but past experience clearly shows how wrong our images of the future tend to be, and the more certain that people are of what the future holds, the more worried and critical a response they should receive.

The British Government as a whole has now produced its own rather more nuanced visions of future security challenges, as in the detailed and thoughtful efforts by the Development, Concepts and Doctrine Centre (DCDC) to predict the Future Character of Conflict and Global Strategic Trends out to 2040.14 These have fed into the latest edition of the National Security Strategy, which ranks future threats into three tiers of priority. In the highest tier come four sets of risks – terrorism, cyber attack, natural disasters, and an international crisis between states.15 The thrust of the document is very different from the Cold War emphasis on a single overriding threat from the Warsaw Pact, and also from the 1998 Strategic Defence Review with its focus on ‘discretionary’ intervention operations overseas.16 The new strategy is much more focused on mitigating direct threats to the UK from a wide range of potential challenges, on the grounds that, ‘Britain today is both more secure and more vulnerable than in most of her long history. More secure, in the sense that we do not currently face, as we have so often in our past, a
conventional threat of attack on our territory by a hostile power. But more vulnerable, because we are one of the most open societies, in a world that is more networked than ever before.\textsuperscript{17} However, intervention operations to tackle these globalised challenges at their source remain a key \textit{leitmotif} of the new strategy, as is clearly illustrated in the SDSR, which assumes that Britain needs to be capable of conducting one enduring stabilisation operation with up to 6,500 personnel, as well as two non-enduring intervention operations with up to 3,000 personnel between them.\textsuperscript{18}

This Defence Planning Assumption shows how the continuing conflict in Afghanistan inevitably exerts a massive influence over our thinking about future defence needs. The unforeseen occurrence of the Falklands and first Gulf wars made it politically difficult to carry through some of the force adjustments planned in the defence reviews conducted a few months earlier in 1981 and 1990, but this is nothing compared to the political untouchability of forces needed for the ongoing Afghan conflict, whatever hypothetical arguments may be made about how strategic needs may change in the future.\textsuperscript{19} The very longevity of recent military commitments in the Balkans, Iraq and Afghanistan is a major factor in its own right, and suggests that (barring ignominious withdrawal) it is much harder to get out of modern conflicts than to get into them.\textsuperscript{20} Air power is just as affected as surface power by this ‘stickiness’ of commitments (which is awfully reminiscent of Brer Rabbit’s famous duel with the ‘Tar Baby’), and since client regimes will continue to depend on air support even after Western ground forces have been withdrawn, the precedent of US air support for South Vietnam in the Nixon and Ford eras may become highly relevant.\textsuperscript{21}

It is all too easy to become fixated on actual current challenges rather than more serious potential ones, so a welcome feature of the \textit{National Security Strategy} is its explicit and detailed articulation of the principle that risks must be prioritised according to the product of their likelihood and relative impact – hence, even a low risk of chemical, biological or nuclear attack or of renewed conflict with Russia or China is a very serious concern because of the gravity of the potential consequences.\textsuperscript{22} During the Cold War, I am glad that the UK deterred a Warsaw Pact attack on NATO while failing to deter an Argentinean attack on the Falklands, rather than \textit{vice versa}! The new strategy acknowledges that deterrence is still a key function of military forces, and that certain capabilities may serve a very valuable deterrent purpose even if they are not routinely used in anger.\textsuperscript{23} However, there is also the opposite mechanism of a ‘self-fulfilling prophecy’, in which specialising in a particular form of warfare may make it hard to avoid taking a lead in tackling such conflicts should the need arise. Britain has traditionally seen itself as good at counter-insurgency operations based on experience in Malaya and Northern Ireland, but its recent involvement in Iraq and Afghanistan has been much more traumatic, and it is by no means clear that the UK will want to focus on further such operations in the future, as General Richards’ vision seems to imply.\textsuperscript{24}
Even if Britain does find itself fighting more such irregular conflicts, a further key point is that ‘asymmetry’ cuts both ways. Not only are today’s ‘hybrid’ wars ones in which adversaries are very willing to engage in intense stand-up fights (as recent experience in Lebanon and Afghanistan shows) if we do not maintain clear ‘escalation dominance’, but allowing the enemy to shape the nature of the fighting is a sure route to defeat, and we must be prepared to seize the initiative and fight wars on our own terms, especially by employing our distinctive advantages in aerospace power.

Air and Space Power

The recent fourth edition of British Air and Space Power Doctrine (AP 3000) lists various strength and limitations of air and space power in turn. In an article a year ago on the Strategic Impact of Unmanned Air Vehicles (UAVs), I decided to start off by going back to basics and distilling the fundamental distinctive characteristics of air and space platforms down to just three strengths and one weakness which the two forms of power share due to their common attribute of ‘flight’, and from which other consequent characteristics flow. The first basic strength of air and space power is perspective, since the height which flight makes possible allows direct lines of sight over a very wide area (extending to a third of the Earth’s surface for a satellite 36,000 km up in geosynchronous orbit). The second fundamental advantage of aerospace vehicles is speed, since the lower frictional resistance of the air enables air platforms to attain speeds around an order of magnitude higher than their land or naval counterparts, while in space the virtual absence of atmospheric resistance allows vehicles to move at least an order of magnitude faster still (28,000 km per hour for satellites in low earth orbit). The third inherent strength of air and space power is overflight, since aerospace platforms can move freely in three dimensions rather than being confined to the land or sea or constrained by terrain obstacles to follow specific linear routes, making it much harder than with surface forces for an adversary to block their progress. The one big offsetting weakness of aerospace vehicles is energy needs, since overcoming gravity without resting on land or water requires large energy expenditure per unit of payload, either constantly (to maintain the necessary airflow over wings or rotor blades) or in the initial surge to give missiles or satellites the enormous height and speed required for sub-orbital or orbital flight. Compounding this weakness is the fact that the fuel needed to provide the energy is itself heavy, and thereby creates a vicious circle of escalating energy needs.

From the three basic strengths of air and space power flow several consequent advantages. In particular, the combination of speed and overflight gives aerospace vehicles the reach to cover large distances and the penetration to fly deep over enemy territory. Air vehicles also have the agility to reach a crisis point quickly and to be re-tasked anywhere across a wide area, while spacecraft, though lacking in agility because of the vast energy costs of changing an established orbit, have the persistence to remain in flight for years on end due to the lack of
frictional resistance. An interesting alternative capability may be offered in future by long endurance airships or solar powered UAVs such as Zephyr, which sacrifice speed in order to minimise energy needs and maximise persistence, hence allowing a more constant and focused air presence over a given area than low orbit satellites are able to provide as they flash across the heavens. More traditional air vehicles suffer from a greater degree of impermanence and base dependence because of the need for constant replenishment of their fuel and ammunition (though these limitations have been eased significantly in recent decades by the advent of air-to-air refuelling techniques). Meanwhile, all aerospace vehicles are afflicted by cost and fragility, due to the advanced technology which flight requires and the difficulty of providing protective armour because of the excess weight it would involve.

By the 1990s, advances in microelectronics were offsetting these inherent weaknesses of aerospace power, by giving Western air forces the network capabilities to take full advantage of aerospace surveillance, the electronic countermeasures needed to overcome enemy air defences, and the precision attack capabilities needed to increase the efficiency of their bomb loads by at least an order of magnitude. In 1991, the US-led coalition overwhelmed Iraqi air and surface forces in an aerospace-led ‘blitzkrieg’ which mirrored on a larger scale the one-sided triumph which the Israelis had initially achieved in Lebanon a decade earlier. US air theorist Colonel John Warden proclaimed that, ‘The world has just witnessed a new kind of warfare – hyperwar. It has seen air power become dominant. It has seen unequivocally how defenseless a state becomes when it loses control of the air over its territories and forces. It has seen the awesome power of the air offensive – and the near impossibility of defending against it... We have moved from the age of the horse and the sail through the age of the battleship and the tank to the age of the airplane’. Operation Deliberate Force in Bosnia in 1995 seemed to confirm the potential of aerial coercion, and the success of the similar air campaign during the Kosovo crisis in 1999 prompted even the sceptical John Keegan to admit that, ‘A war can be won by air power alone’. When the Taliban regime in Afghanistan was overthrown in 2001 by a combination of precision air power and special forces and local allies on the ground, this appeared to endorse once again the dominance of Western aerospace capability.

However, a less flattering image of air power was also developing, and this image has assumed greater prominence in recent years. Already during the Kosovo campaign and Operation Enduring Freedom, there were concerns about the ability of air power to find and destroy enemy ground forces taking advantage of terrain cover, and these concerns came to a head after the Lebanon war in 2006 when the IAF proved signally unable to stop the rain of short range rockets launched by Hizbollah. Still more significant was the revival of air power’s image as an indiscriminate and politically counterproductive weapon, as even precision air power routinely inflicted numerous civilian casualties through ‘collateral damage’ and poor target...
intelligence. General McChrystal in Afghanistan told his officers in June 2009 that, ‘Air power contains the seeds of our own destruction if we do not use it responsibly’, and three months later, Prime Minister Gordon Brown said that, ‘what separates successful counter-insurgency from unsuccessful counter-insurgency is that it is won on the ground and not in the air’. General Richards has frequently echoed these thoughts on the limited utility of air power, as in his IISS speech in January when he argued that, ‘Hi-tech weapons platforms are not a good way to help stabilise tottering states – nor might their cost leave us any money to help in any other way – any more than they impress opponents with weapons costing a fraction. We must get this balance right’. He went on to explain that, ‘We need to right the balance in favour of unglamorous technology: protected transport, communications and intelligence; technology that allows the Armed Forces to get closer to the people and that gets an understanding of the battlefield directly to the commanders. The technology that puts the influencers in touch with those they seek to influence’. The truth is, of course, that these opposing images of aerospace power as a dominant independent presence and as a costly liability are both deeply flawed. Thoughtful commentators have long recognised that the utility of air power varies hugely with factors such as the geographical and political context of each specific conflict, as in Air Vice Marshal Tony Mason’s notion of an ‘Air Power Pendulum’. Sometimes air power will play a leading role within the overall joint effort, while at other times it will play a more supporting part. The recent controversy over the utility of air power has focused on air bombardment of surface targets, which in fact constitutes only one aspect of the multi-dimensional contribution which aerospace power as a whole makes to modern military operations. Nobody disputes that air transport and aerial surveillance and intelligence-gathering play an invaluable role in all conflicts, or that satellites have transformed everything from navigation and communications to reconnaissance and targeting. Control of the air and suppression of enemy surface-to-air and missile capabilities are more easily taken for granted during counter-insurgency campaigns like those in Iraq and Afghanistan, but one need only look back to British experience in the Falklands, Soviet experience against the Mujahideen, and Israeli experience against Hizbollah and Hamas to recognise the damage which can occur when opponents are able to use or contest the airspace over the theatre of conflict, even to a limited extent. The reality is that aerospace power forms an increasingly integrated and indispensable element within military power in general, and that there is no question of British or other Western surface forces deploying or operating effectively without a very prominent air and space component to provide the crucial edge over less fortunate adversaries.

The Benefits and Costs of Flexibility

Two years ago, I took the risk of suggesting in a Staff College lecture
that aerospace power, while undoubtedly flexible, was not uniquely flexible compared to surface forces, as air power advocates sometimes tend to claim. Flexibility has since become the central issue in debates over the future of air power, and Air Chief Marshal Sir Stephen Dalton laid great stress on this aspect in his own address to the International Institute for Strategic Studies in February, arguing that fast jets such as Tornado have proved their flexibility over the past two decades and offer a better way forward than ‘to go down the route of low capability, niche specialisation, optimising our force structure purely for the war we’re fighting now’. In Sir Stephen’s words, ‘real flexibility will be provided by a sensible capability-mix, giving us the combat power we need now in Afghanistan, but future-proofed – as far as possible – by adaptability and judged by consideration of through-life capability and cost-effectiveness, not simply the spot purchase price’. This builds on the 2006 RAF strategy, which focuses on achieving ‘An agile, adaptable and capable Air Force that, person for person, is second to none, and that makes a decisive air power contribution in support of the UK defence mission’. The recent SDSR asserts similarly that capabilities must be ‘flexible and adaptable, to respond to unexpected threats and rapid changes in adversaries’ behaviour’. Flexibility is clearly highly desirable, but it has costs as well as benefits, and achieving the best balance in the face of the current appalling resource pressures is the most difficult single challenge facing defence planners. The essence of flexibility is that it allows a given military capability to handle multiple challenges, instead of requiring separate capabilities to deal with each one. Flexibility is an inherently multi-dimensional concept, and I will now discuss three of these dimensions in turn. The first is geographical flexibility, which involves being able to operate in diverse locations and to move swiftly between them. As I pointed out in the previous section, this is where aerospace power really shines because of its twin characteristics of speed and overflight. Satellites provide intrinsic global coverage, while aircraft (especially fast jets) have the responsiveness to reach a given crisis point rapidly, regardless of the surface terrain, and then to be re-tasked elsewhere just as quickly over a very wide area. Range and basing matter just as much as speed in underpinning this responsiveness. The more deployable a given air capability is to bare bases, the more that transit times can be reduced during operations in a given region, while the longer the range of an asset, the wider the area it can cover from a given base. Sea-basing of air assets offers valuable flexibility in the positioning of bases at optimum points across two-thirds of the Earth’s surface, and it also helps to evade political sensitivities and base-loading constraints affecting nearby land airfields. If geographical flexibility were the only aspect which mattered, then aerospace power would indeed be a uniquely flexible form of military might.

The second important dimension is operational flexibility, by which I mean the ability of forces to operate across the spectrum of
conflict, despite opponents’ efforts to counter them. The fragility of aerospace platforms is a liability in this regard, especially for helicopters and UAVs, but this is offset for fast jets and satellites by the ability to exploit speed and height to stay out of reach of low technology threats such as guns while using electronic countermeasures to defeat high technology threats like surface-to-air missiles. The impermanence of air power is actually an advantage in terms of survivability, since air vehicles are vulnerable only when they appear over the conflict zone from the safety of distant bases, while surface forces (especially on land) have a more permanent presence in the combat zone and so need to be constantly on guard against enemy attack. The more detached and evanescent nature of aerospace power has real benefits also at lower levels of conflict, since satellites enjoy untrammelled overflights even in peacetime, and since it is more politically acceptable to employ air power in ambiguous situations than to deploy ground combat forces (as in the No-Fly Zones over Iraq before 2003 and the ongoing UAV operations over Pakistan). Hence, at least for Western nations with their political sensitivities and their preponderance in electronic warfare, air and space power do currently provide rather greater operational flexibility than surface power.

The third key dimension is **flexibility of effect**. Air planners have put a lot of emphasis on this area in recent years, as in the evolution of multi-role platforms such as the F-15E, F-18 and JSF which can switch seamlessly between air-to-air and air-to-ground engagements, and as in the growing use of both fast jets and UAVs such as Predator as ‘combat ISTAR’ platforms which can conduct detailed surveillance and then use their own weapons to attack any targets which might be found. A lot of thought has also gone into tailoring air effects through developing smaller and more precise munitions and through the use of ‘non-kinetic’ means such as fast fly-bys to intimidate those on the ground. However, it is in this area where aerospace power is inevitably most limited compared to surface forces. If one leaves aside for a moment inherently joint activities such as transporting troops or supplies or providing networked communications, all that air and space platforms can really do to affect a situation on the ground or sea is to observe it from overhead or to threaten or carry out an armed attack. Only surface forces not detached from the situation by height and speed can conduct more subtle and discriminate interactions such as searching inside woods, buildings, caves or boats, conversing with people, taking prisoners and so on. In terms of flexibility of effect, air and space platforms are at a clear disadvantage compared to land and sea forces, and this is why I questioned the idea that aerospace power is uniquely flexible overall.

An equally serious problem is that the undoubted flexibility which air and space power currently enjoy in geographical and operational terms has three significant costs. First, there are frustrating trade-offs among some of the component elements of flexibility – for example, speed increases responsiveness and survivability but limits basing options, decreases endurance, and
makes it even more difficult to engage ‘with’ a particular situation on the surface. Second, making a given aerospace capability more flexible and capable (such as by building aircraft carriers to provide a sea-basing option) also makes the force cost even more to build and operate than it would otherwise have done, hence further reducing the number of platforms which can be afforded within a shrinking budget. Third, larger and so more capable and adaptable platforms also tend to have very long procurement lead times, as illustrated by the fact that Britain’s current Typhoon and aircraft carrier programmes already featured heavily in the conference on the future of UK air power which led to my 1988 book. These problems interact to produce a classic vicious circle, with more and more of the defence budget being pre-committed on projects begun long ago, leaving very little scope to exploit new technological opportunities or to react to new strategic requirements, and so making it even more important that existing platforms be made as adaptable as possible so that they may be modified to cope with whatever unforeseen challenges the future may hold. The Typhoon programme illustrates the resulting dilemmas very well, since contractual commitments make it hard to save money by cancelling outstanding orders, and since turning what was originally conceived as a Cold War dogfighter into a flexible combat ISTAR platform involves significant extra expenditure in itself. Similarly, the crippling contractual penalties for cancelling one of the two aircraft carriers have played a key role in the much-criticised recent decision to build both vessels while not being able to afford the aircraft to make full use of them.

It is frustrations such as these which prompted General Richards to advocate a very different approach. In his words, ‘Technology designed to take on putative first world enemies is hugely expensive. Whilst accepting, with Allies, the need to retain these capabilities to deter and contain, the cost of equipment most relevant to population centric asymmetric conflict is much cheaper and one can afford many more of them. By so prioritising, we will also find the resources to spend more on the technology and equipment needed in all forms of conflict, whether state-on-state or with non-state actors: C-IED systems, UAVs, precision attack, or stabilisation forces.’

Some of the same concerns were echoed last year in the DCDC’s Future Air and Space Operational Concept, which highlighted the need for investment in UAVs, directed energy weapons, space and cyber warfare as well as in air transport and combat ISTAR, and which concluded with a warning that, ‘Fewer and more expensive platforms, the present trend, is approaching the point of diminishing returns, lacks resilience and suggests that we should also seek to rediscover the advantages of numbers and mass’. The SDSR adopts a more equivocal response to this dilemma, and has been accused of simply continuing the traditional ‘salami-slicing’ approach. With budgets increasingly tight, and with air planners understandably reluctant to accept radical reductions in their ability to conduct high intensity combat, how far and by what means to maintain flexibility in aerospace...
capabilities will remain very difficult and contentious issues well after the immediate decisions reached in the SDSR.

The Human Dimension

My remarks about the characteristics and flexibility of air and space power have been based mostly on the technology involved, but as in all aspects of conflict and military force, it is actually the human element which dominates. The role of humans in aerospace power is now being rethought as fundamentally and emotively as it was during the bitter inter-service disputes of the 1920s and the Sandy’s defence review in 1957. At the tactical level, aircrew numbers will diminish still further under the SDSR, while UAVs and improving simulation technologies raise the prospect of a progressive ‘virtualisation’ of the flight experience to match that already in place with space satellites. At the strategic level, it has become common for pundits to advocate the reintegration of the RAF with the other services as a source of efficiency savings. In June, a TV show on the budget crisis found 65% support among the studio audience for merging the services and cutting £9 billion from defence spending, and in August, BBC Radio devoted an entire half-hour programme to asking ‘What’s the Point of the RAF?’, with several commentators urging a similar organisational solution – journalist Sam Kiley, for instance, argued that, ‘They work for the Army, they might as well be in it’.

Although the SDSR takes a more traditional approach by retaining capable manned fast jet fleets and laying little stress on UAVs, the structuring of the Defence Planning Assumptions around Army deployments ‘with maritime and air support as required’ indicates where priorities currently lie. The early departure of Air Chief Marshal Sir Jock Stirrup as Chief of the Defence Staff, and his replacement by General Richards who said recently that ‘Conflict has moved on from the era of the tank and aircraft’, show that established air power arguments can no longer be taken for granted.

I explored the pros and cons of increased virtualisation of the flight experience in my articles a year ago about UAVs and about the future of UK air power. The biggest advantage of such a move is that it reduces the proportion of costly live flying which must be devoted to aircrew training, and so makes it possible to deploy a larger proportion of aircraft fleets on actual operations like those currently under way. Going beyond simulation and relying more on remotely-piloted UAVs has the further benefit of defusing political sensitivities over the potential death or capture of aircrew, though it does make the aircraft themselves more vulnerable to accidents, air defences and cyber warfare. If these problems can be overcome, the spare capacity aboard Britain’s aircraft carriers may offer an important opportunity to boost the unmanned element within naval aviation. Despite Iran’s recent trumpeting of its own new unmanned aircraft, UAVs are unlikely to become a classic ‘underdog’ weapon as happened with V-1s, V-2s, Scuds, Katyushas and the like – their dependence on a comprehensive network infrastructure makes them too vulnerable to disruption by
The real downside of the increasing prominence of UAVs is not that it risks undermining Western aerial dominance (rather the reverse), but that it reinforces a growing ‘dehumanisation’ of aerospace power and a distancing of Air Force personnel from the human dimension of combat.

Current Western perceptions of warfare, as embodied in images from Afghanistan and elsewhere, are very much that ‘Aircraft observe and kill, while soldiers fight and die’. Apart from helicopter crew, who are lauded for sharing the same risks as the troops they transport and supply, the Western exercise of aerospace power is no longer viewed as a particularly ‘heroic’ endeavour. The pervasive image of the soldier as hero and martyr helps to explain why the conflicts in Iraq and Afghanistan are so commonly perceived as ‘ground wars’ rather than as quintessentially joint campaigns. Although the greatest experts on local patterns of life are often the UAV operators who watch given regions day in and day out on their screens in Nevada, the complete physical separation of these observers from the conflict theatre makes it very hard for them to ‘keep in touch’ either with locals or with their Army colleagues on the ground. Even in our increasingly networked and virtual age, humans are tactile mammals for whom real human contact is important, especially in the traumatic environment of deadly conflict.

The other side of the story, is, of course, that losses suffered by troops on the ground for unclear strategic ends have historically been the main motor causing nations to rethink their interventions and withdraw, as happened to the US in Vietnam, Lebanon and Somalia, the Israelis in Lebanon and the Occupied Territories, and the USSR in Afghanistan. Aerospace power may be detached and ‘unfair’, but by minimising the losses of its own operators and by providing the intelligence, firepower and transport (including aeromedical evacuation) needed to safeguard friendly ground forces, it plays a major role in limiting the potential for such casualty-driven demoralisation. The dominant issue in Western military operations ever since the 1991 Gulf war has been where to strike the balance between air and surface power, so as to achieve the desired strategic effect while reducing exposure to friendly casualties. Suggestions that aerospace capabilities are merely a supporting adjunct to ground forces are a gross caricature, as is illustrated by air-led campaigns like those in 1991, 1995, 1999, 2001, and over Pakistan today. The blood price paid recently in Iraq and Afghanistan gives soldiers powerful political weight in the current defence debate, but it is far from clear that the eventual outcome of these traumatic conflicts will be worth the sacrifice involved, and to make them into the dominant model for future planning requires an almost Nietzschean assurance that ‘What does not kill us makes us stronger’.

As in the 1920s, calling into question the very existence of a separate Air Force is likely to prove counterproductive, by increasing inter-service tensions and jeopardising the joint thinking which is now more necessary than
ever. Military service is a highly emotive profession rooted in culture and tradition, and too much focus on impersonal calculations and theoretical efficiency risks undermining the unquantifiable human strengths on which British military excellence ultimately rests. The challenge for airmen and airwomen is to move away from the flight experience itself as the defining qualification for air leaders, and to build a more enduring identity around expert employment of the distinctive strategic characteristics of air, space and cyber capabilities. Rather than inspiring subordinates to risk (and often sacrifice) their own lives as in the gruelling attritional engagements of the past, airmen must shift their focus towards other human dimensions of conflict, in particular the discriminate use of aerospace intelligence and firepower to safeguard friendly surface forces and to reduce the will and ability of opponents to resist, without creating martyrs and so triggering politically counterproductive effects. Although aerospace power will remain inextricably bound up with technology, its successful exploitation requires a deep understanding of human psychology, since it is in the minds of men and women that wars are eventually won and lost.

Conclusion

The SDSR has been a traumatic process for UK air power, with several programmes and bases being cut, and with further personnel reductions on top of those already suffered over the past two decades. However, the outcome has not been all bad, and the SDSR has clearly rejected the more extreme suggestions for radical restructuring of aerospace capabilities. As we move from an entangling current conflict into a fundamentally unpredictable future, air and space power will play an increasingly integrated and indispensable role in our overall defence effort, based on the unique strengths which flight brings. In the face of unprecedented budgetary constraints, defence and aerospace planners will continue to face some nightmarish dilemmas about how best to maintain real flexibility and cost-effectiveness, and how the human dimensions of air and space power should evolve to adapt to technological possibilities and to the challenges from adaptive opponents (especially in the cyber field). The dilemmas have triggered some significant inter-service disagreements over the best way forward, but now that the SDSR has been conducted, it is vital for the different services to reconcile their differences and to cooperate even more closely in delivering joint military capability. If the services do not hang together, they will most assuredly hang separately in whatever difficult and unpredictable conflicts the future may hold.

Notes


14 Development, Concepts and Doctrine Centre, Future Character of Conflict, (Shrivenham: Ministry of Defence, 2010), and Global Strategic Trends - Out to 2040, (Shrivenham: Ministry of Defence, 2010).


22 National Security Strategy (2010), Annex A.
28 By my calculations, a satellite in orbit 300 km up has around 10 times as much kinetic as potential energy compared to its launch position, so the rocket is needed far more for speed than for height. See Wayne Lee, *To Rise From Earth: The Complete Guide to Spaceflight*, (London: Cassell, 2000).
Lessons Learned’, Parameters, Spring 2007, pp.72-84.

36 ‘Deadly airstrike on civilians sours Obama’s Afghan unity summit’, The Times, May 7th, 2009, ‘Drones take a heavy toll on hearts and minds’, The Times, March 10th, 2010. Air power was not, of course, the only culprit – see ‘Nato commander reins in special forces after night raids kill civilians’, The Times, March 17th, 2010.


38 Richards, op.cit., 2010.


42 Sabin, in Barnes, op.cit., 2009, p.99. The first three editions of AP 3000 all listed Flexibility as a key attribute of air power, with the first edition in 1991 claiming that, ‘The height, speed and reach of air power allow aircraft to perform a wide variety of actions, produce a wide range of effects and be adapted with comparative ease to meet changing circumstances and situations. As a result air power is uniquely flexible’. The fourth edition (op.cit., 2009) is more circumspect, and emphasises Agility rather than Flexibility.


cheaper propeller aircraft’, *The Times*, January 22\textsuperscript{nd}, 2010. C-IED stands for ‘Counter Improvised Explosive Device’.


55 ‘After the review, can Britain still defend itself?’, *The Times*, October 20\textsuperscript{th}, 2010, ‘Our wars need command, not committee’, *The Times*, October 26\textsuperscript{th}, 2010.


57 The only growth area in human spaceflight is in space tourism. See ‘Beam us up, Scotty: Virgin astronauts could be launched from Lossiemouth’, *The Times*, June 12\textsuperscript{th}, 2010, and ‘Boldly going nowhere: Nasa ends plan to put man back on moon’, *The Times*, June 14\textsuperscript{th}, 2010.

58 ‘Where should the axe fall on the Forces?’, *The Times*, July 21\textsuperscript{st}, 2010.

59 *Dispatches: How to Save £100 Billion*, (Channel 4, June 21\textsuperscript{st} 2010), *What’s the Point of the RAF?*, (BBC Radio 4, August 17\textsuperscript{th}, 2010), Sam Kiley, ‘Goodbye, Armed Forces. One force will do’, *The Times*, February 4\textsuperscript{th}, 2010.


61 ‘Lame duck defence chief “must go now”’, *The Times*, June 14\textsuperscript{th}, 2010, ‘New chief faces fight to win the trust of RAF and Navy’, *The Times*, July 15\textsuperscript{th}, 2010.


63 ‘More Helicopters in Hampshire than Helmand, but No Pilots to Fly Them’, *The Times*, July 17\textsuperscript{th}, 2009.

64 ‘Battlebots rewrite the rules of war as humans take back seat’, *The Times*, May 21\textsuperscript{st}, 2010, ‘Islamic insurgents hack into CIA state-of-the-art Predator drones’, *The Times*, December 18\textsuperscript{th}, 2009.


66 For non-Western aircrew, it is of course a very different story. See ‘So much owed by so many regimes in the Afghan conflict to so few...’, *The Times*, May 29\textsuperscript{th}, 2010. Despite the welcome infrequency of casualties, Western jet crews do display great skill and daring, as reported in ““Top Gun” takes on Taliban upside down”, *Sunday Times*, May 31\textsuperscript{st}, 2009.

67 Charles Hyde, ‘Casualty Aversion: Implications for Policy makers and Senior Military Officers’, *Aerospace Power Journal*, 14/2, Summer 2000, pp.17-27, ‘Toll of wounded reaches 1,000 in the most deadly year for British troops’, *The Times*, October 31\textsuperscript{st}, 2009, ‘Campaign must not be judged on casualties alone, says army chief’, *The Times*, December 8\textsuperscript{th}, 2009, ‘Grim milestone as 1,000\textsuperscript{th} US soldier is killed by bomb’, *The Times*, May 29\textsuperscript{th}, 2010.

68 ‘Cold War spy plane on new mission to spot Taliban bombs’, *The Times*, March 24\textsuperscript{th}, 2010.


No official history has ever been devoted to RAF Coastal Command and its activities during the Second World War despite its vital role in keeping open the sea lines of communication - particularly the Atlantic bridge for vital supplies and reinforcements from the USA. ‘The Cinderella Service: RAF Coastal Command 1939-1945’ goes some way to rectifying that omission. This book was derived from the Author, Andrew Hendrie’s PhD thesis and, as such, is a sound traditional academic text, extensively researched and footnoted. However, it is also unusual in that it is also part memoir, drawing on the author’s own operational experience; Andrew Hendrie served in Coastal Command from 1939 and flew operationally from 1942 to 1945. He completed his PhD just before his death on 1st April 2004.

Hendrie paints an interesting and very full picture of the Second World War from the Coastal Command perspective, the name of the book coming from the fact that the Command was often referred to as the ‘Cinderella Service’ - as it was often overshadowed by Fighter and Bomber Commands and was not given priority in terms of aircraft and equipment. Its wartime record, however, was second to none and ‘The Cinderella Service’ reveals the vital contribution that Coastal Command made to the Allied war effort.

The book looks first at the aircraft and armament available to the Command and describes the development of operational capability as the war progressed – and that development was from a pretty parlous start. In addition to a steady improvement in aircraft and weapons, it is clear that emerging technology was a key driver of mission success and the value of the ‘boffins’ - in close contact with the front line - is made very clear. He then progresses to discuss the main roles of Coastal Command, particularly anti-submarine warfare and anti-surface shipping operations against enemy warships and merchant vessels. Hendrie’s extensive research and first hand knowledge ensure that all his main assertions are well-supported and referenced. He is able, for instance, to support his somewhat surprising conclusion that small-scale strikes on enemy surface shipping were more effective than the massed attacks of the well-known strike wings, which often suffered disproportionately high losses for the results they achieved. The minor tasks performed by the Command, which were no less important, included photo-reconnaissance, meteorological flights and air-sea rescue, and the author covers these well in a later chapter before drawing
some general conclusions and paying tribute to his fallen colleagues in a moving retrospective. Lengthy and comprehensive appendices then follow, covering Orders of Battle at various stages of the war, notable Commanders, achievements in terms of U boats and ships sunk, and details of aircraft losses and casualties.

Whilst now fully recognised as key players performing a vital role that ensured, directly, the survival of our Nation, the personnel of Coastal Command often felt unappreciated and unsupported, but, as Hendrie points out, morale was usually very high. The author uses a poem by Sqn Ldr Tony Spooner, DSO DFC, to sum up this spirit:

‘Fighter or Bomber?’ his friends used to ask;
But when he said ‘Coastal’ they’d turn half away….

…..‘Fighter or Bomber?’ his friends used to ask;
‘Coastal’ he’d say, his face a tired mask;
Though not in the spotlight where others may bask,
We’ve a tough job to do and I’m proud of the task.

This book forms a valuable reference for anyone interested in RAF Coastal Command from an academic perspective but also provides much food for thought for the general reader interested in Air Power, and Airmen, at war.
Book Reviews

Back Bearings: A Navigator’s Tale 1942 to 1974
By Group Captain Eric Cropper

Reviewed by Group Captain Clive Blount

Eric Cropper’s military career started in late 1940 when he joined the Local Defence Volunteers at the age of 17. Accepted for Aircrew training in 1943, he had a short period of pilot selection flying on the Tiger Moth before starting what was to be a long and varied career as an RAF Navigator. After training, he was posted to Lancasters and completed a tour with 103 Sqn - which included operations over the D-Day beachheads. It was over Caen that the aircraft in which he was flying was hit by another Lancaster, a harrowing experience that is described well in the book.

‘Back Bearings’ is so much more than a wartime memoir, however. After his operational tour, Cropper was posted to a training role and completed the staff navigator course just before the end of hostilities. Cropper then embarked on a 30 year career in the peacetime RAF and this book provides rare insights into the life and challenges facing officers in the fast-developing service. Cropper's post-war career was quite varied. As a specialist navigator, he saw the development of the science and art of navigation from drift sight, dead reckoning and astro-compass, through several iterations of electronic navigation aid, to early inertial systems and the eve of ubiquitous satellite navigation.

He spent several tours in the trials and evaluation world and saw the advent of the current General Duties Aerosystems Course, as it developed from the ‘spec n’. Colleagues who have attended Aries Association dinners in the last few years will recognize many of the cast of ‘Back Bearings’ as stalwarts of such events... albeit, I suspect, vaguely through a hangover! Ironically, the very success of the developments in avionics, in which Cropper played a part, soon called into question the need for a specialist navigator, with the eventual demise of the profession being discussed very soon after he left the service. Away from mainstream flying, Cropper filled a number of staff posts, served at the RAF College, Cranwell, enjoyed an exchange posting in Alaska serving with the USAF, and also spent a year in command of the RAF airfield on Gan in the India Ocean. His description of these tours provides a fascinating insight into life in the RAF during the period and, although the service was much bigger and had a more global outlook, the reader is able to draw many parallels with today.

Although far from the usual ‘blood and guts’ wartime autobiography, this book is quite compelling. Told with feeling and a touch of humour, it encapsulates the 'feel' of life as a
post-war RAF officer. The mundane details of staffwork, married quarters and the ordinary day-to-day gripes of a regular officer add colour and shade to the historiography of the period and, for most of us currently serving, is sufficiently recent for the reader to be able to empathize with the author and make interesting comparisons with service today. Cropper writes with honesty and openness and quickly draws the reader in; his light touch keeps non-specialists interested and engaged without patronizing those with more experience in the field of navigation technology. This is an excellent memoir by an RAF navigator that describes both the revolution in navigation technology during the post war period but also the everyday life and career of an ‘ordinary’ RAF officer.
Counter-insurgency is fashionable again: more has been written on it in the last four years than in the last four decades. So wrote David Kilcullen in 2006, at the low point of the US-led coalition’s counter-insurgency in Iraq. He has since become one of the foremost counter-insurgency ‘soldier-scholars’. A former Australian infantry officer with a PhD in Anthropology, he has played a leading role in making population-centric counter-insurgency orthodox, advising both the US State Department and General Petraeus. Furthermore, Kilcullen has published widely on the subject: his The Accidental Guerrilla: Fighting Small Wars in the Midst of a Big One is on the CAS’s 2010 Top 10 Reading List. His latest book, Counterinsurgency, is intended both for counter-insurgents – civilian and military students and practitioners – and also for the general reader interested in ‘today’s conflict environment’. Like all his work, Counterinsurgency is very well written but, in his own words, it is ‘far from a definitive study’ and is instead ‘an incomplete collection of tentative, still developing thoughts’.

This collection is in two parts. Part One, entitled ‘A Ground-level View’, emphasises the local and temporal character of effective counter-insurgency. It starts with a reprint of Kilcullen’s Twenty-eight Articles: Fundamentals of Company-level Counterinsurgency, written in 2005 for US Army company officers struggling to adapt to the Iraq insurgency. The second chapter, written in late 2009 and aimed at ISAF, lists suggested measures of effectiveness for counter-insurgency, concerning the population, the host-nation government, the security forces, and the enemy. Next there are two case studies. First, a previously published summary of his doctoral thesis which traces the development of Indonesian counter-insurgency techniques, from success in the 1960s, using population-control against communist insurgents, to failure in East Timor in 1999. This is followed with an account of an engagement between Kilcullen’s infantry company and Indonesian forces in East Timor. Chapter Five is a broad ranging study of Al Qaeda, Somalia and Afghanistan emphasising counter-insurgency as a competition for governance and legitimacy. In the shorter Part Two, Kilcullen posits the so-called Global War on Terror as a defensive global campaign against a Takfiri insurgency which seeks to recreate the Caliphate. He argues the solution is the employment of counter-insurgency principles on a global scale.

The book’s main strength is the clarity
and accessibility of Kilcullen’s writing. For example, the introduction summarises in thirteen-pages why population-centric counter-insurgency is more effective than an aggressive enemy-centric approach. Kilcullen stresses two fundamentals - local solutions and respect for non-combatants. He neatly explains the challenge of expeditionary counter-insurgency in a third-country and therefore the need to understand the country, secure it, and build viable local allies. Successful counter-insurgency, he concludes, demands knowing what kind of state we are trying to build or assist, what has proved viable previously, and the compatibility of its government with our own. In other words, for counter-insurgency tactics to work the strategy has to be right. Counterinsurgency also provides an interesting perspective on the US Army’s struggle to adapt in contact and Kilcullen’s part in it.\(^4\) Kilcullen’s Twenty-eight Articles, probably his most widely-read work, was written one night in Baghdad, and then published almost immediately by the influential online Small Wars Journal. The Twenty-eight Articles’ title and format were a crib from T E Lawrence and it has since been published as an annex to General Petraeus’ Field Manual 3-24 Counterinsurgency, which Kilcullen helped write.\(^5\)

One obvious weakness is the book mentions air power only once when it states that, according to Kilcullen, over reliance on air (or artillery) support is an indicator of a unit’s failure to engage with the local population – caused by under confidence or because it is outmatched. As in the Petraeus Field Manual, the counter-insurgent’s reliance on air power to make the adversary fight as a guerrilla, for the fire support to enable dispersed operations, for ISR, and for mobility to avoid IEDs is at best taken for granted. Also Kilcullen does not really challenge the population-centric doctrine. He compares it only with the extreme ‘kill them all’ approach of the Romans and Nazis, when critical analysis of more recent alternative approaches, such as the 2009 Sri Lankan defeat of the Tamil Tigers, may have proved more insightful.

Overall Counterinsurgency is a curate’s egg. The book is published in map-pocket size and is ring-bound to make it look like a Field Manual, which it is not, and the chapters on Indonesia add marginal value only. Nevertheless, most of the book is well worth reading for its valuable insight on countering insurgency.

Notes

5 T. E. Lawrence, 'Twenty-seven Articles', \(\textit{Arab Bulletin}\), 20 August 1917.
Book Reviews

Night Fighters - Luftwaffe and RAF Air Combat over Europe 1939-45
By Colin D. Heaton and Anne-Marie Lewis

Reviewed by Rev Dr (Squadron Leader) David Richardson

Seventy years ago, the 'Dowding System' of aerial defence played a vital role in Britain's survival; this volume seeks to analyse the analogous and less celebrated systems developed by the Luftwaffe during the Allied bombing offensive. The underlying thesis of the book is that mid-level Luftwaffe commanders developed a highly capable array of equipment and techniques and were largely let down by poor strategic leadership. Heaton and Lewis have obviously amassed a considerable degree of knowledge in studying this area, and the volume is replete with technical information.

The authors rightly highlight the role of emerging technology in the duel between Bomber Command and the Luftwaffe, most notably the varying electronic systems such as Naxos and H2S, and point to its legacy in the current conduct of air operations. The description of the evolving German 'wild boar' and 'tame boar' systems is especially interesting.

However, it is difficult to recommend this book as a useful purchase except to the most ardent devotee of this subject. In the first place, there are a large number of egregious errors, such as the ascription of a peerage to 'Lord Winston Churchill', and some bizarre nomenclature; 'Air Vice Sir Hugh Montague Viscount Marshal Trenchard' being the most outstanding example. There are numerous factual inaccuracies; doubling the number of engines on the Avro Manchester being one. The reader may also be surprised to find that Dowding and Trenchard were both still actively directing air operations in 1943!

Beside these flaws, there is a deeper weakness within the book - a willingness to make some superficial judgments on a paucity of evidence. For instance, Heaton and Lewis caricature the Royal Air Force as a class-ridden organisation, which 'in typical RAF fashion' was slow to respond to new intelligence, 'illustrating Bomber Command's penchant for oversight'. Although the authors do have some useful insights into the changing patterns of the nocturnal air war, and an engaging sympathy for the human cost of conflict, their analysis is frequently clouded by generalisation and confused chronology.

The real origins - and potential - of the book can be gleaned by examining the photographic pages. There, amongst the expected images of aircraft and weapons, are pictures of Heaton quaffing drinks with German night fighter veterans, most notably Hajo Herrmann and Wolfgang Falck. Although probably a misguided move by the publisher's photographic editor (it
hardly enhances the appearance of academic impartiality), it reveals the real strength of the book: Heaton's personal links with Luftwaffe survivors. These two men in particular loom large in the index and it is probably best to read this book as a record of their initiatives and observations. Had Heaton and Lewis chosen to create the volume as edited memoirs, rather than attempting an overall history of the air campaign, it would have made a more useful contribution to the field.