

Bosnia, Serbia, Kosovo, Sierra Leone, Iraq, and Afghanistan, Britain's armed forces did not battle against the enemy they had spent 40 years posturing to fight. Although many of the skills, tactics, and procedures honed in the Cold War had some utility in these subsequent conflicts, fundamental changes to the constraints placed on the use of armed force, the character of warfare, and the context to military operations demand more than the tweaked application of legacy capabilities. Rather, they dictate an elemental response in all three components of fighting power (moral, conceptual, and physical), and whilst land forces have borne the brunt of necessary changes, the Royal Air Force (RAF) must also evolve accordingly. The need for such development is not limited to the RAF but is relevant to any air force that has to transition from a Cold War legacy to be effective in today's global security environment. The author hopes that the points made in this article will therefore resonate with a wider audience.

Airmen must match the timely, flexible, and effective practical responses they have demonstrated in distant theatres of operation with equally adept progress in the conceptual arena at home. The present counterinsurgency (COIN) conflict in Afghanistan has explicitly exposed how airpower's critical campaign contribution can promote either mission success or failure. Never before has airpower's participation in war had the potential for such contradictory effects. Consequently, when US Army general Stanley McChrystal served as commander of the International Security Assistance Force (ISAF), he placed serious constraints on the use of ISAF air assets. Airmen did not initiate this sea change in airpower employment, nor was it the result of Airmen reviewing airpower theory. Therefore, although Airmen may have reacted well to changing campaign requirements, room still exists for greater proactive engagement, and Airmen must energetically assimilate the doctrinal implications of the new global security environment,

particularly the growing relevance of nonstate adversaries.

This article aims to promote the successful employment of air assets in unconventional conflicts, which, although traditionally viewed as "small wars" or a distraction from primary military tasks, have the potential to inflict defeat upon the most advanced armed forces in the world. It does so by considering the approach taken to optimise airpower's contribution to COIN operations. It is not concerned with specific tactics, techniques, and procedures but with the doctrinal context within which operational processes and tactical activities should be developed. It therefore focuses on the conceptual foundation for airpower's participation in COIN, not the building (tactics, techniques, and procedures) to be constructed on that foundation.

When addressing a new operational challenge or requirement that departs from accepted thinking, Airmen have three generic options: use a previous solution, create a novel answer to the problem, or modify an existing approach to meet the emerging need. This article considers these three options with respect to the employment of airpower in a joint COIN campaign.

Option 1: Use a Previous Solution— the Allure of Historic Success

Understandably, the instinctive approach has involved searching for historic solutions, and the challenges posed by conflicts in Iraq and Afghanistan have drawn observers to look at airpower's early years to see if perceived success in British imperial air policing provides dormant lessons that could solve current operational problems. This approach has some merit (since relevant lessons might exist), but it is routinely flawed by a lack of objectivity in historical analysis and a neglect of context. Notable pitfalls include an enthusiasm to equate disturbances in the British Empire with today's

violence in Iraq and Afghanistan, a bias in judgment that places emphasis on seemingly common features (e.g., geographical locations, ethnic similarities, or the adversary's tactics) while neglecting factors that invalidate the comparison (such as social, moral, and technological issues). For example, the dread reaction of many "natives" in the British Empire to flying machines that were alien to them and the often imprecise application of violent force by those aircraft contrast starkly with today's technologically savvy "tribesmen" and the interpretation of impotence they draw from the precise, discriminate, and proportional way coalition forces now conduct air attacks.

Furthermore, when examining the British imperial experience, keep in mind that a significant factor promoting the deployment of RAF units to remote parts of the empire was pressure on defence expenditures. The political popularity of RAF air policing during the interwar period was perhaps due more to the economic benefits of using aircraft instead of more expensive land forces than to the limited operational capability of biplanes. Today, comparatively analyzing cost-effectiveness remains a complex issue encompassing factors such as the cost of platforms and the units that support them, the capabilities they provide, and their utility in COIN conflicts. In addition, the increasingly prohibitive costs of twenty-first-century aircraft programmes weaken the notion that employing airpower is a "cheaper" option, however capable it might be.

Objectively, the direct relevance of the imperial experience to current scenarios is questionable; overlooking this reality casts doubt upon the conclusions drawn from that chapter of airpower history. More seriously, to contrast the RAF's positive imperial experience with the difficulties that modern land forces have experienced recently in Iraq and Afghanistan is a deeply flawed comparison. Consequent efforts to promote an "air is best" agenda are incongruous when it is readily apparent that total air dominance and unprecedented levels

of air and space capability (e.g., in intelligence, surveillance, target acquisition, and reconnaissance [ISTAR] assets) would not deliver inevitable victory in either theatre. Similarly, the argument that a "boots on the ground" policy brings an additional risk of casualties (which it can) and that we should reject it in favour of heavier reliance on airpower oversimplifies the link between presence and vulnerability (which can become inversely proportional); furthermore, it ignores the risk that a simple measure of casualties may distort the proper evaluation of operational effectiveness. Most importantly, recent experience in Iraq and Afghanistan clearly indicates that pursuing a COIN strategy which lacks the required physical ground presence to prevent nonstate actors from exercising authority over the population of a street, block, neighbourhood, village, or valley is inherently impotent.

Fighting a nonstate enemy who uses guerrilla tactics in populated environments demands a clear military imperative for more than an overwhelming air campaign. Israel's calamitous experience in Lebanon in 2006, the Iraq COIN campaign, and the conflict in Afghanistan have patently demonstrated that air supremacy and the freedom to use a panoply of modern air assets cannot secure terrain, stop enemy offensive activities, bring security to the population, prevent acts of personal coercion and intimidation, or arrest the spread of fear. Air supremacy can neither detect and deter corruption nor easily distinguish between friend and foe. Wars to win the support of a population demand engagement with the people—an engagement that airpower simply cannot provide. Air policing had demonstrable merit in the imperial period for suppressing recalcitrant natives, but against modern, fanatical nonstate actors who operate within the civilian population in an era of unrestrained media reporting, heightened legal scrutiny, and different economic circumstances, the imperial experience is of dubious value.

Despite an enthusiasm to scour historical records for examples of airpower's utility in difficult land campaigns, the notion that air assets can exclude the need for (or primacy of) land forces in a modern COIN campaign is erroneous thinking based on an overoptimistic interpretation of the value of historic experience, an inadequate understanding of COIN doctrine, and a neglect of the contextual landscape. Instead, to optimise their invaluable contribution to contemporary COIN operations, Airmen must do more than refer to previous success in an "age of empire."

Option 2: Create a Novel Answer to the Problem—Better to Start with a Blank Canvas?

In addressing how to use airpower in the present era of COIN campaigning, one would do well to consider if there is an advantage in starting with a blank conceptual canvas. Adopting such a method allows Airmen to approach the problem without preconceptions and apply their unique perspective on airpower with complete freedom. This technique is particularly effective when considering problems in which airpower comprises the principal military component, in which the challenge posed sits squarely in the air environment, or in which no preexisting solution to the problem is available. Unfortunately, this was not the case in Iraq, and, crucially, neither is it in Afghanistan. Once the short, conventional wars in Iraq and Afghanistan transmuted into insurgencies, the air component could not claim to be the dominant actor in either theatre, nor is the air environment the focal point of conflict, especially when one understands that the essence of a successful COIN campaign is to win the competition with insurgents for popular consent and moral legitimacy.

Paradoxically, the greatest obstacles to a distinctively air-orientated solution to fight-

ing a COIN war are airpower's essential characteristics. Routinely listed as including speed, reach, ubiquity, and flexibility, they reflect use of the atmosphere as an operational domain and depend upon technology. Twenty-first-century airpower has come closer than ever to realising the aspirations of its historically overoptimistic proponents, but in expanding technological boundaries to new horizons, it has become less of a human endeavour in execution and increasingly constrained by the human element of the air dimension. This means that in COIN campaigns Airmen struggle with a fundamental difficulty since success in COIN demands engagement with the people who constitute the prize that friendly forces and the insurgents are contesting.

It remains an awkward truth that airpower, despite being wielded by humans, is principally machine power manifested through technology. Airpower has a huge contribution to make to COIN campaigning (e.g., in intelligence gathering or giving troops decisive manoeuvre capability), but it is irrefutably constrained by its own characteristics. Aircrews rarely see the recognisable faces of their adversaries, let alone the whites of their eyes, and few Airmen can give a reassuring shake of the hand to a frightened civilian. Ubiquity is a hollow omnipresence. Airpower enthusiasts may see the constant patrolling of an air platform over a village as "reassurance" in action, but it can do little to prevent verbal threats or indoor coercion. Fundamentally, to optimise their contribution to COIN activity, Airmen must recognise and accept the limitations of their capabilities and apply their invaluable services accordingly. This point should not be misunderstood. Humans are critical to the successful employment of airpower, but the idea that air operations are fundamentally a human activity is neither accurate nor helpful in defining airpower's role in COIN or irregular warfare against nonstate actors. For all its unique attributes and their undeniable benefits, airpower *cannot* claim that these

qualities fulfil the COIN imperative for human interaction.

In COIN conflicts, technological supremacy is no guarantor of victory because success is anchored to political and societal matters such as ideology, legitimacy, individual will, personal interests, emotion, and perception—things that technology cannot determine. Thus, the omnipresent reconnaissance platforms commanding the sky above a conflict area employing sensors capable of gathering data day or night under most weather conditions cannot remove the essential requirement for human intelligence that comes from conversations, nods, inferences, eye contact, and other personal interaction. The complex intelligence requirements generated by a COIN campaign necessitate the inclusion of both technical and nontechnical intelligence sources. Air and space assets will therefore remain critical to building an effective intelligence picture, but Airmen must use the technological capabilities at their disposal with a realistic appreciation of their limitations in a COIN environment.

Although the key to optimising airpower's contribution to a COIN campaign lies in harnessing its unique capabilities to complement the capabilities of other actors, this does not exclude the need to maximize its inherent potential. For instance, the effect that airpower might have on perceptions (e.g., as a lever of influence or a method of shaping the battlespace) is an immature area of understanding that deserves concerted exploration. Since traditional tasks such as achieving control of the air domain may not burden the air component in a nonstate conflict, using airpower to optimum effect in a COIN campaign requires greater sophistication in its employment. This elegance must be founded on an understanding of what needs to be done and why, after which Airmen must then apply their professional expertise to derive how to use airpower to best effect.

In essence, the synergy that air and land assets clearly produce when used collaboratively should be replicated in the relationship between the theories underpinning the application of air and land power. A blank-canvas approach to developing a concept for the use of airpower in COIN or irregular conflicts does not facilitate this fusion of thinking. Rather, taking an approach related to existing COIN theory promotes intellectual synergy. Consequently, Airmen must become as familiar with relevant works by COIN theorists such as Sir Gerald Templer, Frank Kitson, and David Galula as they are with airpower exponents like Giulio Douhet, Air Marshal Hugh Trenchard, and Col John Warden. This is not a discretionary matter. If we are to integrate airpower into a COIN campaign to optimum effect, then this broadening of understanding is an essential requirement that we should immediately incorporate into the education of Airmen.

Airpower advocates must recognise that countering insurgency, terrorism, or banditry fundamentally requires engagement with people, and, therefore, in the security domain, it is preeminently a responsibility of land forces (both military and civil). Consequently, in addressing the problem of irregular conflicts against nonstate adversaries, one finds that an independently derived air-centric solution is of doubtful utility. Ironically, the very strengths that airpower brings to the defence and security realm place it in an ancillary position during COIN and irregular conflicts, significantly undermining the value of a blank-canvas approach to its employment. Furthermore, it would be illogical to pursue an independent air solution to combating nonstate actors when both the US and UK militaries have made huge efforts in recent years to improve the conceptual foundation for COIN operations. In the United States, this led to an Army/Marine Corps review of doctrine that culminated in the production of a new COIN manual.² In the United Kingdom, a corresponding reassessment has produced new joint and land doctrine for stabilisation and COIN operations.³ Fuelled by continuing operations in Iraq and Afghanistan, the transAtlantic review of previous thinking on COIN and irregular warfare has been intense, wide ranging, and progressive. To ignore the combination of vast practical expertise and intellectual rigour that military practitioners and academics have applied to the conceptual review of COIN would be virtual negligence. It is essential that Airmen start from the doctrinal height attained by those with prime responsibility for its conduct when they consider how to employ airpower in a COIN campaign.

Airpower's ability to bring overwhelming or decisive firepower to a COIN engagement accentuates the restraint that commanders must exert when employing it, especially when COIN priorities appear antithetical to traditional war-fighting considerations. Thus, "courageous restraint" has become a notable principle in Afghanistan, even when friendly forces are under insurgent attack. In a conventional interstate conflict, Airmen are encouraged to think and act primarily as Airmen; in a COIN conflict, their principal responsibility is to understand COIN. In the former, air component expertise has primacy over mission comprehension. In the latter, the priority is reversed.

The logical approach to attaining the desired level of airpower integration in a landcentric COIN campaign is to consider the problem from a common conceptual basis. Hence, the key to exploring how best to employ airpower in a COIN operation is not to embark on a blank-canvas exercise to derive an independent process or strategy, but to examine current joint- and land-force thinking about how to conduct such operations. If Airmen view this understanding through an "air lens," then they will intelligently consider the topic from an informed air perspective that encompasses not only a thorough awareness of what needs to be done, but also a full appreciation of airpower's capabilities, potential, and limitations.

Option 3: Modify an Existing Approach— Build on a Proper Foundation

Extensive analysis by many military and academic authorities of historic counterinsurgencies has produced a number of principles of operation widely deemed enduring and consequently relevant today. Unlike the historical examination of imperial air policing, this scrutiny has focused on what needs to be done to succeed in COIN, not on the performance of a particular actor. As with fundamental theories such as the principles of war, subtle differences exist between and within nations on what these tenets are. Hence, the United Kingdom's Joint Doctrine Publication (JDP) 3-40, Security and Stabilisation: The Military Contribution, lists nine "Characteristics of Classical British COIN," while the new British Army Field Manual volume 1, part 10, Countering Insurgency, lists 10 principles for COIN.4 Despite such variations, there is broad acceptance of principles such as the primacy of politics in a COIN campaign and the need for a political aim, the imperative for a coordinated pan-government approach, the importance of intelligence and information, the effective separation of insurgents from their base of support, the neutralization of the insurgent, the need for long-term postinsurgency considerations, and the need to protect the population.⁵

Regardless of the list we use, the principles are not prescriptive, and we should not apply them dogmatically. Nevertheless, they form a substantial part of the context for military activity and provide a useful conceptual framework that helps shape, inform, and constrain campaign planning. We should therefore apply them when employing airpower in COIN operations, especially since airpower's core attributes may give commanders military options denied to land forces, such as the ability to reach into remote areas or third-party states. The air component's capacity to conduct sorties independently of a land commander's scheme

of manoeuvre and well beyond his or her area of operations places an additional responsibility on Airmen to conduct activities that contribute to joint mission success. This obligation includes ensuring that autonomous air action is both guided and constrained by relevant COIN principles.

Briefly, with respect to the listed COIN tenets, airpower's ISTAR and kinetic capabilities have obvious application in gathering intelligence or information and in neutralizing insurgents. However, Airmen should devote more thought and effort to exploring how airpower might have utility in supporting political, interagency, and postinsurgency endeavours. Whilst efforts investigating the innovative use of airpower (e.g., using an air presence to shape the ground environment) to broaden its contribution to COIN operations are welcome, it is important not to neglect how routine air activities (such as air transport) might be utilized to greater effect. Similarly, the positive effects of constraining the use of airpower merit greater attention, for it is clear that the overall COIN campaign in Afghanistan suffered when the legitimate use of close air support (CAS) caused civilian casualties and undermined popular support for ISAF, and that the heavily controlled use of airpower is a key aspect of ISAF's present campaign plan.

To optimise airpower's contribution to a COIN conflict, air commanders must not only follow the guidance found within the listed general COIN principles but also ensure that the tactical employment of air assets accords with the approach taken by the overall commander as described in his or her concept of operations (CONOPS). As with the COIN principles, national and other variations to a core approach exist. In US Army and Marine Corps doctrine, tactical activity is directed by the concept "clearhold-build."6 In JDP 3-40, it is encapsulated as "shape-secure-hold-develop." In Afghanistan, ISAF employs a "shape-clear-holdbuild" model. Airpower should therefore be employed in line with both the overarching COIN conceptual framework and the applicable tactical methodology. This means that the air component's strategy-to-task planning process (which ensures that all sorties flown on the daily air tasking order contribute to strategic objectives) must reflect not only the contextual guidance and constraints found within the framework principles but also the tenets of the campaign commander's CONOPS.

If airpower is to fulfil its potential in a COIN campaign, then it *must* integrate its capabilities with the driving "clear-holdbuild" scheme of manoeuvre. Though primarily a land-enacted CONOPS, this threestage process is a joint and interagency responsibility, and air commanders should endeavour to guarantee that their employment of airpower facilitates its successful execution. While the listed COIN principles should shape the contextual requirement in which airpower operates, a number of factors should guide, inform, or limit how we apply airpower in a COIN campaign. The following factors should direct the air component's contribution to the campaign, and Airmen must articulate them to land commanders who may routinely view airpower as a subservient instrument.

First, Airmen should employ airpower in accordance with the overarching joint campaign plan, not subordinate component or provincial plans. Understandably, the landcentric nature of COIN operations has the potential to transform the land component's requirements into those of the joint campaign. But in a conflict demanding a joint and interagency response to produce a successful outcome, no single-component plan should usurp the primacy of the overarching campaign plan. In practical terms, this can result in air (and other) assets being allotted to the direct support of land forces when, in campaign terms, they might be more productively employed elsewhere. For example, aircraft used on preplanned CAS duties for potential troops-in-contact incidents cannot be patrolling remote borders used by insurgents to infiltrate from external safe havens.9 This is not to downplay the critical value and battle-winning importance of CAS to troops but to recognize that with regard to *campaign* objectives, other priorities may equally rely on the employment of airpower and justifiably vie for greater attention. Where relative priorities lie and what emphasis they should receive are for the overall COIN commander to judge and direct, but Airmen must beware the potential lure of an overemphasis on single-component activities, guard against it, and when necessary be able to explain why other air tasks deserve higher priority within the joint campaign. Typically, this argument assumes greater weight when it is based on core COIN principles and the commander's CONOPS, so Airmen must assimilate them into their own thinking.

Second, Airmen must ensure that their proposed contribution to a COIN campaign is within the art of the possible. Whilst aiming to optimise their potential effect, they must understand those instances when they cannot accomplish their proposed mission and avoid giving overoptimistic assurances of what air activity can achieve. Similarly, they must prevent land commanders from forming overambitious expectations of what airpower can do for them. Responsibility for the realistic application of airpower rests squarely on air commanders, especially in scenarios in which force ratios, difficult terrain, or unit isolation creates additional difficulties for land forces and raises expectations of what airpower can deliver expectations which are understandably reinforced by the freedom of air action that characteristically accompanies a COIN campaign against nonstate actors. In a scenario in which the enemy is barely able to interfere with friendly air operations, Airmen's plans and aspirations must remain firmly rooted in the art of the possible, and they must clearly explain airpower's true potential and limitations to other campaign participants.

Third, Airmen must acknowledge that airpower can have a disproportionately adverse effect on a COIN campaign. Despite the capacity of land-based weapons systems to

inflict considerable collateral damage during COIN operations, civilian casualties from ground combat do not receive the same media interest as those resulting from air operations. In Afghanistan, of the thousands of sorties allocated to CAS, only a small fraction have caused civilian casualties, yet it is these aberrations that have often defined the public, media, and political perception of what airpower is doing there. 10 The harm caused by collateral incidents should not be ignored. Such events have seen the Afghan government call for a review of the legal framework for ISAF forces and the Afghan Senate cease business for a day in protest, whilst in September 2009 the death of many (perhaps over 100) civilians due to air attack in the German sector of Afghanistan led to the resignation of very senior military and political officials in Germany.11 The need to constrain airpower is self-evident because an Afghan demand that kinetic air operations cease would create serious friction between the sovereign regime in Kabul and the international coalition supporting it.

Fourth, Airmen must recognise that the traditional primacy afforded kinetic air roles may be reversed in a COIN campaign, in which "doing" less may achieve more. Understanding the enduring principles of COIN campaigning would help Airmen recognise when a clear difference exists between what airpower could do and what it should do. In Afghanistan, CAS has proven tactically crucial and decisive, undoubtedly rescuing or protecting hundreds of ISAF troops unfavourably engaged with insurgents. Yet as noted previously, CAS can produce significant problems. The notion that kinetic activity should be airpower's principal contribution to a COIN campaign rests on a combination of skewed historical analysis and a legacy of Cold War demands and practice. Such thinking is unhelpful when the use of lethal force may actually swell—not diminish—insurgent ranks. Whilst bombing and strafing may have crucial utility at a given time and place, it is imperative that Airmen assign as much priority to other

tasks which may have greater beneficial impact on the progression of the COIN campaign. For example, activities such as delivering agricultural assistance to isolated villages, transporting a clan chief's sick child to an emergency medical facility, or monitoring the internal communication lines of an insurgent group may appear less important than CAS yet yield more enduring effects on the campaign.

Fifth, in their promotion of an air component's contribution to COIN campaigns, Airmen should emphasise the features of airpower not routinely recognised by other campaign participants. In doing so, Airmen's reverting to the COIN principles outlined above would usefully guide their thinking and add substance to suggestions about how air assuch forces during a holding phase, while air-based firepower remains a responsive means of interdicting the reemergence of insurgent forces. Air transport assets might also contribute to the building phase of a COIN campaign, but this potential should not be overplayed because, by that stage of the campaign, the prevailing security situation may allow safe movement by land. Lastly, Airmen should remember that throughout the entire clear-hold-build process, air and space assets can provide the psychological benefits of an air presence; round-the-clock ISTAR coverage; and command, control, and communication capabilities that a reliance on digitalisation has made indispensable to military operations.

In their promotion of an air component's contribution to COIN campaigns. Airmen should emphasise the features of airpower not routinely recognised by other campaign participants.

sets might provide the greatest value to the COIN campaign. Whilst airpower's kinetic dimension has some obvious applications (e.g., helping clear insurgents from an area) and its ISTAR capabilities have utility across the whole COIN CONOPS, its wider utility particularly in the "build" stage of the process—is less obvious and deserves specific attention. Executing a clear-hold-build or shape-secure-hold-develop strategy is a complex and demanding task made exceedingly difficult without recourse to airpower. When a COIN commander seeks to clear an area of insurgents, the surveillance, kinetic, and manoeuvre options that air assets provide to land forces may prove critical to success. This is especially true when those land forces are employed in less than overwhelming numbers, deployed to inaccessible locations, or fighting in areas clear of civilians. Airpower's contribution may be equally important to the sustainment of

Sixth, Airmen should not underestimate the value of their contribution to the development of indigenous forces. An essential feature of progress in a COIN conflict is the emergence of capable indigenous security forces. Whilst infantrymen or policemen can be trained relatively quickly, enabling capabilities such as airpower that allow them to operate independently and sustain their activities take much longer to develop. This imbalance can minimise the potential impact of improving native security forces, for example, by limiting their ability to deploy and establish a credible presence amongst their own population. Therefore, the allocation of foreign aviation assets to tasks that serve indigenous forces could possibly have a disproportionate effect on promoting local perceptions of those forces. A significant benefit might also accrue from providing support to indigenous officials (e.g., provincial governors) who would otherwise struggle to reach much of the area under their jurisdiction. Undoubtedly, the substantial effort invested in partnering and mentoring indigenous security forces should include air assets and capabilities, and because training the technically skilled personnel needed in a new air force will take considerably longer than the time required to produce infantry and policemen, this investment should start at the earliest opportunity. For instance, whilst the extensive efforts of the Combined Air Power Transition Force in Afghanistan are contributing to the development of a fully capable Afghan air force in a wider COIN setting, they reinforce the importance of an early allocation of sufficient resources to the task.12 One hindrance to development here is that to make an effective COIN contribution, indigenous air forces do not need to operate the sophisticated equipment used by foreign partners, yet modern air forces do not operate the cheaper, less-capable aircraft that would suit their emerging counterparts. Although this does not prevent mentoring, it would obviously be easier to convert indigenous air and ground crews to types of aircraft flown and serviced by the partnering militaries. In Afghanistan the absence of a basic ISAF-operated air platform capable of reconnaissance and ground attack-that meets the demands of a COIN campaign against nonstate actors—impedes the timely development of Afghan airpower. US plans to procure a light attack/ armed reconnaissance (LAAR) aircraft with sufficient utility for COIN-type conflicts offer a sensible progression that may facilitate the future development of indigenous forces and see COIN theory shape procurement policy.

Conclusion

Airpower's core attributes (i.e., its speed, reach, ubiquity, and flexibility) remain invaluable in COIN operations, but, critically, they also limit its contribution. Although the United States and United Kingdom have

made excellent progress in the practical application of air support to ground forces, additional conceptual effort is necessary to optimise the contribution airpower could make to COIN and irregular conflicts. This deficiency undermines the outstanding efforts that characterise airpower's daily contribution to ongoing conflicts. In light of an aggregate of over 13 years of combat experience across two theatres, the scarcity of specific air doctrine on the employment of airpower in a COIN campaign is startling. One may argue that the main body of land and joint doctrine manuals contains implicit references to airpower, but explicit references occur less frequently: the British Army's COIN field manual includes a fivepage section on airpower, the 200-page US Army Field Manual 3-24 / Marine Corps Warfighting Publication 3-33.5 on COIN also has just a five-page annex on airpower, and the similarly large UK JDP 3-40 refers to airpower only once. 13 Neither does there appear a surfeit of air-authored COIN doctrine on either side of the Atlantic. This paucity of relevant air doctrine should be addressed, and the responsibility for that effort solely rests with Airmen, both in the development of air doctrine and their contribution to joint publications. However, attempts to produce such doctrine through an inappropriate review of history reflect misguided enthusiasm, while pursuit of an independent solution without explicit reference to concepts that underpin COIN operations in the land domain is both illogical and short-sighted folly. Perhaps the most pressing need is to apply airpower in accordance with the clear-hold-build concept of operations; importantly, however, the most informed suggestions for doing so must come from Airmen.

Through various means, the essential change that Gen David Petraeus enacted in Iraq (with remarkable results) involved switching COIN focus from the insurgents to the Iraqi population. ¹⁴ This led to the adoption of many different, often novel, approaches by land commanders and their troops. A similar review of how to employ

airpower is overdue, especially when collateral casualties dramatically confront the notion of protecting the civilian population. Dealing with nonstate actors in scenarios that do not fit within a conventional conflict framework poses new problems for Airmen. All military operations, including air activities, must reinforce and not undermine the moral authority of friendly forces. With the rising importance of nonstate actors, the boundaries between conventional war, insurgency, terrorism, and criminality have blurred, and these differing security threats regularly overlap or coexist. Today, Airmen must contend with complex scenarios in which insurgency, internecine conflict, terrorism, and violent criminality occur simultaneously across the same battlespace. For example, is the group that an air asset detects illegally crossing a border a terrorist cell transporting weapons and explosives or petty criminals smuggling contraband? Are the men loitering around an electricity pylon planting a bomb or stealing copper? The additional challenges that this complexity generates for friendly security forces affect not only Soldiers and policemen but also Airmen since the answers to such questions routinely dictate a different military response.

For all their progress in addressing the actual difficulties posed by current operations, Airmen must ensure that they do not neglect the theoretical basis of their profession and an understanding of what might be required of them in the future. Commendable efforts such as those undertaken by the Combined Air Power Transition Force in Afghanistan should be mirrored in the corridors of (air)power in coalition capitals and among the institutions, training establishments, and doctrine organizations that cultivate airpower at home. We have made steady and effective progress in the application of airpower in COIN operations over the past decade, but this has perhaps occurred in spite of associated conceptual efforts—not because of them. Hitherto, the military's post-Cold War transformation from an era of national defence to one of

global security has focused on conducting defence within an expeditionary framework rather than adjusting to the repercussions of a newly defined threat. For instance, for various reasons (e.g., preparing for potential interstate conflict), the RAF may presently eschew procurement of a basic LAAR aircraft, but this may be precisely a capability that would produce significant dividends in prosecuting a COIN conflict and rapidly developing indigenous military capability. Such an aircraft might also have utility in other stability, low-intensity, or peacekeeping operations. We cannot avoid the implications of this shifting context by neglecting them. In both COIN operations and the potential crises awaiting the employment of airpower, Airmen face significant challenges to the traditional emphasis placed on kinetic capabilities, the primary role of airpower when opposing forces cannot effectively contest control of the air, and the potential consequences of operations amidst a civilian population. Fundamentally, we must explore and address these and related issues because they have implications not only for the tactical employment of air assets but also for future acquisition and capability requirements.

It is difficult to categorise the wars in Iraq and Afghanistan as a temporary trend. Their duration, the rise of nonstate actors as military antagonists, and the nearly global assimilation of technologies which enable such actors to threaten the interests of nation-states suggest that these conflicts represent more than a transient phase in warfare. Consequently, although it is essential that air forces remain capable of conducting both the range of missions and intensity of operations associated with conventional (interstate) warfare, if airpower is to optimise its contribution to the current campaign in Afghanistan and maintain its full relevance in the future, then it must also be effective beyond this traditional arena. Airmen, therefore, must ensure that airpower concepts and doctrine provide a proper foundation upon which to build. 🗘

Notes

- 1. UK military doctrine uses the terms *moral*, *conceptual*, and *physical*. See Joint Doctrine Publication (JDP) 0-01, *British Defence Doctrine*, 3rd ed., August 2008, 4-1, http://www.mod.uk/NR/rdonlyres/CE5E85F2-DEEB-4694-B8DE-4148A4AEDF91/0/20100114jdp0_01_bddUDCDCIMAPPS.pdf.
- 2. Field Manual (FM) 3-24/Marine Corps Warfighting Publication (MCWP) 3-33.5, *Counterinsurgency*, December 2006, http://usacac.army.mil/cac2/coin/repository/FM_3-24.pdf.
- 3. JDP 3-40, Security and Stabilisation: The Military Contribution, November 2009, http://www.mod.uk/NR/rdonlyres/C403A6C7-E72C-445E-8246-D11002D 7A852/0/20091201jdp_40UDCDCIMAPPS.pdf; and British Army Field Manual, vol. 1 (AFM1), pt. 10, Countering Insurgency, January 2010, http://www2.armynet.mod.uk/linkedfilesANOpen/akx/coin_afm/20100408_afm_vol1_part10_jan2010ac71876-u.pdf.
- 4. JDP 3-40, Security and Stabilisation, 2-11; and AFM1, Countering Insurgency, 1-1.
- 5. The author is indebted to Col Alex Alderson of the British Army for his contribution to this point and others
 - 6. FM 3-24 / MCWP 3-33.5, Counterinsurgency, 5-18.
 - 7. JDP 3-40, Security and Stabilisation, 4-20.
- 8. The author is indebted to Group Capt Dean Andrews, RAF, for his contribution to this point and others.
- Report on Progress toward Security and Stability in Afghanistan, Report to Congress, November 2010, 12, http://www.defense.gov/pubs/November_1230 _Report_FINAL.pdf.

- 10. "Troops in Contact": Airstrikes and Civilian Deaths in Afghanistan (New York: Human Rights Watch, September 2008), 13, http://www.hrw.org/sites/default/files/reports/afghanistan0908webwcover_0.pdf.
- 11. R. Chuck Mason, *Status of Forces Agreement (SOFA): What Is It, and How Has It Been Utilized?*, CRS Report RL34531 (Washington, DC: Congressional Research Service, 18 June 2009), 9, http://www.fas.org/sgp/crs/natsec/RL34531.pdf; "Afghan Senate Protests Civilian Deaths," PRI's the World, 16 September 2008, http://www.pri.org/theworld/?q = node/21011; and "Controversial Airstrike in Afghanistan: A Chronology," Deutsche Welle, DW-World.DE, 27 November 2009, http://www.dw-world.de/dw/article/0,,4934122,00.html.
- 12. See Brig Gen Michael R. Boera, "The Combined Air Power Transition Force: Building Airpower for Afghanistan," *Air and Space Power Journal* 24, no. 1 (Spring 2010): 16–26, http://www.airpower.au.af.mil/airchronicles/apj/apj10/spr10/aspj_en_2010_1.pdf.
- 13. AFM1, Countering Insurgency, chap. 9, sec. 2; FM 3-24 / MCWP 3-33.5, Counterinsurgency, annex E; and JDP 3-40, Security and Stabilisation, xxv.
- 14. Sgt Sarah Wood, American Forces Press Service, "Petraeus Supports Troop Increase in Confirmation Hearing," Operation New Dawn, Official Website of United States Forces–Iraq, 24 January 2007, accessed 15 December 2010, http://www.usf-iraq.com/news/headlines/petraeus-supports-troop-increase-in-confirmation-hearing.



Paul Smyth

Mr. Smyth (MA in defence studies, King's College London) joined the Royal Air Force in 1980 and became one of the first ab-initio navigators to be posted to the Tornado GR1 in 1983. He flew more than 2,200 hours in the ground attack and reconnaissance roles and took part in the 1991 Gulf War and subsequent no-fly zone over Iraq. He was on the inaugural staff of the United Kingdom's (UK) Permanent Joint Headquarters, acting as a staff officer on operations teams for the Middle East and the Balkans. As a member of the directing staff at the Joint Services Command and Staff College, he was a campaign planning expert and revised the air campaigning syllabus. His last military appointment was as a UK Assistant Chief of Defence staff liaison officer to the Pentagon, State Department, and National Security Council building staff for operations in Iraq, Afghanistan, and the global war on terror. He left the military in 2006 and later joined the internationally renowned Royal United Services Institute in Whitehall, London, where he focused on topics relating to the military interventions in Iraq and Afghanistan. He has authored a number of articles, commentaries, and papers on operational matters and has provided subject-matter expertise to many British and international media organizations. Mr. Smyth is currently the owner of R3I Consulting.