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SUCCESSFUL APPLICATION OF AIR POWER IN COIN RESTS ON THE FOUNDATIONS OF GOOD DOCTRINE

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JCSP 40

Master of Defence Studies

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Sqn Ldr C. Harmon

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ABBREVIATIONS

AAP	Australian Air Publication
ADDP	Australian Defence Doctrine Publication
ADF	Australian Defence Force(s)
AFDA	Air Force Doctrine Annex
AFDD	Air Force Doctrine Document
AO	Area of Operation
C2	Command and Control
CAF	Canadian Armed Forces
CAS	Close Air Support
CIMIC	Civil – Military Co-operation
COIN	Counterinsurgency
DOD	Department of Defense (US)
FAS	Fuerza Aerea El Salvador
FID	Foreign Internal Defense
FM	Field Manual
GPS	Global Positioning System
HADR	Humanitarian and Disaster Relief
HN	Host Nation
HUMINT	Human Intelligence
IDF	Israeli Defence Force
ISR	Intelligence, Surveillance and Reconnaissance
ISTAR	Information, Surveillance, Target Acquisition and Reconnaissance
IW	Irregular warfare
LIC	Low intensity conflict
LWD	Land Warfare Doctrine
MAF	Missionary Aviation Fellowship
Maj Gen	Major General
Medevac	Medical evacuation
MOOTW	Military operations other than War
NATO	North Atlantic Treaty Organization
NGO	Non Government Organizations
OEF	Operation Enduring Freedom
PNG	Papua New Guinea
RAAF	Royal Australian Air Force
RAM	Remote Area Medical
RCAF	Royal Canadian Air Force
SAR	Search and Rescue
SDB	Small Diameter Bomb
SOS	Special Operations Squadron
UAV	Unmanned Aerial Vehicle
US	United States of America
USAF	United States Air Force
USMC	United States Marine Corps

ABSTRACT

Whereas air power doctrine for conventional warfare is well developed and maintained – it takes strategic concepts and codifies them into action to meet national objectives – similar doctrine for counterinsurgency (COIN) air power is not. However, conventional warfare is the historical exception and not the rule when it comes to the types of conflicts in which national objectives are contested and national security is threatened.

Increasingly, national objectives of nations are being contended in insurgencies and counterinsurgency operations and air power has provided significant contributions to all aspects of these COIN campaigns. Australia, Canada, the US and NATO have been continually involved in COIN operations for the last 15 years and have extensively used air power throughout these operations. Yet unlike conventional warfare, the status of air power COIN doctrine does not reflect the level of operational commitment.

This study establishes an understanding of the characteristics of COIN, what air power doctrine exists to conduct COIN, and it analyzes the key capabilities and functions that air power contributes. It also discusses the gaps in understanding and execution of air power as part of a greater COIN strategy. Specifically, the study focuses on air power roles outside of direct military and security operations that function as enablers of government empowerment and legitimacy within a whole of government COIN strategy. Looking to the future, this paper outlines areas of doctrinal review that are required in order to fully capture and codify COIN air power experience, knowledge and capabilities in contemporary and relevant doctrine.

INTRODUCTION

Downplayed, taken for granted or simply ignored, air power is usually the last thing that most military professionals think of when the topic of counterinsurgency is raised.¹

Introduction

Conventional styles of warfare are a recognized direct threat and challenge to a nation's security. To counter this threat nations have developed single service and joint doctrine to codify how they will train, equip, sustain their forces and fight battles. Conventional air power doctrine is currently well served across the nations of Australia, Canada and the United States of America (US) in regard to taking strategic concepts and codifying them into action to meet these objectives. However, history has shown that conventional warfare is not the only place in which national objectives are militarily contested. Rather, conventional warfare is an historical exception and it is the realm of irregular warfare where most military action occurs.

Within that scope of irregular warfare across the twentieth and twenty first century is a proliferation of insurgencies for which nations in many cases have been caught unaware and largely unprepared. Across this short time frame several countries and alliances have been involved in counterinsurgency (COIN) wars, including the United Kingdom, France, Canada, Australia, US, South Africa, Colombia, Russia, several African, Asian, Middle Eastern and Central American countries, as well as the North Atlantic Treaty Organization (NATO). Insurgencies are truly a global phenomenon that is likely to continue to arise; and so it behooves all practitioners and planners of national strategies and the operational art to carefully consider them. This includes the need to prepare and shape air power capabilities through relevant and coherent doctrine to meet national objectives.

¹ Alan J. Vick, *et al.*, *Air Power in the New Counterinsurgency Era. The Strategic Importance of USAF Advisory and Assistance Missions*. RAND Corporation, 2006, 109.

The Nature of Insurgency and Counterinsurgency

Historical COIN experiences have borne out several principles that governments must consider when planning for COIN operations or deciding upon courses of action. First and foremost is an understanding of the nature of insurgency. As distinct from conventional warfare whereby opposition comes from a recognized external state(s), an insurgency rises from within, often from non well-defined actors. These actors directly challenge the authority of the present administration to govern the population. This challenge is not solely a military one; it is directed against policing, armed forces, judiciary and administration of the region. The battle is not simply between armed forces but for the people and their support. As such, insurgencies are primarily a political struggle whereby all government actions need to be congruent with a strategy of establishing and maintaining an accepted legitimacy to govern.² Insurgencies by the very nature of the asymmetry that exists between the insurgent and the government are protracted wars that require long-term commitment.

Success in COIN is derived from the population consenting to the government's authority and legitimacy. Conducting COIN requires a government to deliver a coordinated strategy to target and remove direct causes that inflamed or support the insurgency. The means to achieve this objective require use of all aspects of national power; military action, judicial and policing reforms, social infrastructure, economic reform and security.³ Thus in considering COIN operations and plans, the first point of acknowledgment must be that each insurgency will be unique in its context, themes and ideology. Whilst many military capabilities and hardware that are brought to use in counterinsurgencies may be similar across different campaigns, the phasing,

² David Galula, *Counterinsurgency Warfare: Theory and Practice* (London: Praeger, 1964), 3, 6.

³ US Department of Army, *Field Manual 3-24 Counterinsurgency Operations* (Washington, DC: HQ Department of the Army, 2008), 1-1.

period of use, impact and effects can have vastly differing outcomes. Air power is no exception to this.

Through historical application and its effects, air power has been established as an integral component in COIN campaigns. Key air power characteristics of speed, reach, flexibility, air mobility and lethality can be brought to bear rapidly and reliably in COIN operations to provide their own asymmetric effects against the insurgents.⁴ By the very nature of insurgency, it is the insurgent who has an asymmetric advantage and the strategic initiative of initiating conflict, thus forcing the government to be largely reactionary. Air power is a vital capability for a government to have at its disposal; it enables rapid response to and reversal of asymmetry, allowing a government to take the strategic initiative.

Building State Air Power Capability

Nation states typically build air power capability in line with their stated strategic objectives of national security. The resources and funding to build these national assets and capabilities are large and must be carefully expended to maximize achieving security of the state and national objectives.⁵ The principle of a first priority for nation defence against a conventional threat drives national air power and doctrine development. This results in states focusing on air power capability and structures that are primarily designed to fight in conventional or regular warfare. However, combating insurgency is also within national objectives, albeit a secondary priority, as readily demonstrated by the willingness of indirectly affected governments to become involved as assisting nations in COIN campaigns. Thus, effort needs to be made to ensure COIN doctrine is also appropriately considered in air power capability, structure and doctrine.

⁴ Australia, Royal Australian Air Force, Australian Air Publication AAP 1001.2, *The Air Force Approach to Irregular Warfare* (Canberra, ACT: Air Power Development Centre 2011), 3-1, 3-8.

⁵ Australia, Royal Australian Air Force, Australian Air Publication AAP 1000-D, *The Air Power Manual 6th Edition* (Canberra, ACT: Air Power Development Centre 2013), 16-21.

To conduct COIN requires adaptation of the air power assets, structures and capabilities that have been optimized for conventional warfare.⁶ It is in this adaptation that much of the misjudgment about the role of air power in COIN is centred. Air power capabilities for COIN are poorly understood for what it is capable of achieving in COIN operations outside of producing kinetic effects or air mobility for ground troops. The typical military joint or “jarmy” mindset is that air power is there solely to enable and support offensive military ground operations. Thus mindset misunderstands the importance and criticality of using air power as part of a broader government strategy to combat the root causes and issues that fuel an insurgency. A discussion of the writing on air power and COIN is instructive in illustrating this contention.

Literature Review and Research Paper Structure

Given the proliferation of insurgencies that have occurred across the globe over approximately the last sixty years, one would expect there would be a mountain of literature and commentary on how to conduct these campaigns. In many instances that expectation is well met with many scholarly articles and books combing through the history, decisions and outcomes of insurgencies. In combination with this literature, many armed forces have undertaken a steady and considered approach to the development and implementation of doctrine directly addressing COIN and other forms irregular warfare, albeit from a primarily ground centric approach.⁷

The contribution of air power in the conduct of COIN campaigns also enjoys a rich vein of literature and dissection by scholars. Invariably the pattern of the written material directly discusses the effectiveness of air power in COIN and follows the evolutionary path of air power

⁶ David Glasson, “Big War Air Power for Small War Operations,” *The Royal Canadian Air Force Journal*, 3, no. 1 (Winter 2014): 17-18.

⁷ US Army FM 3-24 *Counterinsurgency Operations*; Australia, Australian Army, Land Warfare Doctrine LWD 3-0-1 *Counterinsurgency* (Canberra, ACT, 2009); Canada, Department of National Defence, B-GL-323, *Counterinsurgency* (Ottawa: Chief of the Land Staff, 2008); US Joint Chiefs of Staff, Joint Publication 3-24 *Counterinsurgency* (Washington, DC: U.S. Joint Chiefs of Staff, 23 November 2013 [Revision of JP 3-24 Dated 05 October 2009]); and North Atlantic Treaty Organization, AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency* (Brussels: NATO Standardization Agency, February 2011).

capability and technological development itself. As a general consensus the literature overwhelmingly acknowledges that air power has played a valuable and effective role in the conduct of COIN campaigns and will continue to do so in the future.⁸ Yet unlike literature and doctrine for ground force elements, there has been little focus or production of material that directly examines how air power can serve COIN, what gaps exist between air power capabilities in COIN and the existing doctrine, and to how place air power into the COIN doctrine. Air Forces in Australia and the US have at least published single service air power doctrine for irregular warfare operations⁹ but these have had little impact on joint doctrine. Lacking established and coherent doctrine that recognizes and understands how to implement air power in a COIN strategy inevitably leads to a less than ideal force employment, structure, and outcomes.

This research paper fills this important gap in the literature on air power and COIN. Specifically, it argues that current COIN doctrine is deficient in its consideration of and use of air power. The doctrine studied comes from Australia, Canada, the United States and NATO. Air power is not itself a solution to COIN but it does have a large and important role to play in any COIN operation.¹⁰ Without appropriate air power COIN doctrine, governments, commanders and servicemen are without codified guidance on how to equip and structure their forces and how to plan and execute COIN campaigns in support of the national objectives.

In support of the above thesis statement, this paper will consist of four chapters. The first chapter will establish a fundamental picture of insurgency and COIN operations. It will

⁸ See works such as: James S Corum and Wray R. Johnson, *Air Power and Small Wars: fighting insurgents and terrorists* (University Press of Kansas, 2003); Allen G. Peck, "Airpower's Crucial Role in Irregular Warfare," *Military Technology*, 32 Issue 3 (2008): 23; Norton A. Schwartz, "Airpower in Counterinsurgency and Stability Operations," *Prism* 2, no. 2 (2011); and *Air Power, Insurgency and the "War on Terror,"* ed. Joel Hayward (Cranwell: Royal Air Force Centre for Air Power Studies, 2009).

⁹ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*; and United States Air Force, Air Force Doctrine Document 2-3 *Irregular Warfare* (Washington, DC: USAF Chiefs of Staff, 1 August 2007).

¹⁰ James S. Corum, "Air Power and Small Wars: Current Operations," *Baltic Security and Defence Review*, 12, Issue 1 (2010): 153.

specifically highlight the use and meaning of definitions, established lexicons and principles of COIN operations. It will also detail the characteristics of fighting an insurgency and the primary natures of insurgency and COIN. It will then look at what current COIN doctrine is available and in use for sample nations and organizations and how they go about formalizing these principles into working and applied doctrine and how that relates to recognition and applicability of air power.

The second chapter will delve into the specifics and fundamentals of air power itself and its direct application in COIN. It will review key capabilities of air power and how these are adapted and integrated to conduct a COIN operation. It will also discuss the mechanisms used to determine the air power capabilities required and how air power assets are then allocated to an operation. Command and control structures will be discussed as well as the need for the continual review of air power capability and asset allocation as the nature and phases of the COIN operation progresses. In particular, the role of host nation air power in conjunction with support nation air power will be examined. Chapter 2 will lastly draw upon historical case studies to demonstrate effective and ineffective uses of air power. The third chapter is a direct challenge to extend the military and strategic mindset of the use of air power beyond the traditional security phases of a COIN operation. It will discuss the use of air power in a complimentary manner within a comprehensive approach to extend into use in government legitimacy and provision operations as well as building host nation air power capability.

The fourth chapter will provide direct areas of doctrinal review that are required. It will discuss the relevance of air power and its elevation and inclusion into joint and strategic COIN doctrine to guide not only commanders but also political governance and strategy. It ultimately seeks to demonstrate linkages and synergies between military security elements and the greater

political strategy necessary for successful COIN campaigns. This doctrinal review will also serve to highlight to governments that when building national air power capabilities for national objectives, there is a requirement to consider and structure not only for possible conventional warfare threats but also for use in the very real and likely irregular warfare operations.

Conclusion

Insurgencies and COIN conflicts are a major part of Australian, Canadian, American, and NATO military operations across the last sixty years, and it is likely that this trend will continue. Yet these nations have configured air power capabilities and structures to meet the threats of conventional warfare, thus necessitating adaptation to operate in COIN campaigns. The effective use of air power in COIN is not well understood outside of kinetic operations and ground force support enabling roles. The effective and efficient use of air power in COIN is hampered by a current lack of air power focus in COIN doctrine. It is important that good COIN doctrine is developed and in place in order to serve all national objectives.

CHAPTER 1

UNDERSTANDING COUNTERINSURGENCY AND CURRENT DOCTRINE

Introduction

To ensure a coherent and informed position can be determined with respect to the use of air power in COIN and its presence in doctrine, it is first necessary to establish a baseline understanding and meaning of terms. This chapter will set about defining the terms associated with COIN and doctrine and their meanings for use throughout this study. The chapter will then examine COIN doctrine at both single service and joint levels for Australia, Canada, the United States and NATO. The specific focus will be on the use and understanding of air power throughout that doctrine.

Defining the terms

Currently there exist numerous terms and definitions from several different organizations, nations and even single services within nations. Some of these terms are used interchangeably, which can be misleading or incorrectly applied, further muddying the understanding in a joint environment. This ambiguity does little to serve good doctrinal practices or outcomes. The terms and their meanings to be used throughout this paper are discussed in the following paragraphs.

Doctrine. The US Department of Defense (DOD) defines doctrine as the “fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives.”¹¹ The Royal Australian Air Force (RAAF) gives a similar definition: “fundamental principles by which military forces guide their actions to achieve desired

¹¹ US Joint Chiefs of Staff, Joint Publication 1-02 *Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: U.S. Joint Chiefs of Staff, 8 November 2010 [As Amended Through 15 February 2016]), 77.

objectives.”¹² The RAAF definition is missing the vital element of national objectives as the purpose for which the military actions are to serve. Also absent but definitely implied by both of these definitions is that doctrine is to be coordinated and joint in actions across the single services. In essence, doctrine is the means by which militaries codify lessons that have been learnt and provides instruction and guidance for future conduct of coordinated and joint operations in support of national objectives.

Air power. Curiously the US Joint Publication of Military Dictionary, the JP 1-02¹³ does not have an overarching definition for air power itself, rather just sub terms of components of air power. Similarly the NATO glossary of terms and definitions, the AAP-06¹⁴ is also mute on a definition. However, air forces from Australia, Canada and the US all provide a definition of what air power is. The RAAF defines air power as “the ability of a nation to assert its will by projecting military power in, through and from the air domain.”¹⁵ The USAF provides a more detailed definition: “airpower is the ability to project military power or influence through the control and exploitation of air, space, and cyberspace to achieve strategic, operational, or tactical objectives.”¹⁶ The RCAF provides a definition encompassing both air and space, “that element of military power applied within or from the air and space environments to achieve effects above, on and below the surface of the Earth.”¹⁷ The crucial elements of air power definition are the use

¹² Australia, Royal Australian Air Force, Australian Air Publication AAP 1000-D, *The Air Power Manual 6th Edition* (Canberra, ACT: Air Power Development Centre 2013), 221.

¹³ US JP 1-02 *Department of Defense Dictionary of Military and Associated Terms*.

¹⁴ North Atlantic Treaty Organization, AAP-06 Edition 2015 *NATO Glossary of Terms and Definitions (English and French)* (Brussels: NATO Standardization Office, 2015).

¹⁵ RAAF AAP 1000-D *The Air Power Manual*, 214.

¹⁶ United States Air Force, Air Force Doctrine Document 1-02 *Air Force Supplement to the Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: USAF Chiefs of Staff, Centre For Doctrine Development and Education, 11 January 2007 [Incorporating Change 1, 6 January 2012]), 31. The United States use the one-word term “airpower” while Commonwealth nations utilize the two-word term “air power.” As this is a study written by a RAAF officer and for a Canadian Professional Military Education institution, the term “air power” will be utilized unless specifically quoting the American spelling of the term.

¹⁷ Canada, Department of National Defence, B-GA-400-000/FP-000, *Canadian Forces Aerospace Doctrine* (Winnipeg, Manitoba: Air Force Doctrine and Training Division 2nd Edition, December 2010), 18.

and projection of military power and influence through and from the air to achieve national objectives.

Insurgency. NATO defines insurgency as “Actions of an organized, often ideologically motivated, group or movement that seeks to effect or prevent political change or to overthrow a governing authority within a country or a region focused on persuading or coercing the population through the use of violence and subversion.”¹⁸ The nature of an insurgency is such that it is a protracted struggle, following through staged processes in order to achieve intermediate goals and ultimately overthrow the government or the status quo.

Counterinsurgency. COIN stands in opposition to an insurgency seeking to defeat it. There are numerous doctrine and subordinate publications across Australia, Canada, the US and NATO that directly deal with COIN operations, and all contain slight variations on a definition. NATO defines COIN as “comprehensive civilian and military efforts made to defeat an insurgency and to address any core grievances.”¹⁹ However, most doctrinal publications agree to the core elements of the COIN definition, which are that COIN is a political battle waged across civilian and military domains to establish and maintain governmental legitimacy and acceptance in the eyes of the population.²⁰ Typically though in many doctrines, COIN finds itself unfairly bundled into a collective of *catch all* phrases and terms that often used interchangeably and somewhat incorrectly. Common terms that COIN appears coincidental with include revolutionary war, irregular warfare (IW), low intensity conflict (LIC), small wars and military operations other

¹⁸ NATO AAP-06 *NATO Glossary of Terms and Definitions*, 2-I-5.

¹⁹ *Ibid.*, 2-C-16.

²⁰ Australia, Australian Army, Land Warfare Doctrine LWD 3-0-1 *Counterinsurgency* (Canberra, ACT, 2009), 1-2; Australia, Royal Australian Air Force, Australian Air Publication AAP 1001.2, *The Air Force Approach to Irregular Warfare* (Canberra, ACT: Air Power Development Centre 2011), 2-4; Canada, Department of National Defence, B-GL-323, *Counterinsurgency* (Ottawa: Chief of the Land Staff, 2008); US Department of Army, Field Manual 3-24 *Counterinsurgency Operations* (Washington, DC: HQ Department of the Army, 2008), 1-1; United States Air Force, Air Force Doctrine Document 2-3 *Irregular Warfare* (Washington, DC: USAF Chiefs of Staff, 1 August 2007), 4; and US Joint Chiefs of Staff, Joint Publication 3-24 *Counterinsurgency* (Washington, DC: U.S. Joint Chiefs of Staff, 23 November 2013 [Revision of JP 3-24 Dated 05 October 2009]), I-2.

than war (MOOTW). Each of these terms is distinct in its own right and the bundling together subsequently does little to clarify in the minds of operational artists and strategists clear and concise paths for appropriate doctrine. An examination of each is therefore warranted.

Revolutionary War. Revolutionary war is distinguishable from an insurgency and COIN by the manner in which it conducted. A revolution follows a pattern of a spontaneous or sudden and explosive upheaval by a group with quick and sudden large mass support.²¹ It is the seizure of political power by a broad-based political movement through armed force to carry out a widely advertised political or social programme. Throughout the campaign there exists a high level of consciousness of the goals and methods to bring about revolution.²²

Irregular Warfare. Of all of the terms usually bundled together with COIN, IW shares the closest definition to COIN. The US and Australian publications are synonymous on the definition of IW as “a violent struggle among state and non-state actors for legitimacy and influence over the relevant populations.”²³ The key difference between COIN and IW is that COIN is directly seeking to maintain a status quo through an incumbent government against an insurgency. IW is broader in its application and by definition can equally be associated with terrorism, counterterrorism as well as COIN or even assisting and promoting insurgency.²⁴

The remaining terms of MOOTW, LIC and small wars equally do not enjoy specific definition from defence glossaries. However, these terms are part of a common vernacular used within defence and academic circles when describing and conducting military operations that sit outside of conventional warfare. The general term “small wars” describes the use of military

²¹ David Galula, *Counterinsurgency Warfare: Theory and Practice* (London: Praeger, 1964), 3-4.

²² John Shy and Thomas W. Collier, “Revolutionary War,” in *Makers of Modern Strategy, From Machiavelli to the Nuclear Age*, ed. Peter Paret, (Oxford: Clarendon Press, 1986), 817.

²³ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 7-6 and US JP 1-02 *Department of Defense Dictionary*, 1-02.

²⁴ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 2-3.

forces for political purposes across a range of activities from humanitarian assistance, peace enforcement through to conventional combat activities. Throughout these activities diplomacy is operative with the ultimate objective being an agreement or terms being reached rather than the complete collapse of an adversary.²⁵ Having established a lexicon of terms to be used and their meanings, it is now pertinent to review the principles and tenets of insurgencies and COIN operations.

Principles of COIN

Population. An insurgency and the corresponding COIN campaign, is a battle for the people, the objective is the population.²⁶ At the heart of the battle is the struggle for legitimacy and authority to rule the population by gaining their support or at least their submission.²⁷ The desired outcome is highlighted by the two pronged approach typified by both insurgents and COIN operatives alike as they employ both a *hearts and minds* campaign and a *coercion* campaign simultaneously and in adaptive proportions throughout the struggle. COIN is not a military war but a political one. It is conflict that requires the full effort of the government across all spectrums of its interactions with the population in security, policing and economic and social domains to address root causes that fan the flames of the insurgency.²⁸

Complexity. Insurgents are largely unfettered in the manner they choose to conduct operations. Although the struggle is usually within a defined state or area, insurgents are free to operate transnational or even global in their operations. Activities that an insurgency undertakes are designed to sustain it and to delegitimize the government. These activities therefore occur in

²⁵ Small Wars Journal Editors, "What is a Small War?" *SMJ* (blog), July 6 2008.
<http://smallwarsjournal.com/blog/what-is-a-small-war>

²⁶ Galula, *Counterinsurgency Warfare: Theory and Practice*, 6.

²⁷ Octavian Manea, "COIN and FID in Colombia," *Small Wars Journal*, Journal Article January 5 2012.
<http://smallwarsjournal.com/printpdf/12054>

²⁸ US Army FM 3-24 *Counterinsurgency Operations* 1-1.

regular areas such as political, social or religion or in the sphere of irregular activities such as criminality, subversion, and general disorder. Insurgents may also seek to co-opt other groups like criminal gangs and terrorists into funding mechanisms or for destabilization operations, even if those groups are not necessarily aligned with the insurgent ideology.²⁹ This complicates the nature of COIN, requiring the true identity of the insurgents to be established in order to effectively target the correct root cause(s). Along with this, COIN responses and actions also need to be targeted and employed in state, regional and global areas to address the avenues through which the insurgents are operating. Figure 1.1 demonstrates the complexity of a COIN campaign and the areas of focus and attack that will be conducted by insurgents, COIN operatives and opportunistic groups making use of the uncertain conditions.³⁰

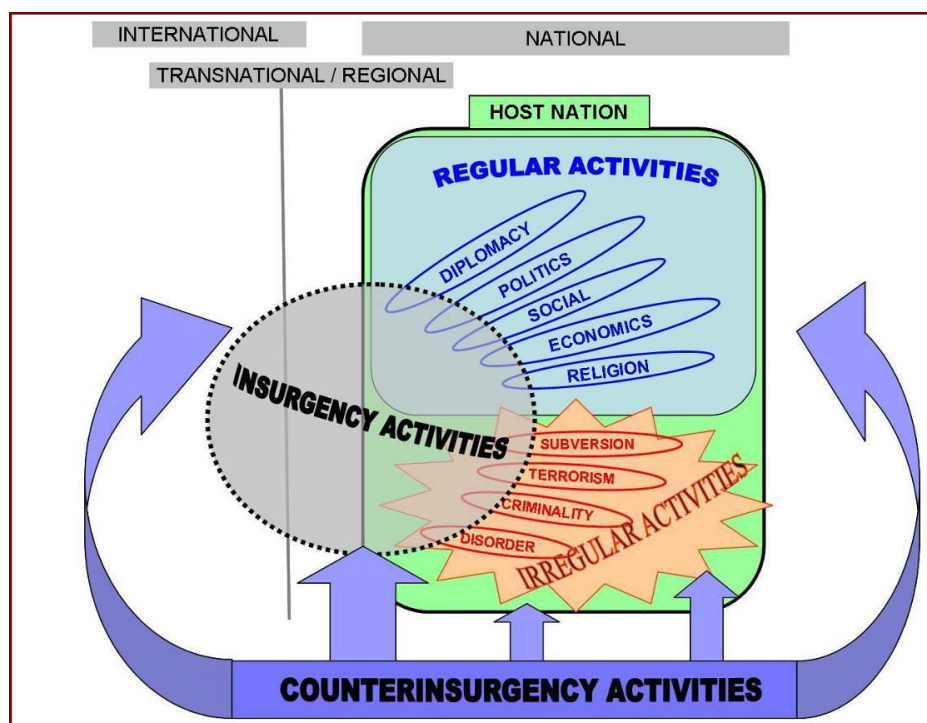


Figure 1.1 – Nature of Insurgency

Source: NATO, AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*, 3-2.

²⁹ North Atlantic Treaty Organization, AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency* (Brussels: NATO Standardization Agency, February 2011), 3-1 – 3-2.

³⁰ *Ibid.*, 3-19.

Asymmetry. A natural asymmetry exists in the proportion of resources and strength between a government and the insurgents. This asymmetry shapes the nature of the conflict by forcing the insurgent to work to their strengths. In the initial stages the insurgent holds the strategic advantage, deciding when, where and how to initiate conflict.³¹ This can be an extremely frustrating situation for a government, for it will be difficult to respond to widespread contacts in a timely and proportionate manner. Often it will be difficult to determine the insurgent, who is ill defined in comparison to the population.³² Slow and disproportionate responses feed the insurgent claims and propaganda of the government's inability to provide security and its disconnection from the populace. Air power is a proven key contributor to counter this asymmetry by providing reach, intelligence, speed of response and scalable responses to insurgent activity.³³

Comprehensive approach. For there to be any chance of success, governments conducting COIN have a responsibility to ensure that all areas of activities depicted in Figure 1.1 are being addressed. The government must employ a comprehensive approach to the problem. This means a military contribution is but one component to be woven into the overall strategy; military success does not necessarily translate into COIN success. Rather, a strategy must be employed that is adaptive to the situation and gives as much importance to political, social, judicial and economic aspects as it gives to the military and security aspects.³⁴ Although historical COIN examples give good foundations for doctrine and strategy, no COIN campaign

³¹ Galula, *Counterinsurgency Warfare: Theory and Practice*, 5.

³² Joel Hayward, "Air Power and Insurgency: Some Preliminary Thoughts," in *Air Power, Insurgency and the "War on Terror"*, ed. Joel Hayward, 11-20 (Cranwell: Royal Air Force Centre for Air Power Studies, 2009), 14 - 15.

³³ United States Air Force, Air Force Doctrine Document 2-3 *Irregular Warfare* (Washington, DC: USAF Chiefs of Staff, 1 August 2007), 20-21; and RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 3-2 - 3-3.

³⁴ James S Corum and Wray R. Johnson *Air Power and Small Wars: fighting insurgents and terrorists* (University Press of Kansas, 2003), 425-426.

will ever be the same as another. The root causes, insurgent employed tactics and ideology, and the geographic disposition of the population will be different in every situation. Therefore, a comprehensive approach needs to be employed that directly address these issues and the natural strengths and weaknesses of both the insurgency and the government.³⁵

Costly and protracted. The government cannot neglect the responsibility for maintaining order; this produces a disparate cost burden for the government to conduct COIN in comparison to the costs borne by an insurgency. Starting from a relatively weaker resource point it is in the interest of the insurgency to drag out the timelines in the conflict and seek to make the war a protracted affair. This protraction weakens the government's resource position as well as their legitimacy if they cannot stem the financial losses, control the costs and secure the population.³⁶ The ability to sustain resources in a damaged state and an affected economy may be beyond the long-term capabilities of a government. So too may be the required capabilities necessary to immediately set about addressing the security needs of the population. This may lead to the need for assistance from an outside nation or organization.

Intervention and assistance. When committing to intervene or assist a host nation in a COIN conflict, nations or coalitions such as the US, Canada, Australia or NATO can bring military components that are capable of direct and indirect support in more than just a traditional military sense. Doctrine for these nations and groups (to be discussed later in this chapter) lay out methods to have impacts in many of the areas to be addressed as detailed in Figure 1.1. These military-led roles are not only for securing the population but also rebuilding physical components of infrastructure and repairing or stabilizing social areas in support of the host

³⁵ Australian Army LWD 3-0-1 *Counterinsurgency* 1-4.

³⁶ Galula, *Counterinsurgency Warfare: Theory and Practice*, 8-9.

nation. A classic example of this is the Clear/Hold/Build³⁷ method that many nations and NATO have employed as detailed in Figure 1.2.

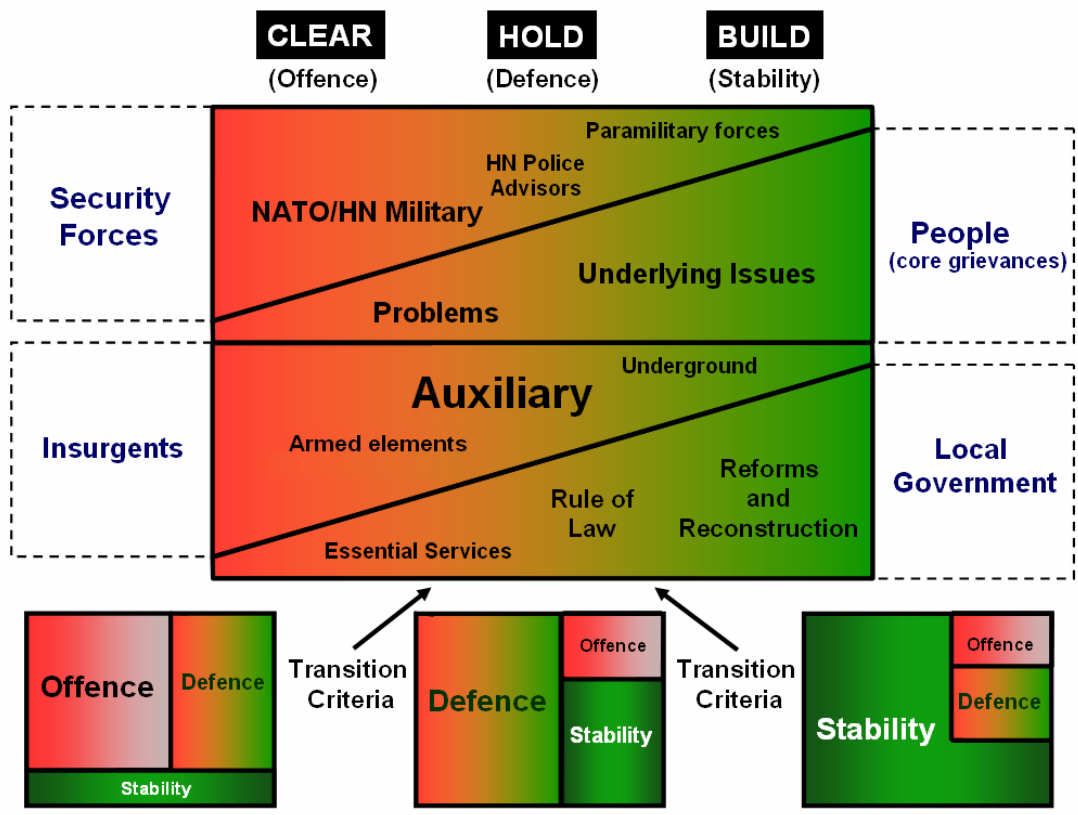


Figure 1.2 – Clear, Hold, Build Interconnected and Evolving Activities
Source: NATO AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*, 5-14.

The primacy when supporting a host nation in COIN is to ensure that the role of the assisting/intervening nation is clear. This is the host nation’s war and all efforts are to be directed and coordinated in a manner that establishes and maintains host nation government legitimacy. As a supporting nation or coalition the job is not to win the war for the host nation; it is to empower the host nation. This requires a focus on a host nation’s capabilities and capacities as well as the insurgent. Planning and conduct of operations is to be in concert with the building,

³⁷ US Army FM 3-24 *Counterinsurgency Operations*, 5-18; and NATO AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*, 5-15.

training and transition of responsibilities to the host nation.³⁸ Ultimately it is not a requirement to have the host nation at capabilities or skills equivalent of the assisting nations. It is enough that the host nation can perform these functions in a tolerable fashion that produces meaningful and legitimate outcomes for the population. Thus, the host nation government is achieving legitimacy and the actions are far more likely to produce long-term solutions when support is reduced and withdrawn.³⁹

Current Doctrine

Having determined the basic tenets and the fundamental terms and definitions associated with COIN, it is time to probe what current COIN doctrine is in use and how this doctrine recognizes and employs air power. For comparison and qualification, American, Australian, and Canadian doctrine will be examined alongside of the joint doctrine of NATO specific to COIN operations. Given the prevalence of COIN operations over the last century and into this one, it would be reasonable to expect that high quality joint and single service doctrine is in existence, being reviewed and updated with each successive experience. Similarly with the evolution of air power throughout the same time period it would be reasonable to expect that the use of air power in COIN operations has been well captured and understood in doctrine and thus employed effectively. The reality of the current doctrinal state does not meet these expectations. In particular, there is a glaring lack of any true focus of air power integration into joint COIN doctrine and in some cases even single service doctrine. This is most jarring given the direct

³⁸ Australian Army LWD 3-0-1 *Counterinsurgency*, 3-8.

³⁹ NATO AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*, 5-11; and Corum and Johnson *Air Power and Small Wars: fighting insurgents and terrorists*, 437.

combat experience of these nations in COIN conflicts in just the last two decades alone in multiple theatres and all with extensive use of air power throughout these campaigns.⁴⁰

US Army and Marine Corps Doctrine. The US has the most robust and complete COIN doctrine across both the joint and single service environments in comparison to the other nations. The most extensive and detailed document is the joint US Army and Marine Corps field manual publication, “Counterinsurgency” FM 3-24/MCWP 3-33.5 released in December 2006.⁴¹ This manual serves well as a foundation of ground force military contributions to a COIN operation and the integration of those military components into the bigger strategic and political campaign. FM 3-24 also acknowledges the joint nature of operations for a COIN campaign and devotes a five-page appendix to the role of air power.⁴² This appendix is a reasonable succinct outline of the capabilities, assets, roles and advantages of air power and its employment in COIN. It is however naturally ground centric in how it views air power and intrinsically limits air power to traditional military roles with a focus on a supporting and enabling ground operations.

Contextually, air power is somewhat appropriately addressed within FM 3-24 with the exception that it is confined to within supporting roles to military operations rather than the overall COIN campaign. There is little discussion of the use of air power in support of civil-military cooperation (CIMIC) operations and agendas, nor of air power use in host nation government roles outside of combined⁴³ military operations, and usually only with a focus on kinetic or air mobility support for ground troops. USAF Maj Gen Dunlap, who wrote an article in

⁴⁰ Paul Smyth, “Airpower and Counterinsurgency Building on a Proper Foundation,” *Air and Space Power Journal* (Summer 2011): 124. http://www.airpower.maxwell.af.mil/airchronicles/apj/2011/2011-2/2011_2_06_smyth.pdf

⁴¹ US Army FM 3-24 *Counterinsurgency Operations*. Although this is a joint US Army and Marine Corps publication, for brevity it will be referred to from here on in simply by the US Army field manual reference of FM 3-24.

⁴² *Ibid.*, Appendix E.

⁴³ Combined operations are composed primarily of host nation personnel conducting the operation and being supported or led by a small contingent of assisting military personnel from foreign forces.

direct response to the USMC doctrine in 2008 titled “Shortchanging the Joint Fight, An Airman’s Assessment of FM 3-24 and the case for Developing Truly Joint COIN Doctrine”⁴⁴ brings many of these same charges against FM 3-24. In this article, Dunlap is particularly critical of the overreach of FM 3-24 in it purporting to be the singular authority on COIN operations.⁴⁵ This will be discussed further in Chapters 2 and 3.

USAF Doctrine. Following the publication of FM 3-24 in 2006, the USAF published its own doctrine, “Irregular Warfare” Air Force Doctrine Document (AFDD) 2-3 in August 2007.⁴⁶ AFDD 2-3 was prioritized following the recognition that little had been done within the Air Force focus on doctrine outside of simply approaching all operations as adaptations of conventional air power thinking.⁴⁷ This publication incorporates into one doctrine the considerations for and the use and application of air power across all facets of IW including insurgency, COIN, terrorism and counterterrorism. However AFDD 2-3 acknowledges that at the very core of all activities encompassed within IW lays in insurgency and COIN.⁴⁸ The use of air power in IW is conceptualized through defining the key capabilities that air power will be able to bring and then how these are employed in crucial activities for specific effects in defined areas. This conceptualization is illustrated in Figure 1.3. AFDD 2-3 consistently throughout deals with the delineation between IW and COIN and does not use the terms loosely or interchangeably whereby confusion can occur. The document treats COIN as a subset of IW with its own distinct

⁴⁴ Charles J. Dunlap Jr, *Shortchanging the Joint Fight? An Airman’s Assessment of FM 3-24 and the Case for Developing Truly Joint COIN Doctrine* (US Air Force Air University 2008).

[Http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=6156&context=faculty_scholarship](http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=6156&context=faculty_scholarship)

⁴⁵ *Ibid.*, 3.

⁴⁶ USAF AFDD 2-3 *Irregular Warfare*.

⁴⁷ Dunlap, *Shortchanging the Joint Fight*, 4.

⁴⁸ USAF AFDD 2-3 *Irregular Warfare*, 3-4.

principles and “truths”⁴⁹ that are required to be understood and employed as part of a joint campaign.

AFDD 2-3 is consistent throughout in its approach to the principles of COIN. The air power contribution is focused largely on a supporting role to the host nation government (the document uses the term partner nation), experiencing the insurgency and scaling the level of support depending on the stability of that government and the current capabilities it possesses. Overall, although embedded in a parent document dealing with IW, the air power doctrine presented for COIN is well balanced and keenly focused on COIN principles. It is appropriately segmented in a manner that is readily understood and can be practically applied to COIN operations by airmen who know core air power principles.⁵⁰ The AFDD 2-3 is therefore a well serving single service document that is excellently placed to guide and supplement joint COIN doctrine

⁴⁹ *Ibid.*, 10-11.

⁵⁰ *Ibid.*, 12,19.

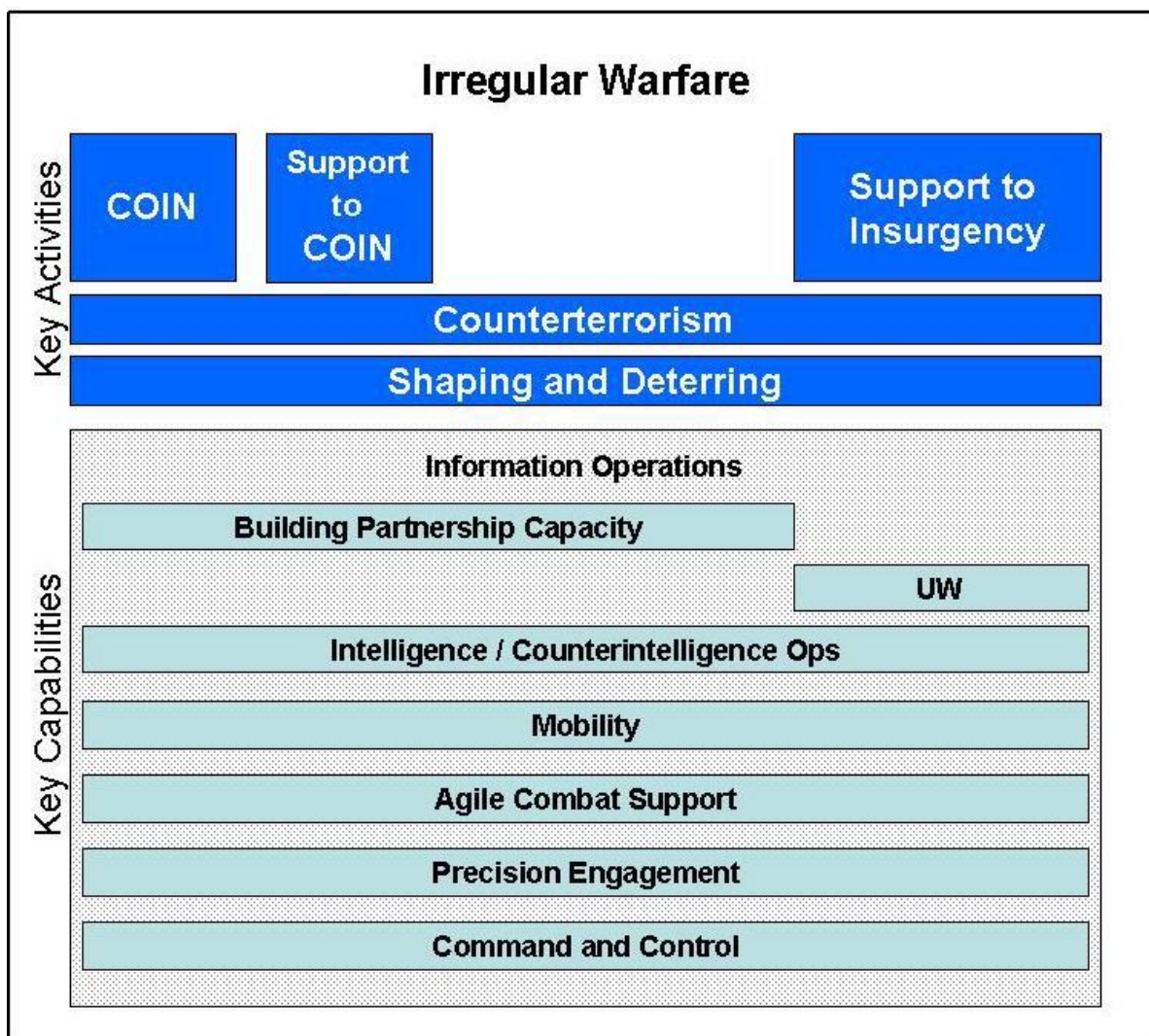


Figure 1.3 – Irregular Warfare Model

Source: USAF, Doctrine Document 2-3 *Irregular Warfare*, 3-4.

US Joint COIN Doctrine. US forces Joint doctrine was first published in October 2009 as “Counterinsurgency Operations” Joint Publication 3-24. This document was revised to the current document and published in November 2013.⁵¹ As expected in a joint publication, a large proportion of this doctrine document is consumed with the planning and assessment processes for a COIN campaign. Armed with the existence of AFDD 2-3 there is a logical expectation that the treatment and recognition air power’s role within planning and conducting a COIN campaign

⁵¹ US JP 3-24 *Counterinsurgency*.

would be highly visible. It is however glaring by omission. The concepts and use of air power are relegated to a three-page subsection of Chapter VII “Supporting Operations for Counterinsurgency.”⁵² Most disappointingly, this section is clearly constructed as to focus on nothing more than what ground troop supporting operations air power can deliver to the Joint Force Commander. JP 3-24 greatly limits emphasis on support to a host nation and the building and using of host nation capability that AFDD 2-3 emphasizes strongly.

The intent and codification of joint air power practices present in AFDD 2-3 is greatly diminished by its treatment in the joint publication. Perhaps it is coincidental but on initial release JP 3-24 directly references AFDD 2-3⁵³ for but on reissue in 2013 makes no reference to it, but to a subordinate document, Air Force Doctrine Annex (AFDA) 3-2 “Irregular Warfare”⁵⁴ which itself is not clearly as focused on COIN as the AFDD 2-3. This reduction in the role of air power to largely being effective servitude to the Joint Task Force for ground operations is epitomized by the guidance for combined actions in the COIN campaign. All reference to using US forces *combined* with host nation forces, is only focused solely ground force operations. There is never a mention of use of or any effective integration of US and host nation air power as even a goal to be strived for in combined operations.⁵⁵ In reality FM3-24 does a far more credible job in giving doctrinal guidance on the scope of effective air power use in COIN that does JP 3-24.

Australian Army Doctrine. The current COIN doctrine in Australian Army use is Land Warfare Doctrine LWD 3-0-1 Counterinsurgency.⁵⁶ Like its US counterpart (FM 3-24), LWD 3-0-1 is focused on a land forces contribution to COIN campaign within the context of military

⁵² *Ibid.*, VII-2 – VII-5.

⁵³ US JP 3-24 *Counterinsurgency* (05 October 2009), VII-7.

⁵⁴ US JP 3-24 *Counterinsurgency* (23 November 2013), VII-5; and United States Air Force, Air Force Doctrine Annex 3-2 *Irregular Warfare Terms* (Washington, DC: USAF Chiefs of Staff, Centre For Doctrine Development and Education, Last updated 12 July 2016).

⁵⁵ US JP 3-24 *Counterinsurgency*, V-14 – V-15.

⁵⁶ Australian Army LWD 3-0-1 *Counterinsurgency*.

operations and their integration into Australian concepts of COIN. Although an Army document, there is strong emphasis on COIN being a whole of Australian Defence Force (ADF) effort utilizing air and maritime capabilities. Air power is primarily dealt with in a six-page annex to Chapter 4 “Operating Environment.”⁵⁷ Like its US counterpart the focus of the air power role is firmly in enabling and supporting the ground forces in military operations. The primary discussion revolves around only identifying three key enablers of precision attack, air mobility and Intelligence Surveillance and Reconnaissance (ISR).⁵⁸ LWD 3-0-1 completely ignores any discussion on air power roles within support to host nation operations, CIMIC activities or any host nation capability development.

RAAF Doctrine. The RAAF, similar to the USAF do not have specific COIN doctrine but look to address it in a broader context through the publication of Australian Air Publication AAP 1001.2 “The Air Force Approach to Irregular Warfare” published in October 2011.⁵⁹ The doctrine specifically details that the term IW will be used throughout in lieu of COIN as it views IW as a broader area and COIN is a large, but yet a subset the IW.⁶⁰ Somewhat confusingly though, throughout the entire document the concepts of and principles described are firmly rooted in COIN doctrine and no significant sections deal with areas such as terrorism or counterterrorism or insurgency itself.⁶¹ The main focus of the doctrine is in the employment of air power in IW through four core air power roles of control of the air, strike, air mobility and ISR and two enabling capabilities of air base support and force protection.⁶² An entire chapter is dedicated the roles that air power plays in support to a host nation.⁶³ The chapter details not only

⁵⁷ *Ibid.*, 4B-1 – 4B-6.

⁵⁸ *Ibid.*, 4B2.

⁵⁹ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*.

⁶⁰ *Ibid.*, iii.

⁶¹ *Ibid.*, Ch 2.

⁶² *Ibid.*, Ch 4.

⁶³ *Ibid.*, Ch 5.

the important aspects of building host nation's own air power capabilities, but also it captures the use of air power in roles that directly work towards influence of the population and government legitimacy.

Australian Joint Doctrine. At the time of writing, Australia has no joint doctrine that deals directly with COIN. Currently the Joint Doctrine Centre has in draft format a joint doctrine manual, Australian Defence Doctrine Publication ADDP 3.21 "The Military Contribution to Stabilisation." This document is not yet available for research and is unlikely to be published for use before mid-2017 due to higher priorities within the Joint Doctrine Centre.⁶⁴

Canadian Armed Forces (CAF) Doctrine. The Canadian Army released B-GL-323-004/FP003 "Counter-Insurgency Operations"⁶⁵ in 2008 as its primary COIN doctrine. Similar to the US and Australian Army doctrines, it is military land focused; however it has minimal to say on air power. Discussion of air power is limited to a total of six paragraphs in a section detailing military components roles in COIN.⁶⁶ The discussion is firmly rooted in fire and air mobility support operations for ground troops and does not extend further. There are limited mentions of a role for air power in resupply and ISR throughout the document but again only within the concepts of direct support to the ground military force.⁶⁷

Surprisingly the Royal Canadian Air Force (RCAF) has not joined the USAF and the RAAF in issuing any form of COIN or IW doctrine and has thus left a void in the coverage of air power doctrine for RCAF operations. The totality of RCAF air power doctrine resides in the parent document, B-GA-400-000 – CF Aerospace Doctrine and the subordinate document series

⁶⁴ Source: Author of ADDP 3.21 *The Military Contribution to Stabilisation*, Doctrine Desk Officer, Joint Doctrine Centre RAAF Base Williamtown, Australia.

⁶⁵ B-GL-323 *Counterinsurgency*.

⁶⁶ *Ibid.*, Ch5 section 5.

⁶⁷ *Ibid.*, 7-14, 7-18, 9-1 – 9-2.

on Functional Capabilities.⁶⁸ Also there currently is no CAF joint doctrine codifying the Canadian approach to COIN or stabilization operations. This void from both a joint and single service avenue firmly leaves the Canadian collective doctrinal understanding of air power employment in COIN relegated to the roles the army has defined.

NATO COIN Doctrine. NATO provides common doctrinal guidance for allied COIN operations through its publication AJP-3.4.4 “Allied Joint Doctrine for Counterinsurgency” February 2011.⁶⁹ The NATO document is not only for guidance on the nature and complexities of COIN and planning considerations for allied forces and commanders, but is also intended for informing civil actors, organizations and host nation governments on what military forces can contribute to a comprehensive approach.⁷⁰ AJP-3.4.4 details air power contribution to COIN through a four-page section within Chapter 5 that specifies the military contribution.⁷¹ As an operationally and tactically focused doctrine document, the role of air power is appropriately addressed and correctly focuses on air power use to meet the campaign needs, not solely the needs of the ground forces – an important distinction. The role of air power includes the integration of host nation air capability into the campaign as well as building host nation air power capability. However, it stops short of addressing the role of air power in support of and contribution to other operations that establish and maintain host nation legitimacy, authority and human security.

Conclusion

To develop an informed position of air power and its use effective use in COIN necessitates grasping the nature of insurgency, the role of doctrine and determine what doctrine

⁶⁸ See RCAF doctrine publications available online at: <http://www.rcaf-arc.forces.gc.ca/en/cf-aerospace-warfare-centre/aerospace-doctrine.page>

⁶⁹ NATO AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*.

⁷⁰ *Ibid.*, xiii.

⁷¹ *Ibid.*, 5-29 – 5-32.

exists. In doing so, this chapter established terms and phrases that will be used throughout this paper, specifically addressing an understanding of what air power and doctrine are and what COIN is and the principles that define it. Doctrine for Australia, Canada, the US and NATO determines firstly what COIN doctrine is actually in existence and secondly what credence or understanding is applied to air power in a COIN campaign within that doctrine. It is somewhat surprising to find such large gaps in COIN doctrine existing for Australia and Canada and the understanding of and use of air power in those countries as well as the Joint US doctrine. Why this is surprising is that these countries, alongside of other coalition partners and NATO, have been actively conducting COIN operations in support of several host nations in recent decades.

There can be little doubt that good progress has been made throughout these campaigns in the use of air power in support of ground COIN operations. However, there are still areas of air power use in full support and integration of COIN operations that have not been well progressed or understood in employment and all for the lack of good doctrinal guidance. The responsibility of addressing this scarcity of meaningful doctrine in both the single service and joint doctrinal arenas belongs to airmen.⁷² The next Chapter will explore the use of air power in COIN operations and lay out key air power capabilities that serve a COIN campaign and how these capabilities are used, both effectively and ineffectively.

⁷² Smyth, *Airpower and Counterinsurgency Building on a Proper Foundation*, 124.

CHAPTER 2

USING AIR POWER IN COUNTERINSURGENCY OPERATIONS

Introduction

The COIN battle is a political one that requires a joint and interagency comprehensive approach to win it. History has demonstrated that whilst air power in and of itself does not provide a solution to COIN it certainly has a crucial part to play in an overall COIN strategy.⁷³ This chapter will first identify and discuss key capabilities that air power contributes to a COIN campaign and the methods in which nations provide platforms and resources to deliver those capabilities. It will then explore through a series of vignettes examples of air power use in historical COIN campaigns and the success or otherwise of air power employment and the overall result of that COIN campaign.

Key Air Power Capabilities in COIN

Consistently throughout historical accounts and academic introspection the use of air power in COIN provides four key functional elements: air mobility, strike, ISR and Command and Control (C2).⁷⁴ To a government battling an insurgency these capabilities provide methods to overcome the insurgent's natural asymmetric advantage and deliver the government their own advantage. Doctrinally many of these historical lessons have been learnt and incorporated. Both single service and joint doctrine acknowledge the importance of air power the benefits it brings in

⁷³ James S Corum, "Air Power and Counter-Insurgency: Back to the Basics," in *Air Power, Insurgency and the "War on Terror,"* ed. Joel Hayward, 209-222 (Cranwell: Royal Air Force Centre for Air Power Studies, 2009), 222.

⁷⁴ Allen G. Peck, "Airpower's Crucial Role in Irregular Warfare," *Military Technology*, 32 Issue 3 (2008): 21.

these key areas.⁷⁵ However, doctrinal gaps still exist and will be discussed in more depth here and in later chapters.

Air Mobility. Insurgents have an advantage of choosing when and where to strike and seek to maximize the natural asymmetry that this provides.⁷⁶ Often these attacks are geographically widespread and targeted in remote areas. The ability to effectively respond to attacks and pursue the insurgents in a timely manner is a massive challenge for a government. Air mobility provides a capability of rapid response and largely negates the geographical boundaries and challenges by which ground bound forces are restricted.⁷⁷ The ability to quickly respond is paramount in providing the population a sense of security and reassurance that the government views them as important and remains a credible authority.

The ability of the insurgent to choose when and where to fight also provides a great economic and resource burden upon a government. In order to provide preventative or response forces it would be necessary to have large numbers of ground forces in many locations at great expense and effort. However, air mobility greatly reduces this burden by exploiting the air power characteristics of reach and speed to shrink the tyrannies of distance and time and emplacing troops and support direct to the areas affected in rapid time.⁷⁸ Similarly, when combined with intelligence, ground forces (both law enforcement and military as required) can be mobilized into areas to provide security and preventative measures. Air mobility also provides means and

⁷⁵ US Department of Army, Field Manual 3-24 *Counterinsurgency Operations* (Washington, DC: HQ Department of the Army, 2008), appendix E; Australia, Australian Army, Land Warfare Doctrine LWD 3-0-1 *Counterinsurgency* (Canberra, ACT, 2009), 4B-1 – 4B-6; North Atlantic Treaty Organization, AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency* (Brussels: NATO Standardization Agency, February 2011), Ch VII; Canada, Department of National Defence, B-GL-323, *Counterinsurgency* (Ottawa: Chief of the Land Staff, 2008), Ch 5; Australia, Royal Australian Air Force, Australian Air Publication AAP 1001.2, *The Air Force Approach to Irregular Warfare* (Canberra, ACT: Air Power Development Centre 2011); and United States Air Force, Air Force Doctrine Document 2-3 *Irregular Warfare* (Washington, DC: USAF Chiefs of Staff, 1 August 2007).

⁷⁶ David Galula, *Counterinsurgency Warfare: Theory and Practice* (London: Praeger, 1964), 5.

⁷⁷ Peck, *Airpower's Crucial Role*, 17.

⁷⁸ NATO AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*, 5-30.

methods of securing lines of communications and community support that may otherwise be compromised by insurgents through the targeting of road and transport infrastructures. The airlift of logistic infrastructure, supplies and medical support is a massive asymmetric advantage to a government as it allows continued access to areas, tasks and to the population despite insurgent attempts to deny or control them.⁷⁹ The effect on the population of this assured government support is not to be underestimated in importance as part of the whole of government COIN strategy.

Strike. Strike, or precision engagement, provides a government with a third dimension capability of speed, range and lethality against insurgents and their actions. The ability to strike using firepower far in excess of what the insurgent can mount is a very powerful asymmetry and it must be used carefully and in proportion. This capability can greatly limit an insurgency's ability to mount large-scale operations or develop command and logistics infrastructures, as strike is most effective against nodes of operations and when insurgent forces operate in a conventional manner.⁸⁰ The threat and use of a persistent and highly lethal strike capability works two dimensionally for a government. It has an overwhelming rapid, lethal and game-changing capability against an insurgent activity but it can also cause collateral damage. The threat of strike is ever present for an insurgent and as such they need to undertake tactical measures in attempts to negate it.

Historical responses from insurgencies has been to operate logistics, forces and commands in decentralized structures to minimize the effectiveness of strike, as well as to hide or amalgamate into the population in an attempt to be indistinguishable from them and therefore

⁷⁹ Norton A. Schwartz, "Airpower in Counterinsurgency and Stability Operations," *Prism* 2, no. 2 (2011), 128.

⁸⁰ USAF AFDD 2-3 *Irregular Warfare*, 44.

minimize the strike threat.⁸¹ Strike engagements in COIN operations are most effective when employed against legitimate and verified targets using proportionate and accurate weapons. As such, strike is inextricably linked to the need and use of good intelligence as well as careful planning and execution using as precise weapons as available and skilled airmen. Strike is a critical enabler in the joint COIN environment, allowing rapid mutual support of ground forces in operations. This can effectively reduce the manpower density required, thereby allowing greater geographical coverage by ground forces.⁸²

Strike can produce different effects upon the population and its use must be carefully considered. Any strike engagement carries with it the possibility of collateral damage and subsequently damage to the support of the population for the government's actions. Insurgents seek to destroy government credibility and support by aggressive propaganda when any collateral damage occurs. The extent or even the truth of the damage is inconsequential to the insurgent narrative and this is often an argument against the effectiveness of air power in COIN operations and in particular in the urban environment.⁸³ However, strike does have a legitimate and powerful role to play in COIN in both rural and urban environments. Many advancements and developments of weapons such as the Small Diameter Bomb (SDB) and GPS guided bombs are relatively discriminatory in their effect and greatly limit collateral damage.⁸⁴ The effective use of strike in COIN lies directly with the coordination of good ISR, planned and discriminate use, and an effective government information operation that is consistent with truth and the whole of government operation to counter insurgent propaganda.

⁸¹ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 4-24 – 4-25.

⁸² NATO AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*, 5-30.

⁸³ Rachel Mourad, "Air Power in Irregular Warfare: lessons from Operation CAST LEAD" *Australian Defence Force Journal*, Issue No 191 (2013), 100.

⁸⁴ Charles J. Dunlap Jr, *Shortchanging the Joint Fight? An Airman's Assessment of FM 3-24 and the Case for Developing Truly Joint COIN Doctrine* (US Air Force Air University 2008), 20-21.

Intelligence, Surveillance and Reconnaissance. A central tenet to any COIN campaign is the need for good intelligence. The traditional mantra is that human intelligence (HUMINT) is the most important and fundamental type of intelligence that best serves a COIN operation.⁸⁵ As critical as HUMINT is, it is but one part of the larger ISR picture; and air power is extremely well placed to deliver in all facets. Air power provides governments an ISR capability covering the domains of geospatial, signals, measurement and signature analysis, and sensor processing and exploitation. As well as collecting information, air power provides analysis, synthesis and integration of information from airborne platforms with other sources to provide a detailed and integrated intelligence picture.⁸⁶ A major contributor to air power's effectiveness is the ability to provide persistent and pervasive ISR coverage across very large areas, enhancing situational awareness by informing commanders and governments of the environment in next to real time.⁸⁷

The range of technology and platforms used to conduct ISR is extensive. It can be modified and customized to achieve the best results given the resources and skill levels present in the host nation or assisting countries. Expensive and advanced platforms such as ISTAR⁸⁸ may be beyond reach, but there exist more economic platforms such as the modified King Air 350 MC-12W aircraft (Figure 2.1). Some of the greatest air power ISR capability is delivered through the use of unmanned aerial vehicles (UAV) or drones. These platforms vary in size from man portable weighing less than five kilograms to full-sized aircraft armed with weapons. The economics, flexibility and configurability of these platforms allow a vast range of ISR capabilities to be fielded and exploited in a persistent manner. Targeted and persistent ISR

⁸⁵ *Ibid.*, 49-50.

⁸⁶ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 4-10.

⁸⁷ USAF AFDD 2-3 *Irregular Warfare*, 30-31.

⁸⁸ ISTAR – stands for information, surveillance, target acquisition and reconnaissance. Variants are built in different airborne platforms but are typified by aircraft and systems such as the USAF's E-8 based on a B707 airframe.

enables the ability to restrict the freedom of movement of insurgents through an AO or neighbouring borders, and within the general population. It also exposes insurgent support and logistics structures both locally and beyond.⁸⁹ ISR derived from air power provides a government with developments and changes in social, political and economic factors relative to the specific regions where COIN is being conducted.⁹⁰ In effect, this provides a barometer to measure population intent and will in response to both government and insurgent actions. ISR is an enabler for other air power capabilities such as strike, integrating with HUMINT for targeting cycles in determining and striking insurgents and their support. ISR also serves as an enabler for other COIN activities such as joint operations in policing and military ground forces.



Figure 2.1 - MC-12W⁹¹

Source: RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 2-22.

Command and Control. The correct C2 structure and employment of air power is not a unique feature to COIN. However, there are several aspects of C2 within COIN that must be understood and used effectively for air power to meet its potential. Central to understanding is

⁸⁹ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 4-11.

⁹⁰ *Ibid.*; and USAF AFDD 2-3 *Irregular Warfare*, 30.

⁹¹ MC-12W Liberty is a modified Hawker Beechcraft King Air 350 or 350ER designed as a specific USAF ISR capability for IW operations

that air power is structured and purposed for strategic objectives and meets these objectives through tactical execution. This is what derives the well-known and oft used air power tenet of “centralized control with decentralized execution.”⁹² In COIN this tenet is paramount in the use of air power to serve the overall strategy. COIN is a political battle and requires a strategy and campaign that deals with all aspects of the root causes and not just the use of military operations to secure the population. Air power has a substantial role to play in government operations for support and benefit of the population that exist outside of the immediate security and military component or phase of a COIN campaign.⁹³ In COIN, air power will be used in joint, combined and humanitarian operations, medical support and evacuation, government social support programmes and in support and assistance to Non Government Organizations working in the region for the population.⁹⁴

Air power assets are a finite resource and are relatively complex and expensive to employ. Many of the same aerial platforms and personnel will be multi tasked to conduct varied operations in several different parts of an AO given the complex and adaptive nature of COIN. It is therefore vital that the co-ordination and allocation of these assets occurs in a manner that serves the central, strategic plan and as opposed to being “penny packeted” to tactical operations only.⁹⁵ As difficult as it may be for a ground commander to understand why they are not allocated the airlift support needed for resupply along a safer route, the operational picture may call for that airlift to be tasked for civilian medical evacuation in another area or for food drops to isolated pockets of the population. C2 is fundamental to getting the right asset for the right job at

⁹² Canada, Department of National Defence, B-GA-400-000/FP-000, *Canadian Forces Aerospace Doctrine* (Winnipeg, Manitoba: Air Force Doctrine and Training Division 2nd Edition, December 2010), 58 and Peck, *Airpower's Crucial Role*, 17.

⁹³ Peck, *Airpower's Crucial Role*, 21.

⁹⁴ NATO AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*, 5-32.

⁹⁵ USAF AFDD 2-3 *Irregular Warfare*, 9.

the right time in support of the unity of effort required in COIN from all elements of the government including military, law enforcement and social efforts.⁹⁶

The astute reader will have observed that there appears to be two fundamental roles and capabilities of airpower in COIN, previously identified in NATO, USAF and RAAF⁹⁷ doctrine that have not been addressed here. Namely the enabling of host nation air power capability and air power support roles outside of a direct security contribution that contribute to the overall COIN strategy. These key air power functions and capabilities are largely missing from joint doctrine, and also to an extent from single service doctrine. To further expand on the importance of these air power functions and their criticality to a COIN strategy they will be discussed in their own right in the chapter 3.

Allocating Air Power Resources in COIN

Determining the amount and type of air power resources to be used or allocated to conduct a COIN campaign is not a direct simple formula. Rather there are many factors that determine what assets to use, when they are to be used and how to use them. The basic premise is that throughout a COIN campaign air power should be employed across all areas of air mobility, strike, ISR, C2, partner building and government support to population, but in varying degrees and proportions. The aim is to have the air power effort serve the overall political strategy and not solely the military component. In reality the major overriding factor of what air power resources to employ in a COIN operation is as pragmatic as first determining what resources are actually available to the host and supporting nations and then adapting this as best able for the needed roles.

⁹⁶ Alan J. Vick, *et al.*, *Air Power in the New Counterinsurgency Era. The Strategic Importance of USAF Advisory and Assistance Missions*. RAND Corporation, 2006, 111.

⁹⁷ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*; and USAF AFDD 2-3 *Irregular Warfare*.

As discussed in the introductory chapter, a nation builds its air power to the budget it can afford and determines capability acquisitions to best match its identified national objectives and perceived security threats. This means that different nations will have different platforms and capabilities across their inventories that have been optimized for dealing with that nation's perceived threats. Very few nations have specifically identified COIN as a major consideration when configuring their armed forces, with perhaps the exceptions of Indonesia and Colombia.⁹⁸

The practicality of this means that building an air power component to a COIN operation requires an understanding of what capabilities exist within the host nation, what is needed and how to adapt the air power available to meet these needs.⁹⁹ When acting as a supporting nation it is essential to plan that wherever possible host nation air power is used to its fullest extent either independently or in combined operations. The essence of COIN is the battle for the population; continual and over extended use of foreign air power runs the very real risk of having a major negative outcome for the host nation. If air power is predominantly overtaken and run by an outside nation or coalition, the host nation government's perceived authority and capacity to provide for its people is open to question and the chances of resentment of the population against the foreign powers and the government rise.¹⁰⁰

As COIN is a complex and protracted affair, the air power capability needs throughout will not remain static but are an ever changing dynamic. To compensate for this it is essential that a robust C2 system be in place to determine individual area needs, overall strategy needs and match these with a thorough understanding and knowledge of asset availability, sustainability and

⁹⁸ Maj Thomas E Sidwell, *The Indonesian Military: Dwi Fungsi and Territorial Operations* (Fort Leavenworth, KS: Foreign Military Studies Office, 1995) <http://fas.org/irp/world/indonesia-fmso.htm>; and Col Alberto Mejia, *Colombia's National Security Strategy, A New "COIN" Approach* (Carlisle Barracks, PA: US Army War College, 2008).

⁹⁹ David Glasson, "Big War Air Power for Small War Operations," *The Royal Canadian Air Force Journal*, 3, no. 1 (Winter 2014): 17-18.

¹⁰⁰ James S Corum and Wray R. Johnson *Air Power and Small Wars: fighting insurgents and terrorists* (University Press of Kansas, 2003), 437.

durability. Actual air power support needs of the host nation will vary as the COIN moves through various phases both regionally and as an overall campaign. Often it is neglected that early within a COIN campaign the best air power support to a host nation is usually outside of a direct violent military response. Rather it comes in the form of either equipping a host nation to conduct aid and resource missions to the population or directly flying these missions in a combined and joint agency manner. These missions serve to directly target the root causes of social, economic and political issues early on.¹⁰¹ The host and supporting nations must be prepared for the use of the full spectrum of air power in order to provide security for the population as the COIN moves across phases.

The protracted nature of COIN places a large burden on a nation's ability to resource and maintain effective air power for the duration of a conflict. This is one of the many reasons a host nation will seek outside support for access to air power resources it either does not have or cannot sustain. The role of supporting nations is not to take over this job from the host nation but to actually bridge this resource and sustainment gap and assist in rebuilding it if necessary. It is in this role that there exist large gaps in joint and single service doctrine.¹⁰² As discussed in chapter 1, the only existing doctrine that deals with this as an air power role in any meaningful manner is the USAF AFDD 2-3.¹⁰³ The Australian AAP 1001.2¹⁰⁴ makes efforts to reference and detail this role but is quite limited in its approach. RCAF doctrine in this air power role is non-existent. Most worryingly is the lack of any serious acknowledgment of this in joint publications across all countries or NATO. Predominantly, single service and joint doctrine focus on how to employ

¹⁰¹ Vick, *et al.*, *Air Power in the New Counterinsurgency Era*, xvi.

¹⁰² Corum, *Air Power and Counter-Insurgency: Back to the Basics*, 219.

¹⁰³ USAF AFDD 2-3 *Irregular Warfare*, Ch 3.

¹⁰⁴ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, Ch 5.

their own air power to win the COIN battle by themselves and largely neglect any focus on host nation air power.

To field sustainable and effective air power for the duration of a COIN campaign requires more than the adaption of current highly advanced, highly technological assets and weapons that are found in the inventories of most modern air forces. Often COIN is an issue that faces less developed nations¹⁰⁵ and these assets are often simply beyond them to own and operate. Similarly, it is not in the interests of supporting nations to commit highly resource intensive assets for long durations and bear this cost burden for a protracted COIN campaign. What is needed is a right mix of lower cost and perhaps lower tech solutions used in combination with high tech systems where available and appropriate.

Whilst assisting nations and coalitions such as Canada, US, Australia and NATO boast inventories of highly advanced aerial platforms and weaponry, it is not feasible that a host nation can procure and operate such capabilities in the time frames necessary to conduct the COIN. Neither is it desirable to place all efforts in trying to achieve this. In most cases it is far more realistic and advantageous to look to less advanced platforms and inventories that can be easily adapted, readily sustained and operated by a less developed host nation air force.¹⁰⁶

The adaption of available civil transport aircraft such as the Cessna Caravan (Figure 2.2) can prove to be an ideal and flexible air mobility asset. It could be readily adapted to provide a multitude of roles including troop transport, medevac, SAR, government transport and humanitarian assistance; or even for offensive capabilities such as a modified light gunship for CAS. There also currently exist programmes to develop robust but less advanced aerial platforms

¹⁰⁵ James D. Fearon and David D. Laitin, "Ethnicity, Insurgency and Civil War" (Stanford University CA: August 20, 2001), Case List. <https://web.stanford.edu/group/ethnic/workingpapers/apsa011.pdf>

¹⁰⁶ Brigadier-General Michael R. Borea, "Building Air Power for Afghanistan: A Team Effort." *Canadian Air Force Journal* 3, no. 1 (Winter 2010): 13, 18.

in recognition of the gaps that exist between available platforms and needs for host nations engaged in COIN. As previously mentioned, the US is developing and operating the MC-12W aircraft designed specifically for ISR in COIN and IW. Other aircraft such as the Embraer A-29 Super Tucano (Figure 2.3) or the US Aircraft Corp concept aircraft A-67 Dragon (Figure 2.4) can provide cost and training effective solutions to strike, CAS and ISR platforms that can be within the reach of less developed air forces.¹⁰⁷



Figure 2.2 - Cessna Caravan¹⁰⁸

Source: http://textron.vo.llnwd.net/o25/CES/releases/CQVU_0002.jpg

Regardless of the platforms and systems used and their levels of advancement, the primacy in the use of air power in COIN must always be focused on the objective of supporting the greater political strategy. All of the firepower on hand does not guarantee COIN success; and

¹⁰⁷ Corum, *Air Power and Counter-Insurgency: Back to the Basics*, 220-221.

¹⁰⁸ Cessna 208B Grand Caravan in service with Forca Aerea Brasileira built by Cessna Aircraft Corporation Textron Inc.

neither does having limited access to all but older and adapted platforms mean defeat. Air power alone does not guarantee success but it is a proven critical enabler of providing asymmetric advantage to a government in both military and non-military arenas of the COIN campaign.¹⁰⁹



Figure 2.3 - A-29

Source: <http://www.embraer.com/PublishingImages/press-releases/Super%20Tucano.jpg>

¹⁰⁹ Corum, *Air Power and Counter-Insurgency: Back to the Basics*, 222.



Figure 2.4 - A-67 Dragon

Source: https://www.strategypage.com/gallery/images/a_67_dragon.jpg

Air power in COIN Vignettes

With a rich history of air power use across the twentieth and twenty first centuries there are ample historical records to explore the success or otherwise of its use and the overall outcomes. This section will look at a brief selection of COIN campaigns through vignettes to provided examples of how air power has been used, what impact it had and what the overall result was in the COIN campaign. These vignettes will demonstrate that air power has been instrumental in COIN campaigns, but also show that even the adherence to best air power practices does not guarantee COIN success.

Nicaragua 1927-1933. An insurgency led by Augusto Sandino saw the US commit to intervention in support of the government in 1927 and the first use of US Marine Corps (USMC) aviation in support of COIN operations. This was a groundbreaking operation with the

development of many new tactics, techniques and procedures that would endure and shape the thinking of aviation operations in COIN for decades to come.¹¹⁰ The USMC was revolutionary in the planning and execution of new tactics and developed the first real joint operational planning and execution mechanisms for operation during the campaign. The results were immediate and stunning and the asymmetry of rapid response and overwhelming firepower from air power were delivered to the Nicaraguan government. The USMC as part of their air campaign employed all identified key capabilities of strike, air mobility, C2 and ISR. However, despite this overwhelming advantage the operation is classed as failure and air power played a central part in that failure.¹¹¹

The USMC took seemingly little care in making efforts to distinguish between insurgents and the regional Segovia population. Despite rules of engagement promulgated to meet the stated US position of being in Nicaragua to protect the civilian population, the reality did not match. The marines viewed all of the Segovia as a potential insurgent and therefore a legitimate target, as all of their actions appeared suspicious to the marines.¹¹² The resultant attacks from the air wreaked devastating damage to the people and their infrastructure. The USMC air power had become a form of air terrorism and alienated the people from the government and drove resentment against the gringo invaders.¹¹³ The use of air power had effectively become a tool against the political strategy of securing and winning over the population against Sandino and his ‘bandits.’ USMC air power and actions drove the support of the regional population to the

¹¹⁰ Richard Grossman, “Looks Suspicious: The US Marines Air Campaign against the Sandino Insurgents of Nicaragua 1927-1933,” in *Air Power, Insurgency and the “War on Terror,”* ed. Joel Hayward, 83-96 (Cranwell: Royal Air Force Centre for Air Power Studies, 2009), 83.

¹¹¹ *Ibid.*, 83, 87.

¹¹² *Ibid.*, 91.

¹¹³ Kenneth A. Jennings, “Sandino Against The Marines: The Development of Air Power for Conducting Counterinsurgency Operations in Central America” *Air University Review* (July-August 1986).
<http://www.au.af.mil/au/afri/aspj/airchronicles/aureview/1986/jul-aug/jennings.html>

insurgency. Ultimately the insurgency ended in a political stalemate that saw Sandino seemingly achieve the nationalist independence he desired with the withdrawal of the US from the country.

El Salvador. El Salvador experienced a bitter insurgency from 1981 to 1992 that saw major disruption to the civilian population and many deaths. The government largely sought to gain and maintain legitimacy through a coercive campaign and air power had a major role to play throughout. The Salvadorian government largely employed their own air power with limited direct action by any assisting nations; however the US did majorly assist in the air power success through its use of advisors, trainers and the provision of equipment.¹¹⁴

The El Salvador case study is a good example of getting the use of air power in COIN right, in particular when it comes to the role of an intervening nation.¹¹⁵ The US made a clear and distinct decision to not fight the war to win it for the Salvadorian government but to assist them to win it for themselves. In this empowering approach, air power from the US was provided through the rebuilding, training and equipping of the Salvadorian Air Force (FAS – Fuerza Aerea El Salvador), which transformed it into a credible and effective COIN force.¹¹⁶ The transformation of the FAS was a major turning point to the COIN campaign. Armed with the right skills and equipment, the government now possessed force multipliers¹¹⁷ of air mobility, strike, medevac and ISR that immediately increased their effectiveness in operations and pressured the insurgents, forcing them to change tactics.¹¹⁸ Importantly, as an intervening nation the US also pursued policies in El Salvador that not only equipped and trained the government

¹¹⁴ Corum, *Air Power and Counter-Insurgency: Back to the Basics*, 220.

¹¹⁵ *Ibid.*

¹¹⁶ Glen Beck, “Offensive Air Power in Counter-Insurgency Operations: Putting Theory into Practice” *Working Paper 26* (Canberra, ACT: Air Power Development Centre, 2009), 10.

¹¹⁷ A capability provided to a combat force that enhances the probability of success in mission accomplishment. Definition from Glossary of B-GA-400-000/FP-000, *Canadian Forces Aerospace Doctrine*, available at <http://www.rcf-arc.forces.gc.ca/en/cf-aerospace-warfare-centre/doctrine/b-ga-400-000-fp-000-glossary.page>

¹¹⁸ Corum and Johnson, *Air Power and Small Wars*, 336-337.

forces, but also sought to address many of the root causes. In tandem with its military support the US directly pursued the Salvadorian government to implement land reform programmes, political reforms for honest elections, disbandment of killing squads, economic programmes and reforms against human rights abuses.¹¹⁹ This two pronged approach by the US helped establish and sustain the legitimacy of the Salvadorian government, equipping it with effective security, policing and military means to secure the population.

Operation Cast Lead. Operation Cast Lead was conducted from December 2008 through January 2009 in response to intensified activity from Hamas. The Israeli Defence Force (IDF) was tasked with conducting an operation to pressure Hamas to cease attacks and secure a long period of security and stability in the Gaza strip. The IDF used air power extensively in a coordinated campaign involving a “shock and awe” initial phase of strike and followed by an air and land phase to secure and hold the AO. Militarily the air power had excellent C2 with extensive use of high precision weapons and an unprecedented level of high quality and pervasive ISR.¹²⁰ The strikes achieved great military success, decimating Hamas training camps, resources, supply routes through tunnels and greatly limited Hamas’ ability to continue with aggression.

Hamas sought to negate the overwhelming asymmetric firepower advantage of the IDF by operating within the civilian population and taking the fight to predominantly urban regions. Even with the use of precision weapons the collateral damage was very high with reports of there being over 1300 Palestinians killed and 4000 homes destroyed.¹²¹ There were also continual reports of the IDF deliberately targeting civilians in the campaign. The veracity of these reports and the actual extent of collateral damage were never truly established as Hamas expertly

¹¹⁹ *Ibid.*, 332.

¹²⁰ Mourad, *Air Power - Lessons from Operation CAST LEAD*, 101-102.

¹²¹ Operation Cast Lead <http://www.globalsecurity.org/military/world/war/operation-cast-lead.htm>

employed insurgent tactics of a highly provocative and emotive propaganda campaign that the world media widely reported. Israel mounted a counter public relations campaign demonstrating Hamas exploiting the Palestinians, deliberately operating from within them and making them targets. Israel also provided many resources and aid directly to the Palestinians. However, these stories did not gain traction and the propaganda war was lost.¹²²

Hamas exploited the collateral damage from air power to effectively erode the legitimacy of the Israeli government. Militarily the operation was successful in employment of air power in a COIN environment. However, the overall strategy failed due to being devoid of any elements that addressed root causes of the insurgency. Without a strategy of fighting for the Palestinian population, the operation was viewed as a battle against them and Israeli government legitimacy was rejected.¹²³

Vignette Analysis

There are clear lessons to be taken from these examples and history that need to be learned and codified into doctrinal practice. In all cases air power proved to be a comprehensive advantage to the government and produced asymmetric effects that needed to be understood and wielded with great care. Air power use throughout was continually evolved, adapted and integrated into operations in real time with excellent military results. Both high and low-tech air power resources have their place and use in COIN. When acting as a supporting nation, there is a greater benefit in having a long-term focus on developing air power host nation rather than do the job for them. In all cases, either using the air power as the government conducting COIN or when supporting a host nation, it is absolutely paramount that the overall political strategy is served.

¹²² *Ibid.*

¹²³ Mourad, *Air Power - Lessons from Operation CAST LEAD*, 102,104-105.

Air power use in any other manner will likely yield excellent military results but may ultimately contribute to the loss of the COIN campaign.

Conclusion

Air power use in COIN does not solely provide a solution but does play a key role in whole of government strategy. This chapter identified four key air power capabilities and functions within any COIN campaign, those capabilities are: air mobility, strike, ISR and Command and Control (C2). Each of these air power functions is instrumental in overcoming disadvantages that a government faces when combating an insurgency. Simultaneously, air power provides the government with its own asymmetric advantages that the insurgent cannot match. The resource ability of a government to operate and sustain air power effectively throughout a COIN battle may be minimal. Nations will often seek assistance from other nations or coalitions to supplement and supply air power capability as part of the COIN strategy. Supporting nations need to carefully allocate these air power resources in a manner that is efficient, empowering to the host nation and sympathetic to the overall COIN strategy and does not purely serve the military component.

A series of vignettes exploring the application of air power in historical COIN campaign highlight the success or failure of the air power implementation. These vignettes demonstrated that successful air power application alone is not enough for COIN success. Rather, air power is but one part of the overall COIN strategy and should not solely viewed in a military context. The next chapter will explore the use of air power in COIN operations that lay outside of direct military and security operations but seek to empower and enhance the capabilities and legitimacy of the government battling an insurgency.

CHAPTER 3

EXTENDING THE MINDSET

Introduction

The predominant theme throughout the COIN doctrine examined in previous chapters has firmly cast air power in a manner that focuses on conducting war fighting in a COIN operation. Current doctrine largely ignores detailing strategies and applications of air power in methods for war ending operations that compliment a whole of government approach and building host nation legitimacy and capability.¹²⁴ Certainly it is important to determine methods of how the military fight will be carried to the insurgents, and this is well covered. However, this is only half of the battle. Missing from COIN joint and air power doctrine is a focus on the use of air power for the population and host nation governance and in particular, non-kinetic air power use. This chapter will detail air power applications in COIN operations that address this doctrinal void, specifically focusing on air power use in the building of host nation government legitimacy and building host nation air power capabilities.

Government Legitimacy Operations – The Softer Use of Air Power

A COIN strategy must focus on addressing more than military operations; it needs to also address root causes and underlying situations that have caused the unrest. Within an insurgency there may be three generalized population groups: a minority who are active supporters of the insurgency; another minority who are active against the cause; and an uncommitted majority who ultimately want peace and security.¹²⁵ It is logical then to focus on meeting the human security¹²⁶

¹²⁴ Colonel John Andreas Olsen, “The Quest for a New Airpower Strategy.” *Air & Space Power Journal* 29, no. 3 (May-June 2015): 32-33. <http://www.airpower.maxwell.af.mil/digital/pdf/articles/2015-May-Jun/F-Olsen.pdf>

¹²⁵ John W. Bellflower, “The Soft Side of Airpower.” *Small Wars Journal*, (2008), 3 <http://smallwarsjournal.com/jrnl/art/the-soft-side-of-airpower>; and David Galula. *Counterinsurgency Warfare*:

needs of this majority as part of the COIN strategy. This is focused to gain the population majority acceptance of governing legitimacy and reduce the impact of the stated insurgent causes.

There are many roles for air power to play in meeting the human security needs of the population majority. Any COIN strategy of a host nation and any intervening or supporting nation/coalition must seek to integrate and use air power directly in soft¹²⁷ roles and not solely in military and security operations targeting insurgents. The question is what would the soft use of air power look like? This study proposes that there are two main avenues of soft air power use to pursue as part of a COIN strategy. Firstly, they can consist of operations that meet immediate physical and psychological needs, such as directly addressing issues of food security, access to health services and establishment and maintenance of rule of law. Secondly, air power can be used to enable and address longer term solutions on matters such as regional economic welfare, good systemic governance and regional connectivity.

The capability of air power provides a government with the ideal tools to reach and service its population. A most basic need such as food security is a very powerful physical and psychological factor that a government can address without major difficulty. Air power can establish and maintain food relief to regions using well understood and practiced humanitarian and disaster relief (HADR) methods. The focus of these missions is that this is a host nation government response to the needs of its people. It is possible and acceptable that these operations

Theory and Practice (London: Praeger, 1964), 56.

¹²⁶ Human security is a people-centred concept entailing an understanding and treatment of threats to individuals and a collective society that left untreated threaten to diminish human life to below an intolerable threshold. These threats occur in areas of economics, food, health, political, environmental, personal and collective security. See United Nations Human Security Unit, *Human Security in Theory and Practice. An Overview of the Human Security Concept and the United Nations Trust Fund for Human Security*, New York, USA, 2009, 56. http://www.un.org/humansecurity/sites/www.un.org.humansecurity/files/human_security_in_theory_and_practice_english.pdf

¹²⁷ The author has constructed a definition of soft air power here for use throughout the paper as: non-kinetic air power roles that are specifically undertaken to meet the human needs of a population and enhance the attractiveness (or soft power) of the host nation government to its population. For a full definition of soft power see Joseph Nye. "Power and Foreign Policy." *Journal of Political Power* 4, no. 1 (April 2011).

could be solely conducted by assisting nations' air power and resources under clearly announced and practiced host nation government direction. Ideally though these operations would be host nation or combined operations where the government profile amongst the population is clearly visible in order to reinforce legitimacy.¹²⁸



Figure 3.1 – PNG Air Force Food Relief to Tabubil in cooperation with MAF

Source: Missionary Aviation Fellowship, “MAF begins food relief flights to famine-hit Papua New Guinea.” Posted November 12, 2015, last accessed 7 October, 2016. <https://www.maf.org.au/latest-news/maf-begins-food-relief-flights-to-famine-hit-papua-new-guinea/>

Food security is not solely about providing foodstuffs in response to an immediate crisis. It also entails identifying and responding to regions where food or crop stress is impacting or likely to impact the population. Air power has an important and developing role to play in this as well. Satellite and UAV technologies have been developed that allow active weather, crop and

¹²⁸ David Glasson, “Hard Decisions For Soft Aerospace Power” (master’s thesis, Canadian Forces College, 2011-2012), Ch 3, Ch 6.

soil monitoring operations to be conducted with accuracy and timeliness.¹²⁹ By employment of this air power, a government will be capable of assisting and providing to the population information and resources to respond to crop diseases, soil moisture or salinity changes and weather phenomena like storms or flooding that are likely to have an impact on food production and human security.¹³⁰ The application of air power in this way serves the second avenue of promoting long-term regional economic strength and viability through resource management. Through the meeting of immediate physical needs and longer-term community wellbeing, there are also positive psychological impacts upon the population. The population majority is more likely to support a government who is actively engaged in meeting their needs and invested in them than they are to support insurgent ideologies and action that can threaten their levels of security.¹³¹

Similar in action and delivery to meeting food security needs are the needs and desires of a population to have quick and ongoing access to health services. Air power is ideally placed to bring mobile health clinics and health services to geographically or security challenged regions or remote locations.¹³² Health access is a crucial population need and air power provides cost effective means of delivering it to the population through mobile teams who can be deployed from central locations. Similarly all stores and major health facilities can be centrally located, simplifying logistical and resource demands for the government. From these central locations the population can be quickly and routinely serviced by air power, bypassing security or

¹²⁹ There are numerous government research/scientific organizations and commercial operators who currently are developing and providing UAV services specifically for crop and soil management. See for example the company “senseFly.” <https://www.sensefly.com/applications/agriculture.html>

¹³⁰ Olsen, “The Quest for a New Airpower Strategy,” 36.

¹³¹ *Ibid.*, 31.

¹³² The Royal Flying Doctor Service (RFDS) in Australia is an example of an organisation that routinely provides fly in medical clinics to remote populations in the vast outback of Australia that are geographically isolated and economically disadvantaged from being able to access health services. <https://www.flyingdoctor.org.au/what-we-do/clinics/>

geographical boundaries that may exist on the ground environment between the regions and the central facilities. Coordination and execution of these services is ideally serviced by the air power practice of centralized command and decentralized execution. The use of air power in this role is not limited to flying doctors and nurses in and transporting patients. Developments are being made regularly in the areas of preprogrammed UAV services to communities in the medical arena. This includes the use of UAVs to deliver medicines to communities or collect and transport laboratory specimens samples back to the central area health centres for processing.¹³³ Air power is invaluable in providing communities access to emergency medical responses. These types of operations are usually termed “mercy flights” and access to them provides a tangible impact upon the morale and well being of communities.¹³⁴



Figure 3.2 – ‘Flirtey’ UAV Delivering Medical Supplies for RAM

Source: Richmond Times Dispatch, *Drones Deliver Supplies to Remote Area Medical Clinic*, last accessed 8 October, 2016. http://www.richmond.com/news/virginia/collection_3c1858f4-db08-5218-9140-f46aa953ebae.html

¹³³ ViralPortal, “Drones Can Now be Used to Transport Laboratory Specimens To Remote Medical Clinics.” Last Accessed 7 October, 2016 <http://viralportal.net/drones-can-now-be-used-to-transport-laboratory-specimens-to-remote-medical-clinics/>

¹³⁴ Dr Richard Goette, “The Positive Psychological Effect of Air Power.” *The Royal Canadian Air Force Journal* vol 1 no. 1 (Winter 2012): 80.

The resources and agencies used to conduct these health services should not be limited in thinking to military assets. It definitely should not be limited to the domain of being provided by assisting or intervening nations. It is acknowledged that developed western militaries are ideally placed to deliver these services, possessing the established capabilities of specialized air medevac teams and aircraft. However, there must be a determined strategy of having these services coordinated, facilitated and run by the host nation government. It is not necessary to limit the provision of services to the host nation military or even a civilian government agency. It is possible to have these services run by NGOs from within and external to the host nation, by regional government bodies, by combinations of military and civilian health specialists and air power and even from grass roots charitable organizations.¹³⁵ In a COIN strategy, the important factor is that the government is actively providing avenues of access to these health services for the people and being recognized for doing so.

Another important aspect to human security is the access to justice and living under a consistent rule of law. In order to maintain legitimacy a government needs to be able to police and enforce legislation across the nation. Having access to police and justice services is a vital ingredient for a population's acceptance of who governs them. Air power has the speed and flexibility to deliver policing to regions in a manner that gives the government the initiative. These operations can be coordinated alongside security operations in order to both protect and police the population but also directly target insurgent activities. Alongside of the policing is the need for an accessible judicial system. Similar to the concept of routine health clinics, air power can deliver to communities a regular and consistent judicial presence. With the concept of a fly in – fly out court, regional authorities can access, administer and dispense the rule of law across

¹³⁵ Organizations exist such as Military Aviation Fellowship (MAF- world wide), the RFDS (Australia), Angel Flight (Australia), Hope Air (Canada) and Air Ambulances (various government worldwide contracted services).

communities from a centralized location. The provision of access to justice for all of the population helps establish the legitimacy and authority of a government. This has been a notable success for bringing justice and law and order where they have been in place for some time in the countries of Somalia, Sierra Leone and the Democratic Republic of the Congo.¹³⁶

These types of soft air power operations require the government to have a level of security established in order to deliver the services. Such activities will need to be coordinated as part of any military and security operations within the overall COIN strategy. Ideally these activities will have preceded any violent conflicts and can reduce the impact of insurgent agitation from the outset. In contested regions where insurgents hold power it will be difficult to establish and maintain regular access to the population for food, health and justice services. However, that does not mean they should not remain a high priority. Rather, the manner in which they are delivered may have to be adjusted now to a more military dominant air power structure to get these services in and protected whilst being conducted. The very provision of these services will make the government more attractive and legitimate than the life under insurgent rule who are seeking to stop them.¹³⁷

The second component to the soft air power use is in addressing the longer-term population needs of economic welfare, community connectivity and good governance. It is the provision of air power infrastructure such as airfields and control systems that will play a major part in these long-term goals. Establishment of airfield facilities is something that COIN doctrine should pay very close heed to in the concept of the clear-hold-build strategy. Little to no mention

¹³⁶ United Nations Development Programme Bureau for Crisis Prevention and Recovery, *Evaluation of UNDP's Support to Mobile Courts in Sierra Leone, Democratic Republic of the Congo, and Somalia*, New York, USA, May 2014.
http://www.undp.org/content/dam/undp/library/crisis%20prevention/UNDP_ROL_Mobile%20CourtsEvaluation_No v2014.pdf

¹³⁷ Olsen, *The Quest for a New Airpower Strategy*, 31.

within the doctrine examined discussed the need or importance of establishing an airfield infrastructure within the host nation. Military engineering units are ideally configured to plan, conduct, and execute this type of construction with specialist engineers, equipment and project managers dedicated to this capability.¹³⁸ These engineering units also have the capacity to access remote regions through airdrop of personnel and equipment to bypass limitations from road, security or geographical restrictions that may exist.



Figure 3.3 - Airdropped Génie bulldozer

Source: <http://www.hollilla.com/reader.php?action=thread&thread=3918668&offset=600>

Constructing an airfield infrastructure across regions creates a multifaceted outcome, gainful employment of the population, provision of a tangible asset of an airfield, ready access to judicial, health and food service needs as discussed above and also it provides a connection point for civil and government services to gain ready access to community. Furthermore, these

¹³⁸ Bellflower, *The Soft Side of Airpower*, 6.

communities now have connection points to other communities and can have mobility for themselves and their local produce to other parts of the nation. In effect, a network of operating airfields opens up the nation and opportunities for the communities to trade and distribute resources. With increased opportunities comes investment in infrastructure and communities. These progressions provide the very substance of local community engagement and involvement and on a broader scale – nation building.¹³⁹

The reality of conducting soft air power in COIN operations is of course more difficult than the academic exercise of identifying tangible ways in which it can contribute. The reality is that soft air power must be conducted in a permissive security environment. The security of the population must be first ensured for these to function. In different regions and in different phases and times this will require military action and the application of hard air power as part of any COIN campaign. The needs of one region will differ from another, so no formulaic soft air power method can be universally applied, thus necessitating a tailored approach. Doctrinally this is no different to any of the clear-hold build strategies that exist and are employed in current models of COIN operations. Why then is this not duly considered in air power and joint doctrine in a like manner? Perhaps the key as to why so little attention is paid to it is that soft air power is difficult to directly define and task and even more difficult to measure in its effectiveness. Successful use of soft air power will not be easily translated into metrics of numbers of sorties flown, insurgents killed, bombs dropped, troops transported or regions cleared. Rather, success will not be readily apparent other than the fact that services are being delivered and functioning and insurgent

¹³⁹ *Ibid.*, 5-7.

agitation has no real foothold. The impact of the soft power may not be apparent until it is dissected and debated in a past tense and its true value will be difficult to quantifiably measure.¹⁴⁰

Building Host Nation Air Power Capability

As an intervening or assisting nation joining a COIN operation, it is paramount to work from the foundation of understanding that this is not your war. It is the war of the host nation and all efforts, military and non-military alike, need to be focused on the systemic empowerment the host nation, strengthening it through the building of governing legitimacy and the capacity to win the peace and keep the peace within its own population.¹⁴¹ Air power is no exception to this and the best contribution an intervening nation can make to the long-term outcome in COIN is training, advising and equipping host nations so that they can conduct the war themselves.¹⁴²

There is no new ground to be broken here, just old lessons to be re-learned and actively employed in doctrine and practice. Australia, Canada, NATO and the US have all been active in this endeavour. The US in particular has been successful with its involvement in this use of air power in COIN operations throughout the twentieth and twenty first centuries, from Greece in the 1940s, Philippines in the 1950s, Laos in the 1960s, El Salvador in the 1980s and Colombia and Afghanistan this century.¹⁴³ The primary focus in these operations has to be to build host nation air power capability and capacity to a state where it can successfully employ air power in a long-term time frame in support of its internal national objectives and enhance government legitimacy.

¹⁴⁰ US Joint Chiefs of Staff, Joint Publication 3-60 *Joint Targeting* (Washington, DC: U.S. Joint Chiefs of Staff, 31 January 2013), Appendix D; and Phillip Meilinger, "A History of Effects-Based Air Operations" *The Journal of Military History* 71, no 1 (January 2007), 164-167.

¹⁴¹ Olsen, *The Quest for a New Airpower Strategy*, 33.

¹⁴² Alan J. Vick, et al., *Air Power in the New Counterinsurgency Era. The Strategic Importance of USAF Advisory and Assistance Missions*. RAND Corporation, 2006, xvi.

¹⁴³ James S Corum, "Air Power and Counter-Insurgency: Back to the Basics," in *Air Power, Insurgency and the "War on Terror,"* ed. Joel Hayward, 209-222 (Cranwell: Royal Air Force Centre for Air Power Studies, 2009), 219.

No two COIN situations are the same and thus the nature of support and level of involvement of an intervening nation will vary from one COIN battle to another depending on the needs of the host nation. Central to the strategy is ensuring that operations are not exclusively overtaken and conducted by intervening nations/coalitions. If this occurs then it builds the very real risk of resentment from the local population against that intervening power and the reduction of government legitimacy and capacity to govern in the eyes of the population.¹⁴⁴

The questions therefore are what types and amount of air power support is the right to provide, what does this look like in practical terms, and how is it to be employed? The answer lays in the identification the actual immediate, medium and long-term air power needs of the host nation in relation to the COIN situation with which they are dealing. This will then determine the level of commitment needed from intervening nations/coalition both in resources and time frames. For example, the needs of the Colombian government with a standing, established and professional air force were vastly different from those of the Afghan Air Force rebuilding from scratch after the initial phases of Operation Enduring Freedom (OEF).¹⁴⁵ There are several basic areas that need to be considered and established as part of the overall COIN strategy when looking to build host nation air power capability. These are equipment, training, C2 and infrastructure and what operations need to be conducted. None of these factors are to be considered in isolation but they are all interrelated and codependent.¹⁴⁶

¹⁴⁴ James S Corum and Wray R. Johnson *Air Power and Small Wars: fighting insurgents and terrorists* (University Press of Kansas, 2003), 437.

¹⁴⁵ Operation Enduring Freedom (OEF) was the joint international, US-led operation against the Taliban, Al Qaeda and subsequent insurgency in Afghanistan. It officially ran from October 2001 to December 2014. See: CNN Operation Enduring Freedom Fast Facts <http://edition.cnn.com/2013/10/28/world/operation-enduring-freedom-fast-facts/> and Canadian Armed Forces in Afghanistan – Mission Timeline <http://forces.gc.ca/en/operations-abroad-past/afg-timeline.page> and Australia’s military involvement in Afghanistan since 2001: a chronology http://www.aph.gov.au/binaries/library/pubs/bn/fads/militaryinvolvement_afghanistan.pdf

¹⁴⁶ Brigadier-General Michael R. Borea, “Building Air Power for Afghanistan: A Team Effort.” *Canadian Air Force Journal* 3, no. 1 (Winter 2010): 12-15.

Equipment. The host nation must have access to and the ability to use and sustain air power equipment that is suitable for the COIN task. As discussed in Chapter 2 this may well mean the use of lower technology, less sophisticated aircraft and platforms to perform the roles. The rapid advancements of high technology jet aircraft left behind a void of readily available and transferrable air power assets which has hindered the capability of less wealthy nations to build COIN air power capability.¹⁴⁷ This is an identified shortfall that is looking to be addressed through the development of capable, yet less sophisticated ISR platforms, airlift aircraft and offensive aircraft such as the A-67 Dragon. Host nation access to equipment can be provided through a myriad of ways. In many cases it can be directly supplied by supporting nations or assisted with purchasing through loans or lease arrangements. Host nations can also access capability through commercial contracts for more expensive or detailed assets for set periods and defined purposes such as satellite, ISR and link communications equipment and capabilities. It must be understood that it is not a requirement that the host nation operate like for like equipment that a supporting nation is using in the COIN conflict. What is paramount is that the equipment is achieving the desired effects, is sustainable, and adds to the host nation capability of operating independently when other nation/coalition support is ultimately withdrawn.¹⁴⁸

¹⁴⁷ James S. Corum, "Air Power and Small Wars: Current Operations," *Baltic Security and Defence Review*, 12, Issue 1 (2010): 150-151.

¹⁴⁸ Australia, Royal Australian Air Force, Australian Air Publication AAP 1001.2, *The Air Force Approach to Irregular Warfare* (Canberra, ACT: Air Power Development Centre 2011), 5-6.



Figure 3.4 – Iraqi Air Force SAMA CH2000 Reconnaissance Aircraft¹⁴⁹

Source: http://www.airinternational.com/view_article.asp?ID=2760

Training and Advising. The type, style and amount of training or advising to be invested into a host nation depend on a number of factors. The core skill levels present in host nation airmen, the equipment available, the security environment, the desired capabilities to be built and what supporting nations will be contributing, all feed directly into the training programmes to be used. The US through its Foreign Internal Defense (FID) doctrine¹⁵⁰ sets out its proposed methods to construct training and advising programmes on a needs-to-be-addressed basis. Looking at Australian, Canadian, NATO and the US structures one observes that only the USAF has a dedicated, but small squadron to focus on this type of tasking. Apart from the US, host

¹⁴⁹ Iraqi Air Force SAMA CH2000 is a reconnaissance aircraft based off a modified US-built AMD Alarus aircraft.

¹⁵⁰ US Joint Chiefs of Staff, Joint Publication 3-22 *Foreign Internal Defense* (Washington, DC: U.S. Joint Chiefs of Staff, 12 July 2010).

nation air power training and capability development is done in an ad hoc manner. The task usually falls to a squadron already in theatre as an add-on rather than a dedicated role.¹⁵¹ The reality of building host nation air power is that it is hugely resource intensive and is beyond smaller nations like Australia and Canada to deliver on their own. These smaller nations and air forces will be more suited to providing support in dedicated plug-in-and-play type roles (this is discussed more in Chapter 4).

The US has the dedicated 6th Special Operations Squadron (SOS) whose mission is based on the FID concepts. 6 SOS are configured to deliver training and advisory roles to a host nation in location, using host nation language and equipment and is purposed for the advancement of procedures, tactics and capabilities, not basic flying skills.¹⁵² All training options should be considered including doing training outside of the host nation in a support nation. This can provide bulk numbers for flying, controlling, analyzing and maintenance skills in a secure environment as well as for advanced leadership skills for senior airmen and commanders to improve C2 and combined operations. Diversified training from multinational partners allows for greater depth of experience to be delivered to a host nation and reduce resource burdens on any single nation. It also keeps host nation credibility intact by countering perceptions that it is being run by proxy by another nation. It is also feasible that this training can be contracted to companies to provide rather than from military units.¹⁵³

Cultural sensitivities and vagaries of the host nation must remain a high priority in order to ensure appropriate, tailored and targeted training is delivered in the most efficient manner available. Throughout the establishment and conduct of the training, the central goal must remain

¹⁵¹ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 5-3 and NATO Joint Air Power Competence Centre, *Improving NATO Support to Future Air Advisor Operations* (Kalkar, Germany: April 2014), 33.

¹⁵² Vick, *et al.*, *Air Power in the New Counterinsurgency Era*, 117-118.

¹⁵³ NATO JAPCC, *Improving NATO Support to Future Air Advisor Operations*, 17, 20.

in focus. That is, the purpose is to have the host nation airmen at a standardized level of qualification in order to conduct air power in a COIN operation in support of their government. There is no requirement that standards are comparative to those of advanced air forces who may be conducting support or combined operations as part of the COIN campaign.¹⁵⁴ They must simply be able to do the job effectively. To express it colloquially, the Australian term for targeting the required level of training in Afghan forces after OEF was coined as “Afghan good enough!”¹⁵⁵



Figure 3.5 - Afghan air force pilot Training on C130 Hercules Mission

Source: <http://www.af.mil/News/ArticleDisplay/tabid/223/Article/484388/airmen-advise-afghan-air-force.aspx>

¹⁵⁴ The important fact is to have the local forces conducting the mission to an acceptable standard as stated by Lawrence: “Better the Arabs do it tolerably than that you do it perfectly.” T.E. Lawrence, “Twenty –seven Articles”, *Arab Bulletin*, 20 August 1917, article 15.

¹⁵⁵ This was a phrase coined to describe the required training standards to be met by all Australian Training Teams in consideration of the level of skills and competencies of the Afghan security forces that were being trained. The term was not derogatory in nature but merely was a reflection of the differing standards between the Australian acceptable standard and what was the standard required of the Afghan forces to meet the objectives.

C2 and Infrastructure. An important aspect of air power capability building within host nation is through development and upgrading logistics systems, infrastructure and C2.¹⁵⁶ To support and conduct any coordinated air power requires a capable logistics network, infrastructure for assets, personnel and communications and the ability to command it. In conjunction with the equipment and skill levels available, supporting nations should be seeking to invest in air traffic and coordination systems to facilitate host nation capability in managing air power operations in both the military and civil domains. These efforts have a compounding effect on all air power operations in COIN and are not isolated to the military or security components.¹⁵⁷ Investment in airfields and helicopter landing area infrastructure is a vital component to a host nation's investment and commitment to its population. Supporting nations should be making this a priority when seeking to enhance host nation air power capability. C2 training and systems development is paramount in both military and government organizations in order to affectively employ COIN and nation building operations. Every opportunity should be exploited to integrate, train and advise host nation commanders and senior leaders on planning, conducting and reviewing combined and coalition operations that are in support of the COIN campaign.¹⁵⁸

Types of Operations. Depending on existing host nation capabilities and the violence level of the insurgency, the nature of what air power operations need to be conducted and who will conduct them will shape a supporting nation's effort to the COIN campaign. It is resource wasteful to look to build capability when operations will not call for it to be conducted by the host nation. For example, proficient CAS is a very difficult and time intensive capability to

¹⁵⁶ United States Air Force, Air Force Doctrine Document 2-3 *Irregular Warfare* (Washington, DC: USAF Chiefs of Staff, 1 August 2007), 75.

¹⁵⁷ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 5-3.

¹⁵⁸ Borea, *Building Air Power for Afghanistan: A Team Effort*, 15.

develop in an air force. The better option may be to invest a lower tech solution of converting small transport aircraft into mini gunships. The resources required to convert the aircraft are minimal and the flying expertise does not need to be trained only modified.¹⁵⁹ On a different aspect it may be desirable to invest in host nation air power precision weapons use capability rather than have external supporting forces employing lethal firepower in areas where collateral damage is of concern. Given the nature of insurgent negative propaganda tactics typically used to offset strike capability, it can significantly reduce the impact of this insurgent message if it is local forces striking and not foreigners.¹⁶⁰ Ultimately the goal is empower the host nation to be able to conduct relevant operations that are within their capacity in order enhance legitimacy and genuine governance and security capability.

ISR is an extremely important air power role in COIN yet it can take a long time to develop skills and gain capability. Immediate ISR operations may need to be solely conducted by supporting nations whilst host nation capacity is built. It is likely that capability should be developed in line with the lower tech solutions that meet the needs of the COIN campaign and the host nation, not seek capability to simply match what other nations have. In essence, existing host nation air power capabilities should be enhanced and employed to their capacity. Capability development goals should be realistic and support the overall COIN strategy. Supporting nation air power should be used where it is the best option and that capability should not be pursued for host nation development and use if there is little tangible benefit. Rather, the resources and effort need to be directed where they will have the greatest positive benefit for the COIN campaign. As

¹⁵⁹ Corum, *Air Power and Counter-Insurgency: Back to the Basics*, 221-222.

¹⁶⁰ Corum, *Air Power and Small Wars: Current Operations*, 148.

a generalization, non-kinetic air power has the greatest impact on COIN operations and should be prioritized as the host nation's capabilities to be enhanced and developed.¹⁶¹

Conclusion

Current air power and joint doctrine is largely bereft of any true efforts to extend the mindset of air power use in COIN beyond the use of air power in military and security operations. Similarly the main emphasis throughout existing doctrine is conducting the air power battle outright without truly considering how to assist the host nation to carry out that tasking. The COIN battle at its heart is about a nation defeating an insurgency through winning legitimacy to govern from its people. Fundamental to achieving this is the need for the host nation to conduct operations that build up and support its people, provides for human security needs and attracts the support of the population.

Current air power doctrine stops well short of delivering air power in support of this strategy. Whilst ever we have air power doctrine and practice that solely focuses on conducting the military operations ourselves and does not extend to thinking about building host nation air power capability or government legitimacy, then we are missing guidance on half of the true battle. Chapter 4 will address these doctrinal shortfalls and detail what elements of review are required at both the single service and joint levels to produce more meaningful and relevant COIN air power doctrine.

¹⁶¹ Vick, *et al.*, *Air Power in the New Counterinsurgency Era*, 61.

CHAPTER 4

ELEMENTS OF DOCTRINAL REVIEW

Introduction

Doctrine is the body of knowledge that provides the guiding principles for the manner in which military forces plan and conduct their operation and aids in understanding.¹⁶² At a strategic level, military doctrine also shapes and influences governments on the use of military capabilities in support of national objectives.¹⁶³ Doctrine also underpins the way an organization will train and equip its forces to be able to conduct these operations.¹⁶⁴ To truly be an effective and efficient organization meeting national objectives, it would be logical to expect doctrine to lead operations and planning, not lag them. However, the evidence from military history, practice and literature reveals that current COIN doctrine with respect to air power across NATO, Australia, Canada and the US does indeed lag. In fact, the content available could be considered at best incomplete and at worst negligent. A close examination of at what COIN air power doctrine is in place and the role air power plays in COIN highlights a definite requirement for doctrinal review. This chapter will detail what reviews needs to occur at both the single service and the joint levels in order to achieve a meaningful and fully developed COIN air power doctrine that seeks to serve stated national objectives.

¹⁶² Canada, Department of National Defence, B-GJ-005-000/FP-001 CFJP 01 *Canadian Military Doctrine* (Ottawa, Ontario: Canadian Forces Experimentation Centre 1st Edition, 2009), 1-1.

¹⁶³ *Ibid.*, 1-4.

¹⁶⁴ Allen G. Peck. "Airpower's Crucial Role in Irregular Warfare," *Military Technology*, 32 Issue 3 (2008): 23.

Single Service Doctrine

The burden to produce meaningful air power doctrine rests firmly with professional airmen from within every single service branch and organization.¹⁶⁵ These are the people equipped with the knowledge and comprehension of air power capabilities who can focus on not only tactical aspects of air power but can translate air power capabilities into strategic purposes serving national objectives.¹⁶⁶ Airmen can produce unique solutions with air power contributions to COIN that are congruous with established COIN principles and synergistic to the overall COIN effort. The current single service doctrines of both the US and Australia¹⁶⁷ are a solid start but they are incomplete. The Canadian contribution to air power focused on COIN is currently non-existent and is unlikely to be produced in the short term.¹⁶⁸

A specific role of single service doctrine is to provide guidance and direction on how an organization should train, equip and sustain itself in order to conduct operations. This is a fundamental objective of doctrine that breeds a deep understanding of capability procurement and development within its people. Doctrine equips an organization with the knowledge and initiative to continually review, update and advise governments on capability and operational planning matters to serve national objectives. To a large extent this is a role that is being underplayed by existing air power COIN doctrine. There are two primary foci in the use of air power in present COIN doctrine. Firstly, air power employment is rooted in a conceptual adaptation of present or existing capabilities to conduct COIN operations. Secondly existing COIN air power doctrine is

¹⁶⁵ Paul Smyth, "Airpower and Counterinsurgency Building on a Proper Foundation," *Air and Space Power Journal* (Summer 2011): 124. http://www.airpower.maxwell.af.mil/airchronicles/apj/2011/2011-2/2011_2_06_smyth.pdf

¹⁶⁶ Sanu Kainikara, "The Future Relevance of Smaller Air Forces," *Working Paper 29*, (Canberra, ACT: Air Power Development Centre, March 2009), 7.

¹⁶⁷ Australia, Royal Australian Air Force, Australian Air Publication AAP 1001.2, *The Air Force Approach to Irregular Warfare* (Canberra, ACT: Air Power Development Centre 2011); and United States Air Force, Air Force Doctrine Document 2-3 *Irregular Warfare* (Washington, DC: USAF Chiefs of Staff, 1 August 2007).

¹⁶⁸ Email, Major Tony Pepin, Canadian Forces Aerospace Warfare Centre, 8 Wing Trenton, to Dr Richard Goette, Canadian Forces College, Toronto, 11 October 2016.

primarily directive in how to conduct and win the military fight. These foci in and of themselves are important but they are not the whole equation. COIN principles dictate that the battle is primarily political and is one for the support of the population. Military and security operations are to be undertaken as a component of a whole of government strategy that is focused on winning the support of the population and establishing and maintaining legitimacy as a government.¹⁶⁹

Single service doctrine of Australia, Canada and the US needs to more clearly address what the true air power role will be in COIN conflicts. Examination of history shows this role is as support or intervention in a host nation. As detailed in Chapter 3, the best assistance comes not from using one's own air power to win the fight for the host nation, but rather from building host nation air power capability and conducting operations that enhance host nation government legitimacy.¹⁷⁰ A greater emphasis of host nation partnering and assistance, and specifically in the role of building host nation air power, needs to be included in the doctrine. By emphasizing this role and definitively laying out its importance in doctrine provides clear pathways and direction on how the single service will achieve this. It will likewise then guide what equipment is needed, what skills and capabilities are required and what the structure of that single service will need to be. In short, it will define how to raise, train, sustain and employ the capabilities needed that serve the purpose of providing support to host nation air power capability development in COIN operations.

The reality of building air power capability for any nation is that is an expensive, resource intensive operation that requires long lead times to establish, both for the host nation and also the

¹⁶⁹ David Galula, *Counterinsurgency Warfare: Theory and Practice* (London: Praeger, 1964), 6-7.

¹⁷⁰ Alan J. Vick, *et al.*, *Air Power in the New Counterinsurgency Era. The Strategic Importance of USAF Advisory and Assistance Missions*. RAND Corporation, 2006, xvi; and Peck, *Airpower's Crucial Role*, 21-22.

supporting nation.¹⁷¹ Developing large-scale specialist capabilities such as resident in the USAF's 6SOS is an enormous undertaking. For a nation to commit to providing large levels of air power training to a host nation is a very difficult task requiring specialist manpower and airmen of high technical skill and cultural sensitivities. For all of its resources and focus on this capability, the USAF has already identified a shortfall of air power trainers for these tasks.¹⁷²

For smaller nations such as Australia and Canada, the concept of building such specialized training squadrons is beyond their means. This reality needs to be identified and addressed in doctrine to determine realistic contributions to the task. Currently, RAAF doctrine recognizes the role and importance of building host nation air power, but the reality of delivering it in practice is rarely met.¹⁷³ The shortfall in delivery is largely due to the doctrine providing overarching (and important) details of what host nation air support entails, without ever being more prescriptive about how to deliver it. This level of prescription is important as it casts a mindset for airmen to be able to actively look for and directly employ air power support using and adapting existing capabilities and skill sets. In essence it will involve constructing plug and play types of operations into larger joint, combined and coalition operations.¹⁷⁴ This will ensure that planned and dedicated air power is delivered in support of host nation capability building, rather than committing resources first and then having to adapt them in ad hoc manners to meet demand.

Single service doctrine also needs to take a more proactive role in identifying and detailing the type and nature of the equipment that is required to produce the desired COIN air power effects. Currently the existing doctrine discusses roles to be employed rather than

¹⁷¹ James S Corum and Wray R. Johnson *Air Power and Small Wars: fighting insurgents and terrorists* (University Press of Kansas, 2003), 436.

¹⁷² Vick, *et al.*, *Air Power in the New Counterinsurgency Era*, xvi, 126-132.

¹⁷³ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*, 2-23, Ch 5.

¹⁷⁴ Kainikara, *The Future Relevance of Smaller Air Forces*, 11-12.

emphasizing the desired effects. This produces a mindset of a focus on the role and not the outcome. This drives a line of thinking around what have we got to deliver that role rather than are there better and more effective ways to achieve this outcome. A prime example is the best methods to deliver strike and CAS in COIN. This is a popular topic currently that is under heavy debate in the UK.¹⁷⁵ The main issue is regarding whether or not expensive 5th generation fighter jets should be used to produce these effects or can they be done with more simple COIN dedicated aircraft like those discussed in Chapter 2.¹⁷⁶ Being effects-focused drives organizational and government thinking to be open to different solutions. This allows genuine thought, discussion and implementation of finding the right assets for the right job.

As discussed in the previous chapters, COIN has different air power requirements than conventional warfare. The level of commitment from a supporting nation may therefore warrant investing in air power best adapted for COIN roles rather than adapting existing air power to meet defined roles. In particular, the generally permissive air operating environment associated with COIN opens up a large number of less expensive options of airframes and equipment to operate that can meet COIN objectives.¹⁷⁷ These may well prove to be more versatile and efficient as part of a nation's overall air power strategy and national objective commitments than the use of high tech and expensive capabilities optimized for conventional warfare and then adapted for COIN.

¹⁷⁵ Ace Rimmer, Think Defence, "COIN Aircraft - Cracking the Nut," last accessed 17 October, 2016, <http://www.thinkdefence.co.uk/2009/09/coin-aircraft-cracking-the-nut/>

¹⁷⁶ See: Robert F. Dorr, "COIN Aircraft Past, Present ... and Future?", *DefenseMediaNetwork*, 18 October 2010, last accessed 9 November 2016. <http://www.defensemedianetwork.com/stories/coin-aircraft-past-present-and-future/>; Arthur D. Davis, "Back to Basics: An Aviation Solution to Counter-Insurgent Warfare" (thesis, Air Command and Staff College, Air University, April 2005), 10-12. <http://handle.dtic.mil/100.2/ADA476254>; James S Corum, "Air Power and Counter-Insurgency: Back to the Basics," in *Air Power, Insurgency and the "War on Terror,"* ed. Joel Hayward, 209-222 (Cranwell: Royal Air Force Centre for Air Power Studies, 2009), 220-222.

¹⁷⁷ Corum, *Air Power and Counter-Insurgency: Back to the Basics*, 220-222.

Joint Doctrine

The absence of meaningful air power COIN doctrine at the joint level is problematic. Neither Australia nor Canada has produced any joint COIN doctrine nor are they likely to have developed and published it in the short term.¹⁷⁸ NATO and the US are the only group or nation examined to have joint COIN doctrine and the role of air power is greatly understated in those documents.¹⁷⁹ Typically throughout this joint doctrine, air power is only emphasized through roles of military employment and in particular in support of ground based military and security operations.

There is a need for an emphasis shift within the doctrine towards an understanding of the employment of air power by a supporting nation or coalition as part of its COIN operations, extending beyond the immediacy of military or security actions. What needs to occur is to elevate the role of air power to be in harmony with what the total COIN strategy represents. That is, air power will be employed as part of a support nation operation that is aligned with the bolstering of the host nation whole of government strategy to the COIN campaign. The emphasis of the air power support to the host nation should seek to empower the host nation government and build credibility and legitimacy. Air power can be conducted in not only executing military security operations against insurgents, but also in soft power roles and host nation air power capability building. Colonel Olsen conceptually expresses this approach as using air power to systemically

¹⁷⁸ Author of unpublished ADDP 3.21 *The Military Contribution to Stabilisation*, Doctrine Desk Officer, Joint Doctrine Centre RAAF Base Williamtown, Australia and Email, Major Tony Pepin, Canadian Forces Aerospace Warfare Centre, 8 Wing Trenton, to Dr Richard Goette, Canadian Forces College, Toronto, 11 October 2016.

¹⁷⁹ North Atlantic Treaty Organization, AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency* (Brussels: NATO Standardization Agency, February 2011); and US Joint Chiefs of Staff, Joint Publication 3-24 *Counterinsurgency* (Washington, DC: U.S. Joint Chiefs of Staff, 23 November 2013 [Revision of JP 3-24 Dated 05 October 2009]).

paralyze the insurgency and to also systemically empower the host nation.¹⁸⁰ This moves joint doctrine from a focus of one of war fighting to a focus of war ending. Or more succinctly, the employment of air power would now serve the purpose of host nation system empowerment and not just the military needs of the intervening or supporting nations COIN operations.¹⁸¹

The current relegation of air power to convenient but isolated annexes or sections¹⁸² does little to well serve joint task commanders, campaign planners and governments when considering supporting or intervening operations in a COIN campaign. The primacy of the COIN campaign is centred on supporting a host nation through a comprehensive approach. This approach is an effort in both civil and military domains from supporting nations and the host nation itself. Ultimately this comprehensive effort is to be designed to directly target and address not only the security aspects of the insurgency, but the root causes themselves, and to establish the host nation government's legitimacy.¹⁸³ As detailed in chapters 2 and 3, air power has important parts to play in all areas of military and security operations, nation capacity operations, and government legitimacy. Hence air power must be present and emphasized as a critical component of the whole strategy and not constrained to the mindset of solely being an enabler for ground force operations.

Critically, for governments and commanders planning operations, the concept of air power use must be understood to be inclusive of capabilities and assets outside of their own military. It needs to consider air power derived from coalition partners, host nation forces and civil air power components from both within and external to the host nation. Only a

¹⁸⁰ Colonel John Andreas Olsen, "The Quest for a New Airpower Strategy." *Air & Space Power Journal* 29, no. 3 (May-June 2015): 30. <http://www.airpower.maxwell.af.mil/digital/pdf/articles/2015-May-Jun/F-Olsen.pdf>

¹⁸¹ *Ibid.*, 33.

¹⁸² NATO AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*, Section IX and US JP 3-24 *Counterinsurgency*, 23 November 2013, VII.

¹⁸³ US JP 3-24 *Counterinsurgency*, 23 November 2013, I-2.

comprehensive understanding of air power use in COIN fleshes out the important and potentially transformational use of soft air power as part of the strategy. Without this thorough understanding, air power in COIN is firmly stuck in the rut of use for military effects centred on ground force support or enabling operations. This is shortchanging both the overall COIN strategy and air power and this is where joint doctrine has stalled.

Joint COIN doctrine prepares commanders and planners well for understanding that early intervention in critical aspects can alleviate and treat problem areas and root causes within an insurgency before the flames can be fanned. What is largely ignored in joint doctrine is that air power has a critical role to play. In early stages of insurgencies, non-military aid can prove to be a most decisive factor.¹⁸⁴ As discussed in chapter 3, the type of aid and support, the manner of delivery, the transporting and execution of this aid will often be soft air power-centric. Without this consideration being doctrinally front and centre in the minds of planners, it will not be implemented in a timely nor efficient manner. Worse yet it may not be delivered at all.

Likewise commanders and planners are well versed with the COIN model of clear-hold-build.¹⁸⁵ What is less well understood is the role soft air power can play in the parts of the hold and build phases. Immediately following any type of conflict or security actions there are genuine human security needs of the population that must be met. Food, shelter, medicine, medical transport, and law and order are all aspects of this human security that need to be addressed in a timely manner. Air power is a primary capability of meeting the needs of the population through delivery of these services and serving the COIN strategy.¹⁸⁶ Joint doctrine though is firmly focused on ground forces tasks in these areas and how to integrate and work with civil government agencies and NGOs to meet the COIN strategy and utterly and completely misses

¹⁸⁴ Vick, *et al.*, *Air Power in the New Counterinsurgency Era*, xvi.

¹⁸⁵ NATO AJP-3.4.4 *Allied Joint Doctrine for Counterinsurgency*, 5-14.

¹⁸⁶ John W. Bellflower, "The Soft Side of Airpower." *Small Wars Journal*, (2008), 9.

what air power contributes to this part of the campaign. With an increased emphasis on air power integration within the overall strategy it is far more likely that the true joint benefits of air power in the COIN campaign can be realized.

Analysis

Without specialist single service guidance, a nation cannot adequately plan and equip its forces to meet its national objectives. Single service doctrine needs to better articulate the roles and equipment specific to COIN that address more than the immediate military and kinetic aspects of the campaign. This requires a focus and a fundamental shift in thinking to embrace the roles of lower tech and less sophisticated weaponry and aircraft if appropriate and importantly a shift to embracing the roles of training, advising and assisting host nations rather than fighting the wars themselves.¹⁸⁷

Joint doctrine likewise needs to shift the focus of air power from being relegated to a ground force capability enabler or supporter. Rather, air power needs to be understood that it delivers results and effects to the COIN strategy at all levels of a whole of government approach to COIN. Soft air power effects and use need to become inculcated in understanding by planners and commanders and implemented in every phase of planning and executing of COIN operations. Nation building is a fundamental part of COIN strategy and air power has an integral part to play in it. Joint doctrine needs to raise the emphasis of air power from a supporting role to an integral and recognized component of the whole COIN strategy.

Progress has been made over the last decade as evidenced by the introduction of both the RAAF and USAF doctrine on irregular warfare and the contained subsets of COIN.¹⁸⁸ However,

¹⁸⁷ James S. Corum, "Air Power and Small Wars: Current Operations," *Baltic Security and Defence Review*, 12, Issue 1 (2010): 153.

¹⁸⁸ RAAF AAP 1001.2 *The Air Force Approach to Irregular Warfare*; and USAF AFDD 2-3 *Irregular Warfare*.

it appears the process may have stalled. Australia is not likely to publish joint COIN doctrine any time soon. Canada is unlikely to publish anything outside of the existing Army doctrine¹⁸⁹ in the short term, and the existing US joint COIN doctrine has rightly or wrongly drawn strong criticism for being merely a planning document of how to refight the Iraq insurgency and utterly neglecting air power in the process.¹⁹⁰ Without concerted effort and drive from airmen to deliver meaningful air power COIN doctrine, the doctrine momentum gained following the Iraq and Afghanistan experiences may well decay. With that decline in momentum the lessons learned and extrapolated may also very well decline with generational shift in the forces unless they are captured and codified in the doctrine.

Conclusion

For any military force to be meaningful and relevant it requires solid foundational doctrine to guide it in its principles, knowledge and capability. For Australia, Canada and NATO, current air power COIN doctrine is greatly lagging practical exposure to COIN operations rather than driving and guiding them. For the US, its treatment and understanding of air power within its joint COIN doctrine is also lacking in focus and application.

There exists a need for the development of single service and joint COIN doctrine for Canada and joint doctrine for Australia. For existing joint doctrine there stands the need for doctrinal review incorporating a greater focus in the use of air power in COIN. Existing single service doctrine also requires a review of emphasis and content to ensure past knowledge has been adequately captured and for the service to better equip, train and sustain its forces for likely COIN operations.

¹⁸⁹ Canada, Department of National Defence, B-GL-323, *Counterinsurgency* (Ottawa: Chief of the Land Staff, 2008).

¹⁹⁰ Charles J. Dunlap Jr, *Shortchanging the Joint Fight? An Airman's Assessment of FM 3-24 and the Case for Developing Truly Joint COIN Doctrine* (US Air Force Air University 2008).

CONCLUSION

Introduction

Conventional warfare remains the perceived dominant threat to national security. The need to meet this threat has been the primary driving force for doctrine development and production. The result has been the development, continual review and maintenance of robust doctrine at single service and joint levels. However, conventional warfare is an exception rather than the rule in the recent historical record of where and how nations' strategic objectives have been militarily contested. It is in the realm of irregular warfare, and in particular insurgency, that most military action has been undertaken in the past several decades. Insurgency has been prolific and global in its reach and impact across the last two centuries, and is likely to continue as a threat to national security and objectives for the foreseeable future.

To be adequately prepared, equipped and trained to meet these insurgent threats demands that COIN doctrine be contemporary and relevant. In particular, this study has shown that air power COIN doctrine must command and hold a presence that appropriately reflects its importance in any COIN campaign. Nonetheless, as this study has shown, current COIN doctrine is deficient in its consideration of and use of air power. Examination of the COIN doctrine of Australia, Canada, the US and NATO has shown that the understanding and consideration of air power in that doctrine is glaringly absent. Doctrine is paramount to the foundation of military capability and codifying its *raison d'être* to serve the nation. As such it is paramount that a focus on air power COIN doctrine be genuinely undertaken in order for it to take a meaningful place in single service and joint doctrine to more fully enable nations and coalitions to tackle insurgent threats.

Summary

In demonstrating that current COIN doctrine is deficient in its consideration of and use of air power, this study has revealed a marked lack of focus on the greater air power contribution to an overall COIN strategy. Chapter 1 established a working lexicon by defining terms and definitions and investigating existing COIN doctrine from an air power perspective, thereby establishing an understanding of what functions doctrine serves and how it serves national objectives. It also laid out the characteristics and principles of insurgency and COIN in tandem with an understanding of the manner in which a host nation and supporting nations and coalitions can take actions to address them. The examination of the current COIN doctrine highlighted varying degrees of air power consideration across the studied group.

Australia has both army and air power doctrine to address COIN but is deficient in any joint publications. This reality will remain for the short to medium term. Canada only has army COIN doctrine and has neither air power doctrine nor joint doctrine that deals with COIN. Like Australia, this absence of publications for Canada is not likely to be addressed in the short to medium term time frames. NATO joint doctrine distinctly underplays the use, impact and usefulness of air power in building host nation capability and capacity, and is instead focused mainly in servicing the military campaign. The US has the most comprehensive single service air power focused COIN doctrine of the examined group and this doctrine mostly serves COIN air power well. However, US joint doctrine is distinctly absent with respect to any true focus of air power integration into a comprehensive COIN strategy. Moreover, it is predominantly military ground force focused and can thus be described as an opportunity missed.

Chapter 2 drilled down into air power fundamentals as they relate to COIN. Four key air power capabilities were identified and discussed: air mobility, strike, ISR and C2. These key

capabilities when used in combination and in a selected manner serve not only the security aspects of the COIN campaign but also the overarching whole of government strategy required. The practicality of air power resource procurement and allocation was also discussed from both the perspectives of the host nation and supporting nations. The essential air power contributions of the supporting nations should be targeted to address identified shortfalls in host nation capabilities. The main effort needs to be directed towards developing the host nation to be able to field and sustain its own air power to fight the insurgency. Throughout the COIN campaign the types and roles of air power required will not be static and support nations must be flexible and adapt their air power contributions accordingly.

The resource intensive nature of air power capability building and the sustainment throughout a protracted COIN struggle requires careful consideration of the most suitable platforms and training. Host nation air power needs are not required to be mirror images of the platforms that supporting nations may employ. Rather, they need to be capable, sustainable and serve the government strategy and objectives. Chapter 2 concluded with a series of small historical case studies to practically demonstrate the effective and ineffective methods of air power employment throughout various COIN campaigns. These vignettes demonstrated that effective air power in COIN is more than just supporting and winning the military battle.

Chapter 3 is a direct challenge to the move beyond the prevailing military centric mindset of air power use currently found in COIN doctrine. There is very little emphasis throughout doctrine on how to build host nation capability and government legitimacy, focusing instead primarily on how to conduct war fighting. The USAF and to a smaller degree the RAAF have somewhat recognized this need and have already included elements of host nation air power building into their single service doctrine. However, it remains stagnated in practical

implementation and is largely ignored and excluded at joint doctrine levels. A mindset shift is required to produce and enact relevant COIN doctrine that is inclusive of air power use that focuses on war ending through host nation capacity and capability building as well as government legitimacy operations. As discussed by Olsen¹⁹¹ the complexity and nature of COIN requires actions that do not solely treat security matters, but more completely set about the systemic empowerment of a host nation in order to address all aspects of the population's needs and the root causes of the insurgency. Air power has the capacity to play a key role in this systemic empowerment of a host nation through non-kinetic, soft air power operations to directly serve a whole of government strategy to combat the insurgency. Given that the COIN battle is a political one, it is time to start addressing the use of air power to serve the whole strategy and not keep it confined to military operations whereby it addresses only half of the battle.

Chapter 4 builds upon the challenges set out in Chapter 3 to directly address the shortfalls in current air power COIN doctrine. It shows that both single service and joint doctrinal development and review are in order. Efforts must be employed by airmen to produce meaningful and relevant air power COIN doctrine. This doctrine must not only address the ways in which that nation itself can conduct the military fight, but it must also be true to all aspects of the COIN conflict. Specifically it is essential understand that the likely COIN roles to be undertaken by Australia, Canada, the US and NATO are in a supporting or intervening capacity. The doctrine needs to reflect this emphasis and provide guidance on equipping, structuring and training to fulfill this role and meet the capabilities this role demands. The doctrine should be rooted in reality of the capacity of the nation to conduct COIN air power in the manner prescribed. Smaller air power nations such as Australia and Canada must remain cognizant of their size and resource

¹⁹¹ Colonel John Andreas Olsen, "The Quest for a New Airpower Strategy." *Air & Space Power Journal* 29, no. 3 (May-June 2015): 32-33. <http://www.airpower.maxwell.af.mil/digital/pdf/articles/2015-May-Jun/F-Olsen.pdf>

limitations. Their doctrine should to be structured to empower a practical understanding and execution in meaningful plug in style COIN operations as part of larger coalition efforts. This will then largely avoid producing little more than sweeping and all-encompassing doctrinal motherhood statements that are not rooted in reality and thus cannot produce effective results.

Joint doctrine needs to elevate the role of air power beyond servicing or enabling ground force security elements. In a COIN campaign, air power has the capacity and capability to extend effects beyond the immediate military fight, and commanders and planners must be cognizant of this. This air power capacity needs to be recognized and embedded into joint COIN doctrine to provide the tools for military forces, commanders, planners and governments to fight the COIN battle across the entire effects spectrum and not solely the military effort.

What Next?

Air power's scope of influence on a whole of government strategy to a COIN campaign is immense. Yet the current use of air power in such a fashion is truly only practiced in somewhat of an ad hoc manner; it is rarely discussed and, most concerning, it is completely missing from doctrine. It is somewhat difficult to understand, given continual involvement and commitments of Australia, Canada, the US and NATO in COIN operations across the last fifteen years that there still exists such a paucity of air power COIN doctrine. What is just as concerning is that existing doctrine still only envisions air power as fighting half of the COIN battle.

Whilst this paper is not a panacea to the ills of the status of COIN doctrine and air power use, it does provide many talking points for conversations that should be occurring. Across air power development centres, headquarters, staff colleges and squadrons, it is time for airmen to start discussing their active roles in the process of air power employment in COIN and seek to translate and codify it into doctrine and practice. Air power has played, and will continue to play,

an important role in any COIN campaign. The importance of this role and its impacts will not progress to a detailed operational understanding and employment unless captured in doctrine. These conversations about air power use in the whole of government COIN strategy need to begin by firstly recognizing that shortfalls exist. Only then can the process of meaningful doctrine development begin.

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