



1990

The Role of Air Power in Crisis Management

This paper was first published in *The Role of Air Power in Crisis Management* edited by Group Captain N E Taylor, proceedings of a conference held at the University of St Andrews in September 1993. The author was, at the time, Chief of Staff and Deputy Commander-in-Chief, Headquarters Strike Command.

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Biography: Sir Richard was commissioned at the RAF College Cranwell in 1959 after completing flying training on Piston Provost and Meteor aircraft. Following nine years service as an operational fast-jet pilot, primarily on the Harrier, he commanded both a Harrier squadron and the Harrier Force in Germany, then became a qualified flying instructor during which time he taught The Prince of Wales to wings standard. A succession of national and NATO senior appointments followed, culminating in his promotion to Chief of the Air Staff and Air ADC to the Queen. On retirement in April 2000, he became Constable and Governor of Windsor Castle. A past chairman of the Board of Trustees of the RAF Museum, he is now president of the RAF Historical Society.

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Introduction

My task today is to talk about air power and crisis management. As COS of STC the opportunity for me to do so is timely because today we are exercising from High Wycombe operational command of a number of air operations which represent a significant national contribution to the containment of crisis.

My professional interest in crisis management quite obviously represents a pragmatic rather than philosophical or conceptual approach. So pragmatism, and what does or does not lie within the art of the possible, will be the flavour of my address. To this end I shall start with some words on the characteristics of air power which are fundamental to an understanding of its practical application. From there I shall move on to draw some lessons from hard earned practical experience before concluding with some words on current and future operations.

First, the concept of air power which has always been rather difficult to define. But for me it is a purely military concept and I have no difficulty with the accepted doctrine of my service that 'air power is the ability to use platforms operating in or passing through the air for military purposes'. The definition neatly takes the middle ground between those who view air power an auxiliary to ground and naval forces, and those who would argue air power is an all-encompassing concept. If one substitutes within the definition the word of 'sea' for 'air' and the word 'on' for 'in', the analogy with sea power becomes immediately obvious. I would argue that both are concerned with power projection, a concept easily recognisable in Victorian and Edwardian times when the battle fleets of the Royal Navy were responsive to political direction that reflected the national will. Thus, while sea power used and still uses the oceans of the world to project power, air power today similarly uses the ocean of the air in which we all live as its employment medium. But the air is manifestly a very different environment in which to fight than either on land or at sea. Thus to start with a statement of the obvious, aircraft are faster and have greater reach than ships or land systems from which one can safely deduce that height, speed and reach represent the primary strengths of air power. And it is these characteristics that we have to understand if we are to evaluate with some precision the potential contribution of air power to crisis management.

The responsiveness of air power is quite clearly as important in crisis management as it is in war because it permits the rapid deployment of military force to deter aggression and to provide timely support for an ally. Similarly air power permits the concentration of military force in time and space where and when required. When committed to operations, aircraft operating over a spectrum of heights permit first observation and then, if necessary, direct fire against enemy forces whether or not they are at the front line, well to the rear of it, or on or below the surface of the sea. Moreover, the reach and endurance of aircraft in recent years has been greatly extended by use of air-to-air refuelling – this is not only important in terms of distant targeting but also in working round potential political rather than physical restrictions such as the refusal of overflight clearance by neutral countries. Finally, and importantly, aircraft can perform a wide variety of actions, and can be adapted quite easily to meet changing

circumstances. One obvious example would be our Tornado GR1As which can be used for low level recce at day or night, and for air-to-surface attack in both the nuclear and conventional roles. They also, of course, have an air-to-air self defence capability.

That said and as a day-to-day exponent of the utility of air power, it would be wrong of me to ignore the inherent limitations of air power which is an impermanent form of military force. The effects of direct action with conventional weapons can be transient and to sustain the effect may require repetition. Moreover, while we are now very competent in our use of air-to-air refuelling as a force multiplier through the extension of both the range and endurance of our aircraft, we have not yet solved the problem of how to re-arm and re-crew an aircraft in flight. Quite obviously aircraft payloads are generally more limited than those carried by ships or vehicles. So aircraft are at their most cost effective when used for tasks that give a high value pay off. For example, a small payload deployed quickly may be of far more value in stabilising a critical situation than one many times larger deploying at a far slower speed. And finally, despite the effort of some aircraft manufacturers to prove otherwise – and I here have in mind as an example the A-10 or Warthog – aircraft are significantly less robust than tanks or ships. Hence relatively low levels of battle damage can have catastrophic effect, albeit this inherent vulnerability can be offset by the exploitation of height and speed to increase an enemy's targeting difficulties.

Beyond these practical limitations there are two other considerations which merit mention. The first is cost. Modern, highly capable aircraft do not come cheap, nor for that matter does the training of their crews. But their increase in capability often permits a reduction in the number of platforms required for a task. It is thus imperative to balance cost *per se* against cost effectiveness. Air power is a product of technology and the nature of the central balance between offensive and defensive capabilities will always reflect the overall direction and rate of technological development. This is particularly evident in the much-decreased sensitivity of air power to light and bad weather conditions – indeed the concealment offered by bad weather and darkness is increasingly turning to the advantage of air power as we introduce to service more advanced all-weather navigation and targeting aids.

So much then for the balance sheet of air power characteristics. But what do we mean by crisis? To my mind a crisis is a situation of danger or suspense which, if left to run its course, could lead to further, perhaps, catastrophic consequences. But 'crisis' in the medical context can also mean a turning point which I believe usefully widens the focus of our attention beyond containment to include the cure.

In the difficult and uncertain circumstances of the world today, air power has much to offer to help preserve and strengthen international security. We in the RAF take considerable pride in our many contributions to disaster relief. The speed of reaction and the skill of our tactical transport crews earned well deserved plaudits for their contributions to famine relief in the Ethiopian highlands in 1984-85. Our Hercules sqns took on a similar role within a coalition

force in the early stage of Operation *Provide Comfort* – the provision of relief of the Kurds fleeing the wrath of Saddam Hussein – and their efforts were of course supplemented by our support helicopters which redeployed into Turkey while in transit back to UK from the Gulf War. Suffice to say that such operations are mounted in the hope of generating goodwill, removing suspicion and promoting stability and security. The fostering of stability and security will also be enhanced by the Open Skies agreement which permits aircraft to roam freely over the territory of signatory states and the sharing of the information gathered. Thus, air power by its existence offers a most useful contribution to the preservation of peace – first through the promotion of international relations and secondly through the provision of reassurance that should help avert threats to peace, both real and imagined.

But air power clearly offers no more of a panacea for guaranteed peace than do diplomatic and economic leverages. A demonstrated military capability may be enough to convince a would-be aggressor that his initial foray constituted an unacceptably risky venture – but it did not in the case of Saddam Hussein who badly misjudged the international military resolve in this respect. Failing all else, full military action may thus be required, which brings me to a cautionary point. Activities in the field of humanitarian assistance, such as famine relief and the delivery of medical support have led some commentators to play down the combat function of the armed forces in general and air power in particular. I acknowledge the temptation to do so but to my view we must train to keep air combat capability well honed. The completion of lesser tasks will be comfortably accommodated within this framework.

So what can air power do as a crisis management tool? It can provide tangible evidence of political will, as in the Berlin Airlift of 1948. It can project unconventional military power, as the Israelis did at Entebbe in 1976. It can project conventional military power, as the French did in Chad in 1987 when their air force's intervention quickly defeated Libyan ambitions in the area. It can demonstrate international goodwill, as we and many other nations did in the aftermath of the Ethiopian famine or the Armenian earthquakes. It can deter military adventurism, as the USAF did with its demonstration flights over a potentially rebellious Philippines airfield when Mrs Aquino faced insurrection in 1989. It can carry out limited military operations against distant targets, as the US forces did in Libya in 1986 and it can carry out multi-faceted operations against a major military force, as the coalition did in the Gulf War. In the 1980s alone, the US Air Force conducted contingency air operations in 26 different countries and over the world oceans. It supported humanitarian, disaster relief or rescue operations over 60 times in 49 countries. This list is far from comprehensive and I only include it as evidence that air power can deliver a tailored response to almost any situation.

But of all its potential applications, air power is best known as a means of deterring aggression. Such deterrence can be both implicit and explicit. In the first instance and at the lowest end of the scale, reconnaissance and surveillance aircraft can – in addition to the collection of intelligence – have a salutary deterrent effect on an aggressor. The act of carefully watching – and our present operations over north and south Iraq come to mind – carries the implicit threat to

your opponent that his actions could provoke a response. Moving up the scale of deterrence, a proven ability to exact rapid retribution by launching an attack deep into unfriendly territory represents by any measure a strong and explicit deterrent: the rapid deployment of Harriers to Belize in 1972 and again in 1977 appear to have been a major factor in deterring the threatened Guatemalan invasion of the territory. More recently, the deployment of coalition air power to Saudi Arabia following Iraq's invasion of Kuwait acted as a single deterrent to further Iraqi aggression. Indeed, with all the benefit of hindsight, had it been possible to divine Saddam Hussein's intentions, the rapid deployment of air power into Kuwait before the invasion might well have defused the crisis before it really developed. But here, perhaps, it would be timely to make one short foray into the field of crisis theory.

A military-operational prerequisite for a successful crisis management operation is 'escalation dominance'. It is of crucial importance for the military means to be sufficient to be able to continue operations if the conflict should escalate. Forces must possess, and be seen to possess, the capability to escalate both farther and faster than the opposition.

Escalation dominance does not necessarily mean sending overwhelming force to the conflict area. This could contradict another important principle, namely that of proportionality. Escalation dominance is achieved if the conflicting parties are convinced that any further aggressive behaviour against the deployed force would be pointless. This means that political and military aims must be explained clearly and unambiguously to the conflicting parties and that agreement must be reached on the principle of implementing further military measures at any time if this is necessary to achieve the political objectives.

Escalation dominance can be achieved by the undisturbed build-up of forces in the region, so being in a position to determine the time and place of any military operation. This requires the mounting area to be adequately protected. Moreover, escalation dominance can be achieved only if the national territory and interests are also sufficiently well protected against a countervailing threat.

And, finally, I would suggest to you that if it is not possible to achieve escalation dominance, the crisis management operation is likely to fail and, furthermore, the coalition would be forced to escalate. In contrast, deliberate de-escalation is only possible from a position of superiority.

Let us now return to practicalities. The early air power theorists put in train a long tradition of over-expectation and inflated claims that marked almost every development in air power technology or capacity up to the end of World War II. Then, air power, once perceived by many theorists to represent a military scalpel, was in truth an axe – and a blunt and ruthless one as epitomised by the emergence of the nuclear bomb. That said, we should acknowledge that our Second World War commanders had the foresight to appreciate what air power could achieve for them but what they did not have was the technological capability. But as I said earlier, air power is the product of technology, and most recently, in the Gulf War, various

elements of technology have come together to produce a model for the handling of crisis and war that is at the same time both enormously hopeful and yet potentially dangerous. I was Air Chief Marshal Sir Patrick Hine's Director of Operations throughout the Gulf crisis and perhaps a few minutes of my personal recollections will be helpful in informing your own thinking and discussion.

Saddam Hussein's forces had the benefit of an impressive military infrastructure. Iraq's combat aircraft numbered some 750 and its air defence system fielded almost 17,000 surface-to-air missiles and up to 10,000 anti-aircraft guns. Their modern radar systems were fibre-optically connected to an integrated computer data link system, with command control links located throughout the country. For greater survivability, many primary command control nodes were buried and concrete covered. Nevertheless, within one week of the start of the war, that system had been comprehensively dismantled and defeated; the coalition had gained air superiority. What did this defeat cost the Iraqis? It cost them their air force, which quickly realised that flying against the coalition was suicidal. It chose instead to fly away from it. Some 35 Iraqi aircraft were lost in air-to-air combat, up to 140 fled. It cost their troops supplies and munitions, when depots were destroyed and bridges downed. It cost them their military eyesight, their ability to manoeuvre, their ability to counter-attack and, ultimately, their will to fight. Methods of attack varied from blanket bombing of large troop dispositions to precision assaults on specific buildings. The weapons employed ran the gamut of the airman's inventory from jammers to guns, from cluster bombs to rockets, and from dumb iron bombs to precision-guided munitions. Stripped of its air cover, its surface-to-air defence systems in tatters, the Iraqi army had no chance and, ultimately, no hope. The much-feared mass land battles did not materialise and nor did the casualties.

As the Director of Operations in the Operation Granby Joint Headquarters I was filling a tri-Service appointment and I remain an apostle of 'jointry' because I do not believe that modern warfare, let alone crisis management, lends itself to neat compartmentalisation. There will always be an overarching political framework which we the military have to understand and accept as the framework within which we have to operate. Moreover, I yield to no man in my admiration of the performance of our land and naval forces in the Gulf War. I mention all this to underline my belief that in addressing the employment of air power in the Gulf, the claim that air power won the Gulf War is not important. It is unhelpful to become side-tracked into such an argument, just as it is silly to downplay the key role of air forces in the overall battle. The crucial point is the final matching of the technological claims made for the airborne weapons and their platforms with their actual performance, and the resultant combinations were undeniably effective:

- Where stealth was promised; stealth was achieved.
- Where precision was sought; precision was delivered.

- When claims that armour was now truly vulnerable to air attack were made; tanks burned and APCs exploded.
- When bridges were targeted; bridges fell.

In short, air-delivered power demonstrated that it could fight a war which could lead not only to the collapse of enemy air power but to the destruction and virtual impotence of enemy land and sea power too. Air power came of age. It proved its flexibility. Its unique characteristics of high speed and concentration of force – which make it so effective not only in response but also in pre-emption – were displayed for the world's media to see. Air power provided dynamic attack and mobile defence; it supplied and moved; it sought and found; it diverted; it prevented; and it destroyed. It showed that the efficacy of modern air power derives not so much from what a single platform or system or weapon can do but from the combination of characteristics that produces a great flexibility of options.

I mentioned the potential danger that can arise from misinterpretation of this model. In time of crisis we in the military cannot guarantee certainty – the commodity most sought by politicians as they struggle to rescue an element of choice from the pressure of circumstances. We deal in probabilities and no more so than when planning an air campaign whether it be at the operational or tactical level. The use of precision guided munitions represent to me, as a military technician, economy of effort – very simply put I can achieve a very high probability of destroying a target with a handful of aircraft rather than an air armada. The problem is that I can offer no assurance at all as to where a laser-guided bomb that misses for whatever technical reason, will land. In tight situations, where the political stakes are high and politicians worry about collateral damage, this reality of life is somewhat troublesome and hence the importance of rules of engagement and intelligence gathering. Rules of engagement serve to control the use of force but without restricting the right of self-destruction. Control is the important word because quite clearly a misuse of firepower could either provoke or escalate conflict rather than contain it or calm it down. Moreover, within a coalition, political cohesion could be jeopardised if the rules of engagement of participating nations are not in harmony – but this is not always easy to achieve. If my memory is correct, 12 different sets of national rules of engagement were issued to our forces from the outset to the conclusion of the Gulf crisis.

In operations that may be conducted under restrictive rules of engagement and with neutral movements continuing in or close to the area of operation, it will be increasingly important to maintain accurate and up-to-date recognised air and surface pictures for both the political and the military control of operations.

For land-air operations, the importance of accurate and timely intelligence is possibly even more important, especially at the lower end of the spectrum, when opponents can take advantage of terrain and may merge with the indigenous civilian population.

Traditionally, peacekeeping and counter-insurgency operations have relied on intelligence derived from individuals (HUMINT). While this will certainly remain important, the proliferation of more capable weapons, emphasises the growing importance of effective area surveillance. Airborne tactical recon and interpretation of its imagery has received a tremendous boost in the wake of the Gulf War and subsequent operations as politicians demand a greater certainty of intelligence to inform their decisions.

Turning to the contemporary scene, our air power has been, and is, involved in the management of a whole range of potential or actual crisis situations throughout the world. RAF aircraft have been deployed in a deterrent role in the Falklands since 1982. Our SH continue to operate in support of the security forces in Northern Ireland in the fight against terrorism while others fly in a policing role in Hong Kong. In the Middle East we contribute to two coalition operations which enforce the 'No Fly' Zones over Iraq. In the north, flying from Incirlik in Turkey with tanker support our aircraft operate daily down to the 36th parallel. We have sustained our contribution here for over two years – first with Jaguar and since April this year with Harrier. In the south our Tornados, again with tanker support, monitor the southern 'No Fly' Zone up to the 32nd parallel along, as in the north, with our US and French coalition partners. Last January you may recall that RAF Tornados participated in two successful coalition strikes against Iraqi air defence sites. In the former Republic of Yugoslavia, since July last year RAF Hercules have been flying up to three missions daily into Sarajevo with UN relief support – a demanding and dangerous operation. Since November last year we have been flying an E-3D sentry aircraft out of Aviano in north Italy as part of the NATO AEW force monitoring air activity over the Bosnian 'No Fly' Zone. Since last April we have contributed eight Tornado F3 aircraft with tanker support as a further national contribution of Operation Deny Flight and as recently as July we have sent a squadron of Jaguar fighter bombers to Italy as part of a NATO offensive force poised ready to respond to a request from the UN Secretary General for Air Support. Finally, we provide regular detachments of Nimrod maritime patrol aircraft for Operation *Sharp Guard* which monitors the movement of shipping in the area to enforce sanctions against former Yugoslavia. Some of you may be surprised at the scale of our commitment.

I have tried to be objective in addressing the strengths and limitations of air power in crisis management. But, as divisions, ships and squadrons become fewer and the likelihood of international crisis remains or even grows, it becomes increasingly important that the instrument for dealing with and for managing crisis must be both effective and available. Our future weapons systems will not be any less costly than in the past. At a time when public expenditure, including defence spending, is very much under the spotlight, suffice to say that the relative value for money of aircraft able to deploy and hopefully stabilise a situation in a matter of hours from the time of decision, compares well with alternative capabilities.

While I cannot rule out – at one end of the spectrum at least – that the UK could go it alone for certain crises, a continuation of coalition activity seems far more likely to me. The ability of

air forces to operate together has been very evident in recent years and NATO has been the catalyst in providing remarkable uniformity in operations. English is the language of the air; tactics and concepts of operation have been produced by NATO and, very often, these have been folded into arrangements with nations outside the Alliance. They are tried and tested. Command and control of air forces is well understood and regularly practised. This is not to say that considerable differences in capability do not exist between the various nations, though operational standardisation is, in my experience, rather higher amongst air forces than in the other services.

Other than the United States, the Royal Air Force is unique within NATO in the range of capabilities it can bring to bear throughout the spectrum of crisis. Our transport force and our air-to-air refuelling capability gives us considerable range and carrying power. Our maritime patrol aircraft and our special intelligence gathering capability give us a remarkable range and carrying power. Our maritime patrol aircraft and our special intelligence gathering capability give us a remarkable facility which can be deployed to any part of the world at relatively short notice. Our support helicopters are assisting in crisis management in a variety of places in the world right now, and our offensive air power with its reconnaissance capability provides Saddam Hussein every day with a reminder of its reach.

On the afternoon of 8 August 1990 the Joint Commander for Operation *Granby* received instructions from the Ministry of Defence to prepare for the deployment of a Tornado F3 squadron from Cyprus to Saudi Arabia and a Jaguar squadron from the UK. No plans existed for these deployments so as Director of Operations I had the rare pleasure of addressing an entirely blank piece of paper to sketch out the deployment concept. The formal warning order was issued that evening. By midday on 11 August twelve Tornado F3 were in place at Dhahran, armed and ready to fight. One day later twelve fully combat-ready Jaguar supported by two tanker aircraft were in position in Oman. This was crisis management in action.

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