A War Misunderstood? Some Brief Reflections on Britain's air war in the Gulf 1990-91

By Dr David Jordan, King's College London

Biography: Dr David Jordan is one of King's College London's air power subject matter experts based at the UK Joint Services Command and Staff College (JSCSC), Shrivenham. Most recently, he has served as the Air Warfare Historian for the Higher Command and Staff Course, and is the academic director for the RAF Division at JSCSC. He is a co-director of the RAF Centre for Air Power Studies, member of the Chief of the Air Staff's Air Power workshop and serves on the APR Editorial Board.

Abstract: Although the 1991 Gulf War represented the start of a significant transitional period for the Royal Air Force as it moved from a Cold War oriented, peacetime force operating from well-founded main bases to a service where regular overseas deployments became the norm, the conflict has received relatively little attention from historians. Additionally, several inaccurate popular perceptions about the nature of the RAF contribution to the air war have gained currency, clouding understanding. This short article briefly reflects on these issues and suggests that it is time for scholars to embark upon a more robust analysis of the RAF's role in the Gulf War, so as to shape a better understanding of the nature of the RAF in the early 21st Century.

Introduction

In his introduction to the Institute of Contemporary British History witness seminar on the 1991 Gulf War, Air Vice-Marshal (AVM) Ray Lock observed that the operation to liberate Kuwait 'very much set the tone for the decades that followed.'[1] It is difficult to disagree with his assessment, since the war to free Kuwait marked the start of continuous operational deployments for the Royal Air Force, not only in the Gulf.

Yet the historiography of Britain's part in the 1991 Gulf War is a little puzzling. Although Operation GRANBY (the code-name for Britain's deployment to the Gulf, first as part of the coalition bid to deter Saddam Hussein from further acts of aggression and then to dislodge his forces from Kuwait) marks the point at which we can see the start of shift in emphasis for the RAF, there was relatively little in the way of media reflection upon the 25th anniversary of GRANBY. This perhaps reflects the slightly odd coverage of Britain's air war that has resulted, although the lack of official documentation thanks to the 30-year rule has almost certainly not helped matters. Our understanding of the nature of the RAF's war in 1991 is largely driven by contemporary media coverage, a few memoirs and books and articles considering the RAF's involvement through the perspective of particular aircraft types employed (most notably those involved in the attack role) and references in works which are dominated – understandably – by the American air effort during the campaign.[2] There have also been a number of unfortunate accounts of the British air effort during the campaign which have added heat but not light to our knowledge and understanding of Operation GRANBY because of an apparent misunderstanding or misreading of events and key concepts.[3] As Seb Cox and Seb Ritchie have demonstrated, there were a undoubtedly a number of problems which faced the RAF during Operation GRANBY.[4] The transcript of the ICBH seminar earlier in this edition of *Air Power Review* also points to a number of serious challenges faced by the RAF. Some of these arose from a conceptual mind-set which had become fixed upon the Cold War construct, preparing for operations in Central Europe against the Warsaw Pact, and some from the long-standing issue of monetary pressures delaying the introduction of equipment. It is also worth observing that there is some evidence to suggest that the experience of the Falklands war, although limited, had some influence on the way in which the RAF approached business in 1991, and that while it would be difficult to claim that this was the result of a robust and efficacious lessons learned process, the supposed 'error' of beginning operations at low altitude was not the result of hide-bound dogma, but had a basis in recent experience.

It is the intention of this short article to offer a few reflections on the RAF's experience of the 1991 Gulf War, pointing out that some of the popular perception of the British contribution to the air war lack a certain amount of accuracy. It also aims to suggest that even without access to the official documentation relating to the 1990-91 period, a more nuanced understanding of operations can still be adduced from the available information, and that Operation GRANBY indeed marked the point at which the RAF began to adapt to a 'New World Order' which would see operational deployments overseas become routine.

Reach, Rapidity and Influence

If Saddam Hussein had assumed that his invasion and subsequent claimed annexation of Kuwait would be accepted as a fete accompli by the wider world, he was to be sorely disappointed. President George HW Bush was clear from the outset that Iraq's aggression would not succeed, informing journalists, 'this will not stand. This will not stand, this aggression against Kuwait.'[5] Bush, strongly supported by the British Prime Minister Margaret Thatcher, led the efforts to compel Saddam to leave Kuwait, with diplomacy at the United Nations being supported by a clear display of military force. Although Thatcher was later to enjoy the claim that she had stiffened Bush's resolve, telling him that it was no time to 'go wobbly', Bush was very clear in his view that force might have to be used.[6] As part of the show of determination, and based upon concerns that the Iraqi forces near to the border with Saudi Arabia might be sent over the border into that country, King Fahd invited western nations to provide support to the kingdom. Air power was at the vanguard of this, with US Air Force (USAF) F-15 Eagles, A-10 Thunderbolt II attack aircraft and F-16s deployed from the United States within ten days of the Iraqi invasion, to be followed by F-111s and F-117s a few days later. Rather lost in this is the British contribution, in the form of Tornado F3 interceptors and Jaguar GR1 attack aircraft, sent to Dharhan in Saudi Arabia and Thumrait in Oman respectively. Two Tornado F3 squadrons happened to be in Cyprus for an armament practice camp; as Cox and Ritchie note, this serendipitous occurrence meant that it was possible to send two squadrons of aircraft which were already provisioned for an overseas deployment to Saudi Arabia.[7] Furthermore, the F3, lacking an attack role, usefully supported the narrative that the deployment of forces to Saudi Arabia was a defensive measure. The Jaguar was clearly not a defensively-oriented aircraft, but as the three Jaguar squadrons routinely conducted overseas deployments, they were a logical choice for despatch to the region. The choice of Oman as the location for their initial deployment - they would subsequently move to Bahrain, placing them closer to the Kuwait Theatre of Operations (KTO) – not only served to reassure Britain's close ally, but also had the benefit of allowing the Jaguars to operate from airbases where the type was familiar, as the Omani Air Force also employed the aircraft.

In numerical terms, this opening deployment was not particularly impressive when it is recalled that the Iraqi air force was, at the time, one of the world's largest, but this is to miss the point. The ability to swiftly deploy overseas sent clear diplomatic messages about Britain's willingness to support its allies, be that the United States of America, or Gulf nations, and helped to establish the context in which attempts to persuade Saddam to withdraw from Kuwait might be undertaken. The difficulty, of course, was that Saddam had no intention of acceding to the international community's near-unanimous demands that he pull his troops out. This meant that it was almost certain that force would have to be used to achieve this end, and an increase in RAF strength was almost inevitable as part of the build up of forces necessary to remove the Iraqi army from Kuwait.

The RAF was able to enjoy further influence here, since it was clear that any campaign against the Iraqis would involve a significant counter-air effort. As part of this, closing or disrupting

Iraqi Air Force bases would be essential. The coalition commander, General H Norman Schwarzkopf and the Joint Force Air Component Commander, Lieutenant General Charles 'Chuck' Horner were both clear that the RAF had an important role to play. Of all the coalition partners, the RAF was the only one equipped with a bespoke anti-runway capability with the JP233 munitions dispenser. The JP233 had begun life as a joint Anglo-American project, but cost issues and concerns over aircraft survivability led to an American withdrawal from the programme.[8] Ironically, this did not see the end of American aspirations for a runway denial weapon, and the French Durandal system – which had to be used in exactly the same way as the JP233, and thus sharing all the features which raised concerns over aircraft survival – was procured instead, never to see operational use.[9] The RAF saw the possession of this distinct capability, potentially vital to offensive counter air operations, as an advantage in 'buying' influence with the Americans.[10] As Air Chief Marshal Sir Patrick Hine observed, his first meeting with General Schwarzkopf was notable for the latter remarking that he wanted armoured forces and 'Tornados…with JP233'.[11]

This points to one of the key advantages that air power delivered - and potentially still delivers - to the United Kingdom, namely possession of discreet, 'high-end' capabilities (as JP233 was by the standards of the time) buying importance and influence with coalition partners. While it was exceptionally unlikely that the British government - particularly one led by Margaret Thatcher - would have shied away from involvement in the conflict, the ability to deploy forces rapidly to reassure allies in the Gulf, and then to be able to offer a capability which helped to ensure influence in the key planning aspects of the war to liberate Kuwait was of clear political benefit. That, however, came at some risk, since it involved the RAF Tornado GR force operating at low level to deliver its key contribution to the opening stages of the war. The use of low-level tactics has become one of the most confused aspects of subsequent understanding of the war, and it is worth providing some examination of this element of operations.

The Low-Level Controversy

Lewis Page, in his polemical account of British defence issues, is particularly notable as a critic of the use of low-level tactics:

> The RAF Management levels [sic] still contend that the low-level phase in Iraq was necessary and useful, and that all the years, lives and money thrown into deep penetration low-level attack were not a dreadful, wasteful error…
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> …The fact is, however, that even if it had worked the whole concept had been shown to be almost suicidal. If relatively feeble Iraqi point defences alone could shoot down more than one in ten of the Tornados operating against them, one can only imagine what the bristling weaponry of the Soviet Central Front would have done….
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> …The air marshals now knew that their whole low-level plan had been lunacy. They still refuse to admit anything of the sort…but the facts speak for themselves. The JP233 suicide weapon has been quietly binned…[12]

As well as rather under-estimating the Iraqi defences – which can only be described as 'feeble' by stretching the very epistemological basis of the word to breaking point – this remarkable evaluation is seriously flawed. It is, therefore, regrettable, that while stated in a provocative manner, the thrust of Page's claims fits in with the popular perception of the RAF's low level operations.

The difficulty with Page's commentary is that it ignores the key fact that RAF doctrine had largely come to mirror that of NATO, and that low-level runway denial operations were seen as a vital tool in any operation on the Central Front had war broken out with the Soviet Union. It was recognised that the risk to aircraft and aircrew would be significant, but the use of low-level weapons delivery increased the likelihood of accuracy, vice loft bombing attacks with unguided ordnance. As noted by a contributor to the Professional Pilots' Rumour Service who had considerable experience with the Tornado GR:

> The huge perceived advantage of JP233 in the procurement period was the prospect of reducing the OTR (over target requirement for a set probability of achieving the damage required) from hundreds of aircraft to tens. Bear in mind that one of the pre-JP233 options favoured was long toss with 1000lb dumb bombs with variable delay fuses, and one does not need to be a weapons expert to realise that many hundreds of attacks would have been necessary to achieve a reasonable probability of closing an airfield for even 24 hours.
>
> Yes, JP233 made tens of aircraft highly vulnerable, particularly around the target but that was perceived to be much better than making hundreds vulnerable and maybe not achieving the objective due to lack of resources.[13]

It is, therefore, a little difficult to sustain the view that the JP233 was a 'suicide weapon', utilised as the result of some hide-bound and unintelligent thought by its users. Furthermore, it was hardly as though the RAF was unique in operating at low level. Perhaps the most extreme example of this can be found with the use of the B-52 Stratofortress at low level. As Jon Lake recorded, while there was a body of opinion amongst the USAF planners that the B-52 should operate at higher altitudes than planned, the majority:

> …preferred low level bombing, for which the whole force had trained and which promised to give better protection against SAMs and enemy fighters.[14]

This led to the B-52s flying a not insignificant number of sorties at low level; the crews of the 4300th Provisional Bomb Wing flew 36 sorties at low level during the first three nights of the war, without loss.[15] It is also worth noting that the F-111 force routinely operated at low level, although the use of that type has become more associated with medium level use of PGMs, particularly in the so-called 'tank plinking' role, while the F-15E, in its first combat operations made use of the AN/AAQ-13 and AN/AAQ-14 LANTIRN targeting and navigation pod system, which had been under development during the 1980s to provide enhanced capabilities similar to those offered by the F-111F's AN/AVQ-26 Pave Tack system, but in a smaller package.

When it recalled that LANTIRN is the acronym for 'Low Altitude Naviation and Targeting Infra-Red for Night', the notion that low level operations were some mental aberration by the Royal Air Force is further eroded. The idea that precision attack from medium altitude could have been carried out, at night, from the start of the war also fails to bear scrutiny, since apart from the LANTIRN and Pave Tack systems, only the Vietnam-era Pave Knife targeting pod (of which only 12 units were built) provided a night and all-weather capability that was ready for employment at the start of the war, while the RAF was hurriedly taking steps to allow the early trials models of the Ferranti Thermal Imaging Airborne Laser Designator (TIALD) pod to be sent out to the Tornado force in the Gulf.

The use of the JP233 and low level tactics with 1000lb unguided weapons against the RAF's opening target sets was not, therefore, an egregious error, but a case of 'going with what we had':

> …it was always HMG's policy right up to the war that what we provided for NATO would be what we used for other operations. So we were stuck with what we had and, of course, to be effective in taking out runways, and deny the use of the airfields to the enemy, we had to use the JP233…
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> …newspapers always over-rate such things and they banged on about the vulnerability of the Tornado. That was sheer nonsense: counter air operations at low level was not without its risks, but it was something we may have had to do against the Warsaw Pact forces… so in the Gulf War, we had what we had and we operated with what we had.[16]

A further undermining of the notion that all was tactical inflexibility is given by the RAF Jaguar force. Just like the Tornado, the concept of operations for the Jaguar involved low-level weapons delivery against Warsaw Pact forces, but the commander of the Jaguar detachment, Wing Commander Bill Pixton, concluded that the Iraqi AAA in the KTO was so heavily concentrated that daylight operations at low level would be suicidal. This prompted him to decide that the Jaguars would operate above the threat posed by AAA, a decision fully justified by the results. As Cox and Ritchie observe, this created some problems in terms of weapons accuracy, although the nature of the target sets meant that this was not a major difficulty.[17] It required the rapid integration of more suitable weapons, in the form of CRV7 rockets and CBU-87 cluster munitions, replacing the BL755 cluster bomb which was optimised for low-level delivery. The integration of both the CRV7 and CBU-87 was not without difficulty, although both weapons systems were used to good effect in due course.[18]

Within a few days of the start of the conflict, it became clear that the Iraqi Air Force (IqAF) had decided to all-but cede control of the air to the coalition, which presented both an opportunity and a challenge. The opportunity lay in the ability to move the Tornado to medium altitude, out of the range of AAA and with the reassurance that operating alongside the significant American electronic warfare (EW) and Suppression of Enemy Air Defences (SEAD) capability would do much to help reduce the threat posed by guided surface-to-

air weapons. Unfortunately, the problem lay in the design of the Tornado GR1 itself. In the memorable phrase of Paul Jackson, the Tornado 'took to the medium level role like a duck to accountancy', as the weapons system on the aircraft was not optimised for operating at this level. The result was that the Tornado went from being an effective and important part of the coalition air effort to an aircraft which was not able to deliver ordnance with any particular accuracy thanks to the limitations of its avionics.[19]

This caused some angst in London, as members of the Air Staff became worried that this would make the Tornado GR1 particularly vulnerable in the forthcoming defence cuts. This prompted suggestions that the Tornado force return to low level operations, an idea rejected by the RAF commander in theatre, Air Vice-Marshal William Wratten, who expressed his objection to the idea in rather less colourful terms than the aircrew did when they became aware of the proposal.[20] The solution lay in the use of PGMs. Unfortunately, early ideas that the USAF F-15E and F-111 forces might provide 'buddy lasing' for the Tornados were impractical as a result of the lack of LANTIRN targeting pods for the F-15s and the burden of commitments placed upon the F-111Fs. This required the despatch of elements of the RAF's Blackburn Buccaneer force equipped with the Pave Spike designator pod, and the use of two TIALD pods which had been hurried out to theatre for the ultimate form of operational evaluation. Pave Spike was a daylight-only system, but in circumstances where the coalition had control of the air, the need to operate at medium altitude (famously not the Buccaneer's normal environment) in daylight was not the issue that it might have been. It is important to note that the Tornado/Buccaneer combination gave the coalition an important extra level of PGM capability. At the time, the F-111F, F-117A and F-15E represented the PGM capability provided by the USAF, while the US Navy's A-6 Intruder and some of its F/A-18 Hornets also had the ability to deliver laser-guided weapons; the A-7 Corsair, in its final operational deployment, also made use of the electro-optically guided AGM-84E SLAM stand-off missile. The ability to use the Tornado and Buccaneer against targets requiring the use of PGMs, notably bridges and hardened aircraft shelters further added to the importance of the RAF's contribution to the prosecution of the war.

Space precludes a full examination of the range of RAF capabilities deployed during the war, and detailed research into the role of the Support Helicopter fleet, and the tanker and air transport forces is long-overdue. The tanker fleet was essential to operations, although small in number compared to the significant numbers of American KC-135 and KC-10 refuellers; the RAF tanker force had been essential to operations in the Falklands and would go on to be one of the means by which Britain provided significant support to the United States in the opening days of the war in Afghanistan, with VC10s and Tristars being particularly valued by US Naval aviators as they conducted long sorties from carriers operating many miles away from the land-locked nation in which their target sets could be found. Only in this edition of *APR* is there a sensible academic analysis of the role of the Nimrod MR2, adding to the short accounts of the Nimrod's work in the Gulf by Tony Blackman and Bill Gunston, and illustrating a further gap in our contextual understanding of the British air war to date.[21]

When beginning to consider the RAF's role in the 1991 Gulf War, then, what brief conclusions might we draw as our starting point for further research? The first is that the coverage of the RAF's role in the conflict is still lacking. While there was an initial burst of enthusiasm in terms of personal accounts of the war and coverage by those writing about aircraft types (particularly the Tornado, Jaguar and Buccaneer), interest rather fell away in the face of numerous other deployments by the RAF, particularly in the maintenance of the No Fly Zones between 1991 and 2003, the commitment to the Former Yugoslavia which culminated in Operation Allied Force over the Kosovo crisis and finally Operations Herrick and Telic. While the skill and adaptability of the RAF proved a vital attribute in 1990, they have come to be subsumed in the inaccurate narrative which misrepresents the nature of the RAF's operations at the start of the war, with the debate over low-level operations and JP233 obscuring far too much before consideration of the air war from a British perspective rather faded from discussion.

The nature of Operations Herrick and Telic perhaps helped to further obscure the use of British air power during the 1991 war, as a popular narrative began to evolve which claimed that Afghanistan and the post-Saddam insurgency in Iraq represented the future of war; a future in which air power was an auxiliary and which was likely to cause more harm than good if used to deliver ordnance. When this complacent view of air power in decline was rudely interrupted by events in Libya in 2011, commentators did not return their gaze to 1991 to see what lessons might be drawn from that campaign, or what Operation GRANBY did for the RAF in terms of beginning the move away from operations at fixed main bases with the occasional deployment on exercise to a routine where deployments were the norm for a significant proportion of the air force. The process of defence cuts which began with Options for Change – a review which was under way while British forces were deployed to the Gulf – did not stop, and it was only after the nadir of the 2010 Strategic Defence and Security Review that commentators began to wonder whether the UK could make a significant air contribution to operations as it had during the 1990-91 period. Although the 2015 SDSR added to the RAF's equipment strength, the challenge of providing personnel to operate these aircraft was not clearly addressed – yet the evidence of GRANBY is that the ability to deploy a significant air element can be of considerable importance if Britain wishes to have relevance in coalition operations. This requires investment and a willingness to avoid succumbing to 'presentism' or being prepared only – in a cliché which gained considerable traction in the latter stages of operation Herrick – to fight 'the war, rather than a war'.

Yet much of what is now lamented in defence commentary circles as the United Kingdom having lost its ability to be influential was seen in 1991, but not acted upon. Sir Peter Harding sums it up very well:

> When looking to future scenarios, the lesson we learnt is that we should not look to specific expected threats or provide specifically for those threats. Ten to one, they will not appear, but some other threat will. What we need… is a range of capabilities to make sure that we could meet most situations.[22]

For all the difficulties faced, the RAF's contribution to coalition operations in 1991 was neither insignificant nor ineffective. Even without access to the official documentation, a more nuanced understanding of operations can be adduced from the available information, and Operation GRANBY may be seen as marking the point at which the RAF began to adapt to the 'New World Order' that arose after the end of the Cold War, even if the world proved to be rather more dangerous and unpredictable than the proponents of the new order had hoped. The real challenge, of course, lay in identifying the key lessons of the conflict and then implementing them in terms of training, tactics and procedures. As Seb Ritchie has observed, the process of implementing lessons has proved a thorny one.[23] The lack of detailed open-source coverage and analysis of the RAF's contribution to the 1991 war has not helped as wider understanding of the conflict remains lacking. It is to be hoped that this volume of *Air Power Review* will aid in the process of broadening understanding of the 1991 war and the RAF's part in it, thus ensuring that the enormous efforts and sacrifices of those members of the RAF who served in the conflict are fully recognised, understood and can be of full benefit to those who have followed them.

Notes

[1] AVM Ray Lock, introduction to Session 1, 'Britain and the 1991 Gulf War Witness Seminar' (hereafter 'Witness Seminar'), 16 March 2011. Unpublished transcript. The edited and abridged transcript forms an integral part of this edition of *Air Power Review*.

[2] See, for instance, John Peters and John Nichol, *Tornado Down* (London: Signet Books, 1993); Pablo Mason, *Pablo's War* (London: Bloomsbury, 1992); Charles Allen, *Thunder and Lightning: The RAF in the Gulf War: Personal Experiences of War: R.A.F. in the Gulf - Personal Experiences of War* (London: Stationary Office Books, 1991); Jon Lake and Mike Crutch, *Tornado: Multi-Role Combat Aircraft* (Hinckley: Midland Publishing, 2006); Martin Bowman, *Sepecat Jaguar: Tactical Support and Maritime Strike Fighter* (Barnsley: Pen & Sword, 2007); Tim Laming, *Buccaneer: the Story of the Last All-British Strike Aircraft* (London: Patrick Stephens Ltd, 1998).

[3] See, for example, Lewis Page, *Lions, Donkeys and Dinosaurs: Waste and Blundering in the Military* (London: Arrow, 2007), particularly pp.133-136 and Cdr N D Ward, 'Land Based Air versus Carrier Borne Air: Real Costs and Achievements''https://thephoenixthinktank.files.wordpress.com/2010/10/land-based-air-versus-carrier-borne-air-real-costs-and-achievements.pdf (Accessed 22 April 2016)

[4] Sebastian Cox and Sebastian Ritchie, ' The Gulf War and UK Air Power Doctrine and Practice', in Sebastian Cox and Peter Gray (eds) *Air Power History: Turning Points from Kitty Hawk to Kosov*o (London: Frank Cass, 2002); Sebastian Ritchie, 'The Royal Air Force and the First Gulf War, 1990-91: A Case Study in the Identification and Implementation of Air Power Lessons', *RAF Air Power Review*, Volume 17:1 (Spring, 2014).

[5] Remarks by President George HW Bush, 5 August 1990, https://bush41library.tamu.edu/archives/public-papers/2138 (Accessed 21 April 2016)

[6] Lord Powell of Bayswater, *Transcript*, Witness Seminar Session 1,16 March 2011.

[7] Cox and Ritchie, 'Gulf War and UK Air Power', p.291.

[8] 'GAO Critical of US Programmes', *Flight International*, 6 June 1981, p.1702; 'Can the Runway Survive?', *Flight International*, 3 October 1981, p.1016 –' Citing grave doubts about the survivability of JP233-equipped F-111s, the US is pulling out of the joint programme'.
[9] 'Can the Runway Survive?', *Flight*, 3 October 1981, p.1016.
[10] Cox and Ritchie, 'Gulf War and UK Air Power', p.297.
[11] ACM Sir Patrick Hine, *Transcript*, Witness Seminar Session 2 ,16 March 2011
[12] Page, *Lions, Donkeys and Dinosaurs*, pp. 135-136
[13] Post to **http://www.pprune.org/military-aviation/199874-jp233.html** 30 November 2005 (Accessed 2 May 2016)
[14] Jon Lake, *B-52 Stratofortress Units in Operation Desert Storm* (Oxford: Osprey Publishing, 2004), p.45
[15] Ibid, p.47.
[16] MRAF Sir Peter Harding, *Transcript*, Witness Seminar Session 2, 16 March 2011.
[17] Cox and Ritchie, 'Gulf War and UK air power', pp.295-96.
[18] Ibid.
[19] I am grateful to a number of RAF Tornado GR1 aircrew for their insights into the problems they encountered.
[20] Cox and Ritchie, 'UK Air Power in the Gulf', p. 299; I am grateful to Air Vice-Marshal Ray Lock for his entertaining recollection of the response of the crews to the idea that a return to low-level operations was a sensible idea.
[21] Tony Blackman, *Nimrod: Rise and Fall* (London: Grub Street, 2011); Bill Gunston, *Nimrod: The Centenarian Aircraft* (London: The History Press, 2009)
[22] Harding, *Transcript*, Session 2.
[23] Sebastian Ritchie, 'The Royal Air Force and the First Gulf War, 1990-91: A Case Study in the Identification and Implementation of Air Power Lessons', *RAF Air Power Review*, Volume 17: 1