RAF Ethos & Culture in the 21st Century

Aircrew or Air Power?

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"Air power is the most difficult of military force to measure or even express in precise terms'
(Winston Churchill)

British military ethos and culture has usually been studied in the context of the British Army rather than the Royal Navy or Royal Air Force (RAF). This is possibly because the Army provides a richer variety of material for what has traditionally been regarded as an area of academic study, particularly for historians and sociologists[1]. It is only comparatively recently that the RAF has begun to seriously examine and seek a better understanding of its own particular ethos and culture. Such internal studies that have been undertaken have sought to support short-term decision making at Air Force Board level.[2]

A possible reason why it has taken so long for the RAF to generate a debate about the subject may be due, in no small part, to the nature of air forces and air power. Meilinger states that airmen "have had a difficult time attempting to analyse, define and explain the concept of air power, not only to the other Services, decision makers and the public at large, but even to each other"[3] and defining and explaining the ethos and culture of air forces is little different. The various internal studies have raised a number of pertinent issues relating to the future ethos and culture of the RAF and the Service's response to various societal pressures.

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However, the studies have not critically examined the underlying assumptions concerning the RAF's specific ethos and culture, nor the adaptation of that ethos and culture to the operational imperatives of the 21st Century.

Within the limits of this paper, ethos is defined as a "system of values and governing principles that influence and characterize the way in which members of a group interact with one another and respond to the world around them".[4] Culture is defined as "the symbolic, learned, non-biological aspects of human society including language, custom and convention"[5] that reflects and supports this ethos. Often described by the British military as "Core Values. . . [they] always include such recognisably military virtues as physical courage, total commitment and service before self"[6]. Schein argues that these values then "serve as a guide and as a way of dealing with uncertainty of intrinsically uncontrollable or difficult events"[7].

The RAF, like its sister Services, has always accepted that its ethos and culture needs to be different from the society its personnel are drawn from if it is to sustain the moral component of air power[8], because of the 'unlimited liability' [9] that its personnel accept. RAF ethos is currently defined as:

"The distinctive character, spirit and attitude of the RAF which together inspire people to face danger, and even death. It is underpinned by tradition, esprit de corps *and a sense of belonging. It encompasses the will to contribute to the delivery of effective air power that arises from confidence in the chain of command, trust in colleagues and equipment, respect for individuality, sustainment for high professional standards and the courage to subordinate personal needs for the greater good"*[10]

However, the RAF has long recognized that its ethos and culture is different in many respects from those of its sister Services. When compared to the Royal Navy or British Army only a small proportion of RAF personnel, primarily officer aircrew, has traditionally sought to engage in combat. Many of the remainder of RAF personnel are well-educated technical specialists whose primary role is to enable aircrew to engage in combat. It is the ethos and culture of the RAF's officer aircrew that has dominated the organization, not least because it is from their ranks that the senior leadership of the Service is drawn. Forged in an era of total war and profound technological change, this ethos and culture has primarily been sustained within the Service throughout the 20th Century by the stations and squadrons that provide its organizational foundation. However, that foundation and the ethos and culture it supports may be vulnerable to future changes in the nature of conflict.

This paper will critically examine future influences on the ethos and culture of the RAF and the possible consequences for the Service as it conducts operations in the 21st Century. The paper will focus on the possible impact that any reduction in the role of manned combat aircraft and the increasing use of jointery and contractorization may have on the RAF's ethos and culture. Such operational and organizational changes may have a profound effect on the Service's position at the 'right of the line'[11]. But for the ethos and culture of the RAF to be understood it is first necessary to understand the historical context that has influenced the development of ethos and culture within the RAF.

The ethos and culture of military organizations

"What are the morals of the military world . . . The military world is characterized by the absence of freedom — in other words, a rigorous discipline-enforced inactivity, ignorance, cruelty, debauchery and drunkenness."
(Leo Tolstoy)

Military organizations have often been perceived as being a world apart from the societies they serve, not least because of their functional imperative of being able to inflict violence. Military ethos and culture is based, in part, on the wider social ethos and culture of the society from which soldiers are drawn. However, this is then developed by military organizations through the processes of both formal and informal socialization in which recruits are dispossessed of large parts of their previous civilian, ethos and culture and assimilate a distinctive military ethos and culture. As Massey states:

"In the military sense ethos comprises a distinctive style of thought and behaviour, related to a specific

A patrol of the 1st Battalion, The Queen's Regiment in Basra

The ability to conduct high intensity war fighting operations remains the ultimate raison d'être for the British armed forces

professional purpose within the wider cultural and moral setting of the parent society. It is typically manifested at both the individual and institutional levels, and its defining characteristics normally include: marked corporate solidarity and unit cohesion; a pronounced sense of patriotism, duty, loyalty and honour; the subordination of individual needs to those of the larger group; acquiescence in a rigid and hierarchical structure, founded on firm discipline; and an attachment to tradition, ritual and symbolism."[12]

The purpose of this is to ultimately ensure that military personnel carry out their functions in combat, because a natural individual reaction would be to avoid combat in an effort to stay alive[13]. This requirement to get men to fight is still an accepted part of British Defence Doctrine that identifies the need for motivation, leadership and effective management as the moral component of fighting power.[14] This need to ensure that men would fight also contributed to the development of professional armed forces. As Hackett argues:

"It has evolved into a profession, not only in the wider sense of what is professed, but in the narrower sense of an occupation with a distinguishable corpus of specific technical knowledge and doctrine, a more or less exclusive group coherence, a complex of institutions peculiar to itself, an educational pattern adapted to its own specific needs, a career structure of its own and a distinct place in the society which brought it forth"[15]

Physically separated from the rest of society the distinctive ethos and culture of this profession flourished, as Howard states:

While the military have accepted the increasing role of women and adapted themselves accordingly they have, to date, resisted the incorporation of women into units whose principal task is deliberately to close with and kill the enemy face-to face

"They were a self contained universe, with their own routine, their own ceremonies, their own music and dress and habits; that whole tedious but obsessive way of life known as 'soldiering'"[16]

The armed forces have thus evolved into separate and distinctive institutions within British society. They also exhibit the traditional features of a Weberian bureaucracy[17]: they are hierarchical, have a formal body of rules and role specialization, impersonal relations between members, provide long-term employment, promotion and pay dependent upon merit and a rational decision-making process. In particular, all armed forces have evolved structures that support both their functional ability as well as their ethos and culture, both of which are required to ensure that they can effectively manage and apply violence on behalf of the state.

These structures reinforce the subjective 'psychological contract' that is often said to exist between the Services and each individual Serviceman and which commits the individual to risk his life in return for suitable rewards and support[18]. Keegan argues that this 'western' military culture, readily apparent in the British armed forces has been very successful in getting men to fight and win wars.[19]

This war-fighting ethos is also closely associated with the concept of the nation-state and the idea that soldiers "were not primarily members of a warrior caste, fighting from a concept of honour or of feudal obligation; nor were they contractors doing a job for anyone who would pay them. They were servants of the state, or rather of their country"[20]. Nevertheless professional western armed forces still retain elements of all the above, not least the British armed forces who still take an oath of loyalty to the Monarch as head of state. The war-fighting ethos continues to provide the cultural paradigm for the British Armed forces and "The ability to conduct high intensity war fighting operations remains the ultimate *raison d'être* for the British armed forces".[21]

There remains a general acceptance that the armed forces do need to be different from the societies "because of the functional imperative that underpins all their actions, namely war fighting".[22] However, since the Cold War there has been societal pressure for the armed forces to adapt their ethos and culture. Some senior military officers have expressed their concern about this, General Rose has commented that "Today, our military ethos . . . is being actively destroyed by a mixture of cultural change within our society and new national and international legislation"[23].

In 2000 the Chief of the Defence Staff, General Guthrie, warned that if this process, together with under-funding, continued then the British armed forces could become "little more then a gendarmerie, all symbolism and no substance".[24] There are three main reasons why the war fighting ethos and culture of the services are perceived as being at risk. Firstly, there are the significant cultural and social changes occurring in British society that have resulted in the composition of the British armed forces being altered; principally with an increasing number of roles for females, the acceptance of homosexuals and the influence of human rights legislation.

Secondly, for primarily economic reasons more civilians, both civil servants and private contractors, now carry out tasks within the military that were traditionally performed by Service personnel. Finally, there are the profound changes to the nature of operations that the armed forces are now required to conduct, many of which are not related to war fighting. Consequently, armed forces are now "more multipurpose in mission, increasingly androgynous in make-up and ethos, and with greater permeability with civilian society".[25] Together these changes have led to the label 'Post-Modern' being applied to military organizations to differentiate them from 'Late Modern'[26] forms of military organizations of the Cold War that had an essentially masculine war fighting ethos and culture.

Many of these societal pressures, such as allowing homosexuals to serve, have been forced onto a reluctant military; others such as the greater involvement of women have been successfully

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accommodated by them. Dandeker has argued that the British armed forces should embrace certain changes, accommodate others with caution and resist those changes that are likely to impact upon their operational effectiveness, such as permitting women to serve in infantry units.[27] The Services are now attempting to react to societal changes while retaining their military effectiveness as they accept that they will only be able to recruit and retain personnel from Generations X and Y if they do change[28].

As the Vice Chief of the Defence Staff, Air Chief Marshal Sir Anthony Bagnall stated in relation to recruit training: "Youngsters of today are different. They are less committed to a long-term career, they are more materialistic, better educated and more questioning".[29] However, this need to accept change has been balanced against the need of the Services to retain war-fighting effectiveness. This is most apparent in relation to the Service's attitudes to women. While the military have accepted the increasing role of women and adapted themselves accordingly they have, to date, resisted the incorporation of women into units whose principal task is "deliberately to close with and kill the enemy face-to face"[30]. This is primarily because of their physiological and psychological limitations.

For the RAF this has meant that women can now fly combat aircraft, and are excluded only from service within the RAF Regiment. Both Dandeker[31] and Massey[32] argue that the Services have often resisted change in the past, but once forced to accept it have found that their operational effectiveness has not yet been compromised.

Dandeker and Massey reflect the primary concern of the Services that social changes and pressures should not effect their 'war-fighting' ethos and culture or that any resistance to social change, because of that imperative, does not effect their own legitimacy. Recent debates over such issues as the role of women and the training of recruits have been of real concern to the Army for these reasons. The Services have generally been more successful at resisting organizational changes that they believe could affect their war fighting ethos and culture, particularly the Army when defending its regimental system.

However, the need to find cost-effective ways of achieving capabilities has resulted in the increase in the number of 'joint' units and the use of civilian contractors. These changes coupled with technological developments and the possible nature of future conflicts may have a greater impact on the Services distinctive ethos and culture, although the effects will vary between each Service. It is easy to understate the variations in war fighting ethos and culture that exist between the Services: each has developed differently because of the nature of the

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An RAF Harrier GR7 armed with a laser guided bomb

environment in which they operate. Consequently, it is likely that any change in the nature of war fighting will also effect them differently and this may be particularly so for the RAF.

The development of RAF ethos & culture

"We few, we happy few, we band of brothers" (William Shakespeare)

The differences in ethos and culture between the Services have often been accentuated and celebrated by the Services themselves for a variety of reasons including *esprit de corps* and bureaucratic rivalry. But the major difference between the RAF and its sister Services is primarily because "only a small minority of RAF personnel – aircrew – directly and regularly engages in combat".[33] A common perception by the detractors of air forces is that when compared to the other Services "Air-forces are undisciplined, they do not fight real battles; they are populated by a glamorous elite rather than real warriors; the higher echelons are remote technocrats who raze cities and kill civilians without compunction" [34] and that their ethos and culture reflect this resulting paradigm.

The RAF accentuated the differences in its ethos and culture from the other Services as it struggled to retain its independence during its early years of existence. It has always placed significant emphasis on the technical skills of individuals within the Service rather than what are, to many, secondary skills such as weapon handling or 'tactical' leadership and teamwork 'in the field'. Its airmen are identified by the variety of specialist 'trade groups' to which they belong; most RAF

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personnel are also usually less concerned about what has been called traditional military 'bullshit'.[35] Consequently, the Air Force Board accepts that "respect for individuality is a more dominant aspect of RAF culture than that of the Army or the RN".[36]

In historical terms there a variety of influences that have shaped the culture and ethos of the RAF. Firstly, the RAF was born in an era of total war between nation states. For many of the original proponents of air power, such as Douhet, World War One showed that warfare on land and sea could become rapidly stalemated, but that in a war of attrition it would be difficult if not impossible to defeat a well-supplied enemy army. In contrast, Douhet argued, the new centres of gravity for states were now the civil populations whose industrial efforts sustained their armed forces. Air power could be used to bring about the rapid collapse of an enemy "by bombing vital centres and thus breaking his will"[37] at little cost to the attacking side.

Trenchard used these arguments to help justify an independent Service with a distinct operational role at the expense of the other two Services when defence expenditure was being reduced during the 1920s and 1930s, a success that exacerbated the bureaucratic rivalry and conflict between the Services.[38] This sense of an independent role was supported by the RAF's self-belief that was based on the certainty of airmen that their profession represented the future of war fighting, compared to the other Services whose own pride and self belief was perceived as being rooted within the past. As Meilinger asserts, "Soldiers tend to look backward to the great captains and the great wars whilst casting only furtive glances towards the future. For airmen the opposite tends to be true- our gaze is forward."[39]

Secondly, the RAF could only exist because of the technological advances that permitted men to fly into combat. As Howard states, "war in the air became an immensely sophisticated exercise in tactical and technological ingenuity in which the professional fighting men were at least as dependent on the expertise of the scientist as they were on their own skills to carry out a task".[40]

The utilization of technological advances such as radar and monoplanes is still celebrated by the RAF as they enabled 'the few' to win the Battle of Britain in 1940.[41]

The RAF remains focussed on maintaining a technological edge over any potential adversary, as the Chief of the Air Staff recently stated: "Our ability to carry out the roles I have outlined will remain inextricably linked to our weapons systems and so to the speed of technological change"[42]. The centrality of weapons systems is a key feature of the RAF. The Army may talk about 'equipping the man' but the RAF is focussed on acquiring complex weapon systems and then manning them with relatively small numbers of highly trained aircrew, many of whom could be more lucratively employed within the commercial airline industry. The successful military utilization of technology by the RAF has primarily depended upon the performance of these individuals both in the air and on the ground because, as Westenhoff states: "The most prized military trait of air power, flexibility, stems from individual performance, trustworthiness and initiative".[43]

However, even though the RAF was created because of technological developments in the 20th Century it could not escape from the older military traditions of the other Services. The RAF likes to emphasise its unique 'light blue' ethos[44] and its uniforms and rank titles also highlight its organizational and cultural distinctiveness; yet much of its organization and culture is an amalgam of Royal Navy and Army organization, traditions and rituals that have changed surprisingly little over the years.

Thus, while the RAF has sought to be different from its sister Services it remains tied to the rituals and symbols inherited from both the Royal Naval Air Service (RNAS) and the Royal Flying Corps (RFC), as Congdon states: "the cut of the [RAF] uniform is Army, the method of portraying rank Navy. The eagle badge is RNAS, and the brown gloves a legacy of the RFC".[45] Many in the other Services remain dismissive of the RAF's attempts to be different, as a Royal Navy Petty Officer writing to *The Times* stated: "The RAF do not have traditions, they only have habits".[46]

More significantly, organizational influences on ethos and culture inherited from the RFC and the RNAS came from stations and the flying squadrons that were sustained by them. Flying squadrons, like Army regiments, celebrate their own unique history, battle honours and customs. The RAF has always believed that "identity with specific squadrons has proved to be a powerful tool in the development of ethos for *ab-initio* aircrew".[47] In many respects stations and squadrons became, like garrisons and regiments are for the Army, self-contained institutions that acted as the focus for the RAF's military capability and helped sustain and develop its distinctive ethos and culture.

The nexus for RAF ethos and culture on stations and squadrons was the RAF's aircrew and it was the aircrew that primarily provided the senior leadership of the Service. The command of major stations and flying squadrons has traditionally been the preserve of aircrew. However, unlike the other two Services, this leadership "is distinctive for the narrowness of its gene pool".[48] It is equally true that the leadership of both the Royal Navy and the Army is dominated by 'war fighters'.

However, in both these Services the function of combat is neither confined to, or defined by, such a relatively small number of individuals who, within the RAF have never totalled more than about 20% of the officer corps. For the Army, as Terraine argues : "to lead their men in battle is what army officers are for — not the only thing, but a very important one. The RAF is different and peculiar".[49] As Terraine makes clear in reference to RAF personnel in World War Two:

"The overwhelming majority [of RAF personnel] . . . were to be found in the ground crew — that assembly of skilled, educated, individualistic, irrelevant, dependable men without whose untiring labours the aircraft would not have flown, the operations would not have happened, the victory could never have been won"[50]

The majority of ground branch officers are technical specialists who, though they may command men, will probably never lead their men into battle or have the opportunity to reach the highest ranks of the Service. Consequently, the war fighting ethos and culture has been established by the aircrew and has been largely assimilated by the remainder of the RAF whose primary role is to support those who fight, even though they may have distinctive sub cultures of their own.

Subcultures and fragmentation

"Every airfield should be a stronghold of fighting air-grounds men, and not the abode of uniformed civilians in the prime of life protected by detachments of soldiers. It must be clearly understood by all ranks that they are expected to fight and die in defence of their airfields"
(Winston Churchill)

This war fighting ethos and culture based upon stations and flying squadrons commanded by aircrew arguably reached its apogee during the Cold War when the RAF's combat power was based around Main Operating Bases (MOBs) located within West Germany and the UK. The MOBs were located well behind the expected front line but were intended to conduct operations against Warsdaw Pact forces. These MOBs (or 'citadels') were fighting units in their own right; they were maintained at a high state of military readiness and all ground personnel were trained to operate within an NBC environment and protect their airfields against attacks by enemy special forces. Consequently, this war-fighting ethos was well developed and easily maintained amongst all RAF personnel and reflected in a distinctive MOB or 'citadel' culture. Many personnel, both aircrew and non-aircrew, spent many tours on these MOBs living and training together.

However, this MOB culture masked, to some extent, the complexity of air power and the subsequent demands for a large number of specialists to support air operations, provide logistics and force protection. This ensured that the RAF increasingly consisted of non-aircrew officers in a variety of branches together with the various 'tradesmen' they commanded. While MOBs had a distinctive culture many of these supporting specializations, such as the RAF Regiment, medical personnel or the RAF Police, could be classed as distinct subcultures within them because by virtue of their own specialist training and occupation.

As Gudykunst states: "they are groups within a culture whose members share many of the values of that culture, but also have some values that differ from the culture".[51] Some of these sub cultures have their own distinctive esprit de corps that improves their effectiveness and enhances their contribution to air power. This is a common phenomenon and few large organizations have a completely universal ethos and culture. As Reiner has argued in relation to police forces (which are not dissimilar to armed forces as they are also involved in the application of force on behalf of the state):

"The values, norms, perspectives and craft rules which inform their conduct is, of course, neither monolithic, universal nor unchanging. There are differences of outlook within police forces, according to such variables as personality, generation, career trajectory and structural variations according to rank, assignment and specialization"[52]

The RAF's sister Services are equally obliged to differentiate between occupational specializations. However, research tends to suggest that because of the role and organization of air forces there are much sharper divisions between the various occupational sub cultures within them compared to the other Services. In a detailed examination of cultural perceptions within USAF, Smith found evidence that the USAF is fractionalised, with internal divisions between 'pilots and all others'[53] Smith's research indicates that the 'others' of the USAF were also divided into distinct occupational subcultures.

When comparing the USAF to the other US armed forces, Smith argues that the US Army is the most cohesive and this was attributed to the mobility between specializations and the fact that soldiers serve together in interdependent combined arms teams who live (and may die) together in combat. Smith believes that the US Navy is the second most cohesive service because of the confined operational environment of a warship in which all live and operate together for prolonged periods of time. In contrast Smith sees the USAF as the least cohesive of the Services, being fractionalised by diverse and specialized technologies and operating concurrently at the strategic, operational and tactical levels. Consequently, Smith argues that "there is much less 'glue', less single mission simplicity, and less combined physical contact than is seen in the other Services"[54].

It may be difficult to draw direct parallels between Smith's research and the situation that exists within the UK armed forces, not least because of the fractionalisation caused within the British army by the regimental system[55] (although this may be more apparent than real). However, there appear to be distinct similarities between the USAF and the RAF in this regard, with both officers and airmen within the RAF being divided into a variety of different branches (and sub-specializations for officers) and trade groups, all focussed on their specific roles.

The end of the Cold War and the increasing pressures to reduce costs, together with the associated contractorization and civilianisation of many tasks traditionally performed by military personnel has also led many in the RAF to view the RAF as just another employer and themselves as merely employees, rather than members of an organization with a specific military purpose.[56] It has been argued that given their propensity to leave the Service to fly with commercial airlines even aircrew "see themselves as technicians first and military professionals second".[57]

Following the Cold War the RAF has had to culturally adapt to operating from unprepared bases and supporting its sister Services in a manner arguably not seen since the use of tactical air forces in North Africa and Europe during World War Two. It has not been an easy process for the RAF to move away from the certainties of operating from MOBs against a well-defined enemy, although this is becoming easier as personnel recruited since the 1990s have become accustomed to regular deployments. In this regard the RAF is also similar to the USAF and the Chief of the USAF recently admitted that:

"This new generation of air and space warriors has to be tougher minded. It has to get back to the mentality of the old composite air strike force, where they used to live under the wing—they fly in set up the tent city and live off meals ready to eat for a week or so before

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A Chinook prepares to pick up troops in the Tora Bora region of Afghanistan

sustainment airlift starts . . . in this culture you have to get back to some basic institutional values: every airman is a warrior"[58]

However, particularly since the 1999 Kosovo campaign, the RAF has begun to adapt to the needs of expeditionary operations and proved itself capable of successfully operating within Afghanistan during 2002. Indeed since that campaign there appears to be an increasing acceptance within the RAF's hierarchy that such operations are no longer the exception to the rule:

"Following the Afghanistan campaign the Royal Air Force really understands what is meant by the term Expeditionary Air Operations . . . no notice deployments to remote parts of the world . . . to absolutely bare base conditions with the most basic and harsh living conditions with exceptionally challenging operational flying conditions"[59]

Stations and squadrons that have traditionally sustained the RAF's ethos and culture have been marginalized, to a great extent, by the nature of expeditionary operations. In these expeditionary operations most MOBs rarely have an operational role. In addition, technological and operational requirements dictate that flying squadrons often do not operate together as cohesive units during operations and that, unlike in the Cold War, composite formations are more usually the norm.

The RAF's Deployed Operating Bases (DOBs) are usually manned by an *ad-hoc* mixture of personnel,

both regular and reservists, some deployed as formed units and others as individuals. This makes it far harder to ensure that there is a cohesive war fighting ethos and culture within both units and DOBs and imposes further strains on the moral component of air power. The changing nature of conflict in the 21st century may create further challenges to the ethos and culture of the RAF when it is involved in expeditionary operations.

The changing nature of future conflict

"Tomahawk cruise missiles may command the air but it is Kalashnikov sub-machine guns that still rule the ground"[60]

Since the end of the Cold War conventional military power has been used to achieve political objectives where diplomacy has failed. In Kosovo, Afghanistan and Iraq, conventional armed forces have achieved decisive effects. However, some commentators, such as Van Crefeld argue that the use of armed forces on such operations only delays their eventual obsolescence;[61] others such as Krepenevich argue that the current revolution in military affairs will continue but that military organizations will have to undergo significant adaptation if they are to remain relevant.[62]

In the future military operations will be conducted in a globalised and interdependent world in which potential conflicts are exacerbated by resource scarcity and political, social and economic inequalities between populations and local elites.[63] These conflicts may not be wars between states that 'western' militaries have long trained for and often fought. Van Crefeld argues that Clausewitzian 'Trinitarian' wars in which governments, armed forces and national populations are all easily identifiable may well become less frequent.[64]

Van Crefeld believes that the state's traditional monopoly on the use of violence is increasingly being challenged and that future wars will often be waged within societies amongst the civilian population. As Kaldor observes, at the start of the 20th century eight soldiers died for every civilian killed in war, but by the end of the century that ratio had been reversed.[65] Van Crefeld argues that in future "wars will not be waged by armies but by groups whom today we call terrorists, guerrilla, bandits and robbers";[66] he also argues that other state and commercial organizations such as police and intelligence organizations, private security and private military companies, will become increasingly prominent and that in parts of the world "crime will be disguised as war, whereas in other cases war itself will be treated as if waging it were a crime".[67]

Van Crefeld's view is considered to be somewhat extreme by many and other commentators such as Sabin argue that "Neither microchip warfare nor unconventional warfare will soon make traditional weapon systems obsolete".[68] However, the concept of future military operations championed by the Strategic Defence Review (SDR) New Chapter and based upon Network Enabled Capabilities (NEC) is likely to be only marginally less challenging to military organizations. If NEC is to be successful then we may well see a pressure to modify existing hierarchical command structures and the development of new information based 'elites' who may challenge the traditional supremacy of the 'war fighters' in the three Services. Torpy argues that increasingly operations will have to be conducted in urban environments with the minimum risk of collateral damage and subjected to an increasing number of legal and ethical constraints[69] and these are likely to make the task of war fighting even more complex.

Despite the future possible complexities of war fighting it is likely that traditional armed forces will continue to play a significant part in operations even if their organization and role undergo major changes. Air power may have to be applied in complex non-linear battle-spaces full of legal and moral uncertainties, dominated by urban terrain and complicated by difficulties in identifying an enemy that may attempt to merge in with a civilian population. However, it seems likely that the importance of air power will not be diminished and may become even more ubiquitous. But applying air power in these battle-spaces is likely to generate a number of additional strains to the ethos and culture of the RAF.

Future influences on RAF ethos & culture

"Those skilled in attack move as from above the nine-

There is realization at the highest levels within the RAF that the Joint Strike Fighter might be the last manned combat aircraft in the RAF's inventory

fold heavens. Thus they are capable both of protecting themselves and of gaining complete victory"
(Sun Tzu)

In the 21st Century the RAF is likely to face challenges poised by the increasing use of Unmanned Aerial Vehicles (UAVs) and the increasing reliance on air power by its sister Services. In addition, the increasing use of jointery and the contractorization of support functions could also threaten the RAF's ethos and culture.

Following the recent experience of operations in Afghanistan and Iraq it appears that the use of UAVs and eventually Unmanned Combat Air Vehicles (UCAVs) will become increasingly significant. There is realization at the highest levels within the RAF that the Joint Strike Fighter might be the last manned combat aircraft in the RAF's inventory.[70] The increasing use of UAVs may well lead to the development of groups of personnel within the RAF engaging in combat but who are not aircrew in the traditional sense of the word:

"the certain influx of substantial numbers of uninhabited vehicles into military inventories in the coming decade will cultivate a new and influential group of people with core skills proximate to those that were previously the sole preserve of pilots, namely: expert knowledge of the performance characteristics of various air platforms; acute situational awareness in three dimensions; specialist understanding of weapon effects; and tactical expertness. Furthermore, the same kinds of skills will be resident in the emerging class of battle space managers who populate airborne systems such as AWACs and JSTARs"[71]

The RAF has appeared slow to accept the potential of UAVs to contribute to the projection of air power. At the present time only the British Army currently operates UAVs and the introduction of the 'Watchkeeper' UAV into the British inventory is likely to be conducted on a joint basis. Debates as to the role of individual services in UAV operations and who are to 'fly' them may become lively, as it has in the US armed forces.[72] Although lack of available funding is invariably an issue, as well as

to doubts about their capabilities, it may also be that the RAF has been slow to accept that UAVs because of the implicit threat they pose to the cultural paradigm of the RAF's senior leadership.

As Stephens states: "fighter pilots are definitely in a class of their own when it comes to resistance to learning".[73] If that has been the case then it would be little different from the British Army's unwillingness to embrace the role of air power in the early 20th Century. As Smith notes, organizational ethos and culture has a major impact on organizational behaviour: it provides an organization with a sense of identity and professional focus. However, it also shapes "the responses of the organization to its mission rivals and those with whom it must operate in carrying out its mission . . . and it will seek to defeat any challenges to those functions that it associates with its core. It will be largely indifferent to functions it sees as peripheral to its core"[74]. Wise supports this, stating that "The dilatory rate of change of organizational structures and culture act as brake on the uptake of new concepts and is the greatest cause of friction".[75] This is unfortunate because the RAF should arguably be leading the way with the development of UAVs.

However, if the RAF has been slow to accept UAVs there are indications that the RAF is seeking to adapt and reduce its reliance on officer aircrew. The RAF is now improving its professional 'air power' and leadership training for all commissioned officers. In addition, the introduction of the General Duties Branch for all RAF Wing Commanders in 2003 may open up more senior appointments to non-aircrew. Improved leadership training is also being introduced for junior and non-commissioned officers and this may improve the cohesiveness and effectiveness of the Service's leadership.

Nevertheless the ethos and culture of the RAF currently, but unsurprisingly, remains very much that of a Service dedicated towards the support of manned combat aircraft. But in the future, when such combat aircraft numbers are reduced, is there a critical mass of officer aircrew, of which any reduction could affect the current ethos and culture of the RAF? What would be the ethos and culture of an RAF that contained few if any manned combat aircraft? It is possible that the impact of this on the RAF would be greater than the 'loss' of the tank would be to the Army's ethos and culture.[76] This is because, unlike the Army, the RAF's ethos and culture is still primarily defined by a small group of men and women who fly combat aircraft.

The traditional belief that the application of air power is the primary preserve of air forces may also be challenged by the increasing need by the other Services for air power. Vallance has observed that since the mid 1980s surface force units in many armed forces have reduced by between 30-60% while air units have grown by a similar amount because "air power — in all its purple forms — is seen by the military as well as the politicians as likely to play a growing role in future crises and conflicts.[77] The change in the nature of military operations, coupled with declining defence budgets have led to the increasing use of jointery to maximise the operational effectiveness of all three Services and minimise costs by both forming joint units and undertaking joint training.

This may well lead to two further developments. Firstly, the increasing role of air power and the ubiquity of the medium in which it operates will require an inherently joint approach to its application. The fact that following the SDR three major joint operational formations: the Joint Helicopter Command, Joint Force Harrier and the Joint NBC Regiment all contain RAF force elements is not a coincidence. All three organizations, to differing extents, have to respond to the challenges poised by the different ethos and cultures of their component parts, particularly the Joint NBC Regiment which comprises of Royal Tank Regiment and RAF Regiment personnel.[78]

Secondly, as this process continues, the RAF's unique position as the main provider of air power may be increasingly challenged by its sister Services, operating as they will aircraft carriers and attack helicopters. In a truly joint environment this may not be a problem; Day has stated that "the days of arguing for a weapon system merely because their own Service operates it are long gone, and contemporary commanders are routinely

finding themselves having to put any Service bias to one side . . . The key output in terms of military capability is targeting for effect".[79] But this also raises issues about the ethos and culture of the single Services. Currently the MoD accept that differences between the Services will, and should, remain even with the increasing emphasis on jointery:

"There is great value in the separate identities and distinct characteristics of the Navy, Army and Air Force. This is not for reasons of tradition, but because of the needs of the modern battlefield still require the specialist skills and ethos of each Service, and individual units depend for their fighting capability on the training, discipline and ethos generated by their parent Service"[80]

In a future of increasingly joint capabilities how will three distinct approaches to ethos and culture be reconciled when there may be, for example, RAF and Army aircrew operating off the deck of a RN aircraft carrier or assault ship? Can a single Service ethos (and in the case of the RAF a distinctive 'light blue' ethos) be sustained in such a joint environment when the primary concern is the projection of a particular capability to achieve a desired effect? Harley is sceptical of the assertion that jointery is an acceptable means of achieving affordable capabilities, arguing that in common with any bureaucracies the three Services:

"will play any games, including jointery. In doing so, the Services will be selective in their use of language to support their case. For example single-Service forces are claimed to have benefits in terms of specialist skills, ethos and morale, while a single defence force is rejected as 'amorphous'. It would be interesting to inquire why a single defence force could not achieve a distinct identity and why such criticisms do not apply to joint units"[81].

The example of the failed Canadian attempt to create a single defence force is often held up as a good reason why the UK should not attempt to do the same,[82] but the centralising tendency of successive defence ministers, while attempting to play the three Services off against each other has been readily apparent since 1945.[83] As the Assistant Chief of the Air Staff recently stated: this "centralizing tendency creates a threat to [single service] identity".[84] However, it is likely that the pressure to achieve joint solutions will continue. The increasing numbers of Service personnel with joint-Service experience may start to have an effect on the overall culture of the three Services and the recent Defence Training Review conducted by the MoD will mean that a significant amount of training will be conducted on a joint basis.

A recent study into the effect of proposed changes to the Military Flying Training System (MFTS) has stated: "the challenge of specifying the requirements of three different approaches to ethos and culture may prove difficult to reconcile. In addition, the air environment, or battle-space, presents a unique challenge to all, irrespective of their service or mission'.[85] Westenhoff cautions that increased jointery must not compromise the inherent benefits of air power:

"*As belts tighten in the world's democracies, defence staffs tend to equalize dissatisfaction and seek compromise in the name of 'jointness' rather than pursue excellence in the specialized fields of air power, sea power and land power. In this atmosphere, compromise can repress expertise and initiative, promoting a form of conformity"*[86]

Defence is becoming increasingly commercialised in an attempt to reduce costs, improve efficiency and get better value for money. The armed forces are increasingly subjected to the discipline of the marketplace through the creation of agencies and their associated chief executives, devolved budgets, customer supplier agreements *et al*. Admittedly the vast majority of these agencies operate in the support area, providing logistic and administrative support but they still account for around 18% of all Service personnel.[87] This creates potential sources of conflict between "those with responsibility to engage with the enemy and those for whom defence could become another commercial, income-generating activity".[88]

The MoD has accepted that there is a role for contractors in providing support to the military both in the UK and on deployed operations so as to "enhance military capability in a cost effective way".[89] There is already an explicit acceptance within British military doctrine that there are only three areas of military activity

To use non-military undermines the spirit of international law, disavows the basic tenets of military professionalism and displays a singular lack of trust on the part of government towards its armed forces

within the combat support and combat service support areas that could not be carried out by contractors, namely policing, armed security and defence courier duties.[90]

Air power may be most vulnerable to the process of civilianisation and contractorization. This is because on the majority of deployed operations most support activities for air operations are currently conducted in relatively benign environments and there are currently clear organizational divisions between combat and non-combat units within the RAF. This is unlike the Royal Navy where all specializations are to be found in a warship and the Army where many combat support and combat service support functions are integrated into combat units.

In such environments it is possible that most if not all of the RAF's combat support and combat service support activities, with the exception of some force protection activities, could theoretically be carried out by contractors under the existing MoD guidelines. The RAF is increasingly being drawn down this route, along with parts of its sister Services. For the RAF the use of a Private Finance Initiative with a commercial consortium to provide a future air to air refuelling capability, a vital combat support function and the contractorization of space based assets (the new high, and potentially vital ground of the future) shows how this process is well advanced within the UK. The impending contractorization of the UK's MFTS also potentially threatens the RAF's ethos and culture, particularly as it relates to *ab-initio* aircrew.[91]

This growing commercialisation of the Services co-exists uncomfortably with their traditional ethos and culture where effort is not linked to financial reward. As Keegan states: military men have been traditionally motivated by a "concern to enjoy the good opinion of comrades, satisfaction in the largely symbolic tokens of professional success, hope of promotion, expectation of a comfortable and honourable retirement"[92] — the 'psychological contract'. Chuter argues that where the military have become involved in commercial undertakings then corruption increases and military effectiveness declines.[93]

Associated with this trend the increasing discussion surrounding the possible use Private Military Companies. Such organizations went out of fashion in the 16th century with the demise of the *Condottieri* (literally translated as contractors), largely because they were considered "bold amongst friends, cowardly amongst enemies, they have no fear of God and keep no faith with men".[94] US commentators have argued that military contractors "would mitigate risk by allowing America to achieve military strength focussed on core capabilities instead of trying to create a force spread so thin across the operational spectrum that it is in danger of inadequacy or indecisiveness at every point on that spectrum".[95]

It is unlikely that the process of contractorization within the UK can be reversed for similar reasons. However, Mac Farling argues that this potential vision of the future poses some particular problems for air forces, particularly if UCAVs could be operated by other state or commercial organizations. He argues that to use non-military undermines the spirit of international law, "disavows the basic tenets of military professionalism and displays a singular lack of trust on the part of government towards its armed forces".[96] Unfortunately, the precedent has already been set, as the CIA has already used air power, in the guise of a Predator UAV, armed with Hellfire missiles to kill terrorists in Yemen during November 2002.[97]

If war does become increasingly 'criminalized' and military activity merely an adjunct to the activities of police and intelligence organizations and private military companies then this will place additional pressure on air forces. As previously discussed, the original justification for the use of air power was that it could achieve strategic effects in an era of total war. However in the post-modern era it is increasingly likely that those adversaries who experience the 'strategic effects' of air power will consider themselves victims and seek to have it branded as immoral and disproportionate:

"Victim-hood affords the enemy a claim to the moral high ground. The shedding of enough innocent blood can eclipse the meaning of even the noblest cause . . . These images stir outrage in the United States and Europe, fuelling the now familiar rearguard movements to stop such bombings and end such wars"[98]

Tornados of No 31 Squadron; this squadron was based at RAF Laarbruch between 1955 and 1971 and RAF Bruggen between 1971 and 2001

The high watermark for the RAF's ethos and culture as an independent Service was during the Cold War when the focus of its activities was on the various MOBs in UK and Germany

In such circumstances many operations will be conducted by military forces that may have more in common with 'constabulary' tasks rather than the overwhelming application of military force. In such situations it may be necessary only to use force as a last resort or possibly to use only non-lethal weapons. Air platforms may have a more significant role to play in the gathering of intelligence or carrying out surveillance tasks, all conducted in complex and non-linear battle-spaces, with ill-defined 'front lines' or 'rear areas', that may impose significant risk and stress on individuals. These possible changes call into question the RAF's traditional ethos and culture with distinct divisions between war fighters and non-war fighters, particularly if adversaries attempt to counter air power asymmetrically using 'terrorist' techniques and tactics. In such circumstances such distinctions between particular groups of airmen become almost meaningless and unit cohesion will become even more important.

The RAF's distinctive ethos and culture may have already been weakened by the marginalization of the station and squadron structure following the end of the Cold War. It could be further undermined by the demise of manned combat aircraft, the growing ubiquity of air power, increasing jointery, contractorization and the use of the armed forces in more complex war fighting environments. Although the RAF is aware that these changes create challenges to its 'light blue ethos', additional measures may have to be taken to protect that ethos, particularly if UAVs and UCAVs replace combat aircraft in large numbers.

First, the role that ethos and culture plays in the moral component of air power could be accorded greater importance within the RAF's 'strategy pillars'[99] so that its maintenance becomes as important as that of any weapon system. Jans & Schmidtchen argue that this has been a failing of many armed forces and cite the experience of the Australian Defence Force in this regard.[100]

Second, the doctrinal and cultural distinction between combat aircrew and the rest of the RAF could be reduced, so that the role of all RAF

personnel in generating air power could be properly acknowledged. RAF personnel should consider themselves as being 'all of one company', although combat aircrew would continue as *primus inter pares* whilst their role remains. This could be achieved through an increase in appropriate re-education and training.

Third, the role of existing flying squadrons should be enhanced. At the present time flying squadrons on a DOB require around 150 immediate operations and engineering support personnel but there are an additional 400 RAF personnel required for each squadron to provide wider logistic support and force protection.[101] A number of de facto 'Wings' already exist on MOBs within the UK, but their role is subordinated to that of the MOBs themselves and their 'commanders' are, first and foremost, station commanders.

If flying squadrons were formally 'brigaded' into 'Wings' with appropriate supporting personnel who trained and deployed together, then the squadrons and their over-arching 'Wings' could become the primary focus for, and provide support to, the RAF's war fighting ethos and culture. The 'Wings' could help to reduce fractionalization amongst the ground branches and trades, while better focussing the particular *esprit de corps* of these branches and trades towards a common goal-air power, irrespective of whether they were supporting manned aircraft or UAVs.

They should also improve teamwork and leadership, and help sustain the psychological contract between the Service and individual airmen in what could be difficult operational environments. These 'Wings' might be similar in some respects to the USAF's Air Expeditionary Forces (AEFs), although their main focus would be to provide organizational and operational cohesiveness on deployed operations, rather than a balanced range of air power capabilities supported by the AEFs.

Designated Air Combat Support Units and Air Combat Service Support Units could be more closely associated with particular 'Wings', dependent upon their specific role. High quality officers could be encouraged to command these formations rather than MOBs, most of which have an essentially 'peacetime' role. In this regard these 'Wings' may perform a role fulfilled by the Royal Navy's ships and the Army's regimental system and personnel could be posted to them rather than stations. It could be argued that 'Wings' would reduce flexibility and increase costs; however, the absence of a sufficiently cohesive ethos and culture could be potentially disastrous and far more costly. Paradoxically the RAF may have to become organizationally more similar to its sister Services' combat units if it is to retain a distinctive and cohesive ethos and culture that can successfully contribute to the delivery of air power in the 21st century.

Conclusion

"If you don't like change you are going to like irrelevance a lot less"
(General Eric Shinseki)

It is apparent that the ethos and culture of the RAF shares many of the characteristics of the traditional military ethos and culture of its sister services. Like its sister Services the RAF perceives itself as being a 'war fighting' organization whose personnel put service before self and are prepared to fight and possibly die on behalf of a greater good — *pro patria.* The RAF has been concerned that societal pressures do not erode its own distinctive ethos and culture and adversely affect the moral component of air power.

However, the RAF has a distinctive ethos and culture based upon the fact that traditionally only a small number of aircrew have sought to engage in combat. This war fighting ethos and culture has traditionally been supported by the RAF's organizational structure of stations and flying squadrons that have invariably been commanded by aircrew. The high watermark for the RAF's ethos and culture as an independent Service was during the Cold War when the focus of its activities was on the various MOBs in UK and Germany. However, Cold War MOBs disguised the fact that the RAF had become a culturally fragmented Service because of the inherent complexity of air power, and because the dominant ethos within the Service — that of the aircrew — could not be fully shared by the majority of its personnel. As the war fighting ethos and culture of the RAF is primarily

based around the manned combat aircraft and those who fly them, the RAF is currently more vulnerable to possible changes in how, and by whom, future conflicts may be fought than its sister Services.

The RAF is attempting to address societal pressures and cope with the new challenge of expeditionary operations; it has also accepted that jointery and contractorization may also effect its ethos and culture. However, the changing nature of future conflict, many aspects of which have already been observed during operations in Kosovo, Afghanistan and Iraq, will create additional pressures on the RAF that may have a profound impact on its future ethos and culture. Despite future battle-spaces becoming more complex, air power may become more ubiquitous. It is possible to foresee a future where air power will increasingly be applied using UAVs and the need for combat aircrew in particular may be significantly reduced.

Military force could become organized around military capabilities rather than individual Services and supporting functions may be increasingly contractorized. In the future, military personnel will probably have to undertake a wide range of 'constabulary' functions rather than act primarily as war-fighters and military operations may become increasingly constrained due to the environments in which they are conducted and the desire of societies to avoid unnecessary suffering on either side. These changes may affect all three Services, but the greatest impact is likely to be felt by the RAF, given that its current war fighting ethos is largely derived from its aircrew.

If the RAF is to maintain its war fighting ethos and culture then the current distinction between aircrew and non-aircrew, war fighters and non-war fighters, must be reduced. The occupational fractionalization that currently exists should be minimised by an increased emphasis on education and training for all RAF personnel in air power matters, particularly in relation to the use of air power in complex operations. The role of flying squadrons, possibly 'brigaded' into 'Wings', should be enhanced to compensate for the reduced role of stations in sustaining the moral component of air power and improve the cohesiveness and effectiveness of RAF units during future operations. This may require dramatic organizational change that goes to the heart of the Service's present ethos and culture, but the challenge will have to be accepted if the RAF is to retain its place 'at the right of the line' in the 21st Century.

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