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RELEVANCE OF AIRPOWER IN IRREGULAR WARFARE

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JCSP 40

Exercise *Solo Flight*

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Introduction

> *The Air Force will need to win in complex battlespaces characterized by rapidly changing technological breakthroughs, geopolitical instability, a wide range of operating environments, and an increasingly important and vulnerable global commons*.
>
> - General Mark A. Welsh III, Chief of Staff, USAF
> *A Call to the Future: The New Air Force Strategy Framework*

During its relatively short history, airpower has grown into a formidable instrument of national military power. It has demonstrated inherent capabilities of flexibility, responsiveness, persistence, versatility, and global reach in a wide range of conventional operations. Influenced by the Cold War, military forces were designed, postured, and trained to fight primarily state-on-state conventional war and have proven to be "very effective at achieving classic military objectives against countries' armed forces in a variety of circumstances."[1] The dominance of Western, but primarily the United States (U.S.) airpower has not gone unnoticed by potential and new adversaries. In seeking an advantage, less powerful adversaries will look to counter Western strengths and exploit vulnerabilities by using irregular warfare (IW).[2]

In order to achieve political and military objectives in contemporary low-intensity warfare, such as IW, airpower has reinvented itself numerous times through advancements in technology and tactics, technics, and procedures (TTPs) throughout the years. Despite a series of successful air campaigns since 1991, airpower continues to

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[1]Christopher Bolkcom and Kenneth Katzman, *Military Aviation: Issues and Options for Combating Terrorism and Counterinsurgency* (Washington DC: Congressional Research Service, Library of Congress, January 27, 2006), CRS-1, http://www.dtic.mil/dtic/tr/fulltext/u2/a454391.pdf.

[2]Allen G. Peck, "Airpower's Crucial Role in Irregular Warfare," *Air & Space Power Journal* 21, no. 2 (Summer 2007): 10, http://eds.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=22&sid=a956eefd-19d5-4150-8dbf-19d455b854c6%40sessionmgr114&hid=126.

struggle with its response to IW, outlining the challenge of applying airpower in irregular war.[3] Many of the airpower TTPs developed and refined during the Cold War, remain pertinent against isolated states, such as Iraq, Afghanistan, and Libya and non-state actors in modern IW conflicts, however, the "fundamental changes to the constraints placed on the use of armed force, the character of warfare, and the context to military operations demand more than the tweaked application of legacy capabilities."[4] The role of the airpower is not limited to a single type of war. It is expected to remain capable of conducting successful operations in both high- and low-intensity conflicts. The broad scope of IW activities is identified in U.S. *Air Force Doctrine Document (AFDD) 3-2 – Irregular Warfare* and includes foreign internal defence (FID), unconventional warfare, counterterrorism, counterinsurgency (COIN), and stability operations.[5] To remain a dominant force, adaptability is the key to an enduring and relevant airpower contribution.

This paper will aim to show that airpower is relevant in today's irregular wars. To continue making significant contributions, adaption is necessary in order to address the requirements of an evolving operational environment and remain responsive to the expectations of political and military leaders. With a focus on irregular warfare, this essay will explore the allure of airpower and why leaders tend to gravitate towards its use as part of an initial response to a military crisis. It will also identify potential kinetic and non-kinetic capabilities that may preserve the relevance of airpower in modern war. The

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[3]Christopher Griffin, "The dual-role dilemma," *Armed Forces Journal* 145, no. 2 (September 2007): 20, http://eds.b.ebscohost.com/ehost/external?sid=61b20aa0-7eee-4938-bfde-e814004829f1%40sessionmgr198&vid=12&hid=113.

[4]Paul Smyth, "Airpower and Counterinsurgency: Building on a Proper Foundation," *Air & Space Power Journal* 25, no. 2 (Summer 2011): 116, http://eds.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=24&sid=a956eefd-19d5-4150-8dbf-19d455b854c6%40sessionmgr114&hid=126.

[5]Department of Defense, *Air Force Doctrine Document 3-2, Irregular Warfare* (Montgomery, AL: LeMay Center for Doctrine Development and Education, 15 March 2013), 5.

key to success rests with modifying existing tactics and strategies, and utilizing all organic and joint capabilities to prevail against state and non-state actors, including insurgents and terrorists.

The Allure of Airpower

It is important to first understand why airpower is so attractive to political leaders and why it has become the primary *go to* means of employing the military instrument of national power. There are several factors that may help understand this viewpoint: global reach, technology, and air- and space-enablers.

First, airpower possesses the unique advantage of global reach; the relatively rapid projection of massive firepower capable of overwhelming an adversary.[6] It is apparent that this characteristic heavily factored into the selection of the U.S. response to the 11 September 2001 terrorist attacks. President Bush was presented with two options; one comprised of a land force of five divisions that required months to field prior to commencing combat operations.[7] The time-line and the logistic challenge of moving a large Army force to the land-locked country were daunting. The other (and approved) plan called for a combination of U.S. airpower, Special Forces (SOF), and indigenous Afghan allies that could be in place in a relatively short timeframe.[8] The anticipated spin-up time was expected to take 60-90 days to plan, equip, and train the joint force,

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[6]John A. Warden III, "Employing Air Power in the Twenty-first Century," in *The Future of Air Power in the Aftermath of the Gulf War*, ed. Richard H. Schultz, Jr. and Robert L. Pfaltzgraff, Jr., 57-82 (Maxwell AFB, AL: Air University Press, 1992), 61.

[7]Géraud Laborie, "The Afghan Model More Than 10 Years Later," *Air & Space Power Journal Africa & Francophonie* 4, no. 3 (Fall 2013): 50, http://www.au.af.mil/au/afri/aspj/apjinternational/aspj_f/digital/pdf/articles/2013_3/laborie_e.pdf.

[8]*Ibid*., 50.

nonetheless, combat operations began on 7 October, less than a month after the 9/11 attacks.[9]

Additionally, sophisticated technology also promotes the perception that air capabilities are an effective instrument of national power. Precision-guided munitions (PGMs) and intelligence, surveillance, and reconnaissance (ISR) data collection platforms have significantly decreased collateral damage due to kinetic actions. The employment of PGMs from long stand-off ranges lowers the risk or likelihood of significant loss of life to friendly forces.[10] After the air war ended in Afghanistan, the Pentagon reported that approximately 75 percent of all munitions employed during Operation Enduring Freedom (OEF) hit the intended target and achieved the desired result, compared to the 45 percent success rates in Desert Storm and Allied Force.[11] Also, the satellite-guided Joint Direct Attack Munition (JDAM) was assessed as having a 90 percent effectiveness rate throughout the campaign.[12]

Also, airpower is considered an enabler of joint, coalition, and Host Nation (HN) forces in IW. Direct air- and space-enablers include a global precision strike capability, information and cyber operations, ISR, air mobility and transport, helicopters, unmanned aerial systems (UAS), and space-based vehicles.[13] The innovation and adaptability of the air components, as part of a joint force, is recognized and outlined in Army and Marine Corps doctrine. "Airpower provides the supported ground forces with a significant asymmetric advantage over insurgents as a result of their flexibility, situational

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[9]Benjamin S. Lambeth, *Air Power Against Terror: America's Conduct of Operation Enduring Freedom* (Santa Monica, CA: RAND Corporation, 2005), 73-74.

[10]Warden, "Employing Air Power …," 61.

[11]Lambeth, *Air Power Against Terror …*, 249.

[12]*Ibid*., 250.

[13]Peck, "Airpower's Crucial Role …," 11.

understanding, freedom of manoeuvre, and access to immediate joint fires."[14] Control of the skies is an advantage that IW adversaries may not be able to counter in kind, and thus must factor into their decisions and actions.[15]

Airpower's Kinetic Capabilities

Considering the definition of IW, also adopted in RCAF Aerospace Doctrine[16] which is:

> a violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s). IW favors indirect and asymmetric approaches, though it may employ the full range of military and other capacities, in order to erode an adversary's power, influence, and will.[17]

This definition warns against ruling out the use of conventional capabilities by insurgents. Therefore, airpower must be prepared to respond to an adversary's course of action with a broad spectrum of strategies and tactics. Airpower's kinetic capabilities provide several important advantages to friendly forces: offensive attack, deterrence, and shaping of the combat environment to achieve a desired effect.

When adversary tactics reflect conventional warfare, close air support (CAS) "appears [to be] highly relevant to the non-state actor challenge."[18] The unique conditions in Afghanistan during OEF, and the desire for a rapid response brought together a combination of airpower, SOF, and local Afghan ground forces. This construct, now

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[14]Department of Defense, *Field Manual 3-24/Marine Corps Warfighting Publication 3.33-5, Insurgencies and Countering Insurgencies* (Washington DC: Department of the Army/United States Marine Corps, May 13, 2014), 9-12.

[15]Peck, "Airpower's Crucial Role …," 11.

[16]Department of National Defence, B-GA-400-000/FP-000, *Canadian Forces Aerospace Doctrine* (Winnipeg: DND Canada, December 2010), 66.

[17]Department of Defense, *Air Force Doctrine Document 3-2* …, 2-3.

[18]Bolkcom and Katzman, *Military Aviation* …, CRS-5.

known as the "Afghan Model"[19] was far from the traditional role utilized by air and ground forces in joint operations. The near real-time employment of joint targeting and PGMs clearly demonstrated the effectiveness of airpower, in particular when teamed with "not only forward ground spotters but also friendly ground forces sufficient to flush out and concentrate enemy forces."[20] The coordinated air-ground efforts involved SOF attacks, which concentrated Taliban forces into smaller areas (larger groupings), and highly effective air delivered precision-guided attacks.[21] This novel and effective use of airpower did not represent traditional CAS but instead blurred the doctrinal line between supporting and supported command relationships.[22] In addition to coordinating air strikes, SOF operators provided exceptionally accurate, real-time intelligence to complement the air force's electronic ISR capabilities.[23] The innovative combination of the modified joint targeting cycle, advanced technology, and a short kill chain was clearly demonstrated in support of General Dostum of the Northern Alliance. Only 19 minutes after he presented a target request to a SOF team, a B-52 engaged and destroyed a Taliban tank and troop formation.[24] Joint operations clearly illustrate the synergy between land and air forces.

As a deterrent, the presence of an overhead strike capability carrying a wide range of weapons can provide a significant advantage to the coalition forces. These assets can act as a persuasive tool and limit the options available to an adversary. During early OEF operations, the coercive nature of airpower was demonstrated during attempts to persuade Taliban commanders to surrender or defect.[25] Initially, SOF forces offered cash as an

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[19]Laborie, "The Afghan Model …," 49.
[20]Lambeth, *Air Power Against Terror* …, xxiii.
[21]*Ibid.*, xxiii.
[22]*Ibid.*, xxiii.
[23]*Ibid.*, xxiv.
[24]*Ibid.*, 260-261.
[25]*Ibid.*, 104.

incentive; however a hesitant commander required additional motivation. A JDAM attack outside of his headquarters convinced him to accept the offer for less money.[26]

Alternately, when operations like Anaconda encounter unexpected or unplanned enemy resistance or casualties, the benefits of readily available airpower carrying a variety of weapons are invaluable. As Anaconda continued into daylight hours, the AC-130 gunship had to withdraw and left a huge gap in firepower.[27] Terminal air controllers then had to call in other airborne fighter and bomber assets, which fortunately were able to support many of the CAS requests and negate the enemy advantage.[28]

Another benefit of kinetic airpower is the ability to shape the environment. During the Libyan conflict, allied forces initially concentrated their efforts on the attrition of Qaddafi's forces. The air strikes were so successful that Qaddafi's troops abandoned their conventional equipment and adapted theirs tactics by reconstituting their forces to resemble rebel fighters, making them less vulnerable to air attack.[29] The United Nations Security Council Resolution (UNSCR) 1973 restricted the employment of NATO ground forces which negatively impacted and limited the effectiveness of strike missions, especially after the change in the Libyan forces' tactics.[30] The attempt to use the Afghan Model proved problematic since no SOF-like NATO forces were authorized in Libya to closely coordinate with the rebels. The lack of coordination between the Libyan rebel forces and airpower, coupled with the inability to accurately distinguish Qaddafi's

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[26]*Ibid*., 104.
[27]*Ibid*., 190.
[28]*Ibid*., 190-191.
[29]Erica D. Borghard and Constantino Pischedda, "Allies and Airpower in Libya," *The US Army War College Quarterly Parameters* XLII (Spring 2012): 68-69. http://strategicstudiesinstitute.army.mil/pubs/parameters/Articles/2012spring/Borghard_Pischedda.pdf. 68-69.
[30]Jason R. Greenleaf, "The Air War in Libya," *Aerospace Power Journal* 27, no. 2 (March-April 2013): 32, http://www.au.af.mil/au/afri/aspj/digital/pdf/articles/Mar-Apr-2013/F-greenleaf.pdf.

reconstituted forces may have been the cause for the loss of rebel gains made during the NATO air strikes.[31] Eventually, SOF forces from Qatar and the United Arab Emirates, along with the French and British, deployed to coordinate with the Libyan rebels, which allowed the effective use of airpower per the Afghan Model.[32]

Initially, airpower countered Qaddafi's forces by effectively incapacitating tank and mechanized forces, which swayed the military advantage to the rebels. This created a buffer or "breathing room for the fledgling opposition forces to become more skilled."[33] The ability to create a delaying effect highlights an important contribution and role airpower can play in order to shape the battlespace and shift the balance in favour of other, possibly outmatched, forces.[34]

The air component brings a tremendous amount of the firepower potential to any battlespace and the flexibility to pursue a wide range of activities in order to achieve the military objectives. Kinetic capabilities allow military commanders to shape the environment, destroy or even annihilate targets, and/or deter adversaries from conducting their preferred courses of action. In order to remain truly effective during IW, care must be taken to avoid some inherent pitfalls. This includes a danger of backlash caused by collateral damage. Often collateral damage, especially if actions result in civilian casualties, will be used by the insurgency as propaganda to rally the popular support and discredit coalition forces.[35] Additionally in IW, the ability to strike at an adversary's centers of gravity (CoGs) will have less relevance due to the decentralized nature of the

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[31]Borghard and Pischedda, "Allies and Airpower in Libya," …, 64-65.
[32]Laborie, "The Afghan Model …," 53.
[33]Borghard and Pischedda, "Allies and Airpower in Libya," …, 64.
[34]*Ibid*., 64.
[35]Lambeth, *Air Power Against Terror* …, 98-99.

insurgent/terrorist organizational structure.[36] The traditional strategic targets of leadership, key production, infrastructure, population, and fielded forces as outlined in Warden's Five Ring System[37] may not be easily discoverable nor generate the desired outcomes in IW. Perhaps, to complement kinetic capabilities, the employment of the support role and low-tech aspects of airpower may be conducive setting the conditions necessary to win the hearts and minds of the population in small wars and IW.[38]

Airpower's Non-Kinetic Capabilities

> *Where possible, U.S. strategy is to employ indirect approaches – primarily through building the capacity of partner governments and their security forces – to prevent festering problems from turning into crises that require costly and controversial direct military intervention.*
>
> - Secretary of Defense, Robert Gates[39]

The statement by former U.S. Secretary of Defense, Robert Gates opens the door for the air component to look at options to perhaps find a balance between overwhelming conventional capabilities and a niche IW force capable of building a tailored air capacity in developing partner nations.[40] The use of indirect methods may produce a combination of desired effects. One such approach is the called the Aviation - Foreign Internal Defense (A-FID) which focuses on "assessing, training, advising, and assisting HN aviation forces in the sustained use of airpower to help their governments deal with

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[36]Peck, "Airpower's Crucial Role …," 11.

[37]John A. Warden III, "Success in Modern War: A Response to Robert Pape's *Bombing to Win*," *Security Studies* 7, no. 2 (Winter 1997/1998): 174-176.

[38] James S. Corum and Wray R. Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists* (Kansas: University Press of Kansas, 2003), 427-433.

[39]Bernie Willi, "The Importance of Airpower in Supporting Irregular Warfare in Afghanistan," *Air & Space Power Journal* 26, no. 4 (July – August 2012): 105. http://www.airpower.au.af.mil/digital/pdf/articles/2012-Jul-Aug/V-Willi.pdf.

[40]George H. Hook Jr., "Closing the Irregular Warfare Air Capability Gap: The Missing Puzzle Piece: Rugged Utility Aircraft and Personnel," *Air and Space Power Journal* 24, no. 4 (Winter 2010): 57, http://www.airpower.au.af.mil/airchronicles/apj/apj10/win10/2010_4.pdf.

internal threats."[41] The development of an appropriate air capability will increase the ability to fight more effectively, enhance legitimacy, and reduce dependence on foreign forces.[42]

In Afghanistan, the NATO Air Training Command-Afghanistan (NATC-A) and the Afghan Air Force (AAF) worked together to build a partnership which strived to develop a sustainable, supportable, and readily available airpower solution that meets current and future security requirements of the Afghan people and civil authorities.[43] The capabilities were tailored to the financial wherewithal of the state and include transportation, casualty evacuation, air mobility, training, and CAS in support of Afghan National Security Forces.[44]

HN airpower is a significant benefit for both the HN government and coalition forces. The ability to conduct air missions, such as humanitarian support, disaster relief, and election support demonstrates to the people and the insurgents that the HN government can enable beneficial change and improvement within the state.[45] When citizens see constructive government activities or citizens benefit from government sponsored assistance, these actions foster the transparency, credibility, and legitimacy of the government.

An example was the deadly avalanches in the Salang Pass in Afghanistan.[46] Using AAF aircraft, Afghan and NATO crewmembers were able to quickly rescue numerous Afghan citizens as well as recover many of the people killed in the natural disaster.[47] The

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[41]Department of Defense, *Air Force Doctrine Document 3-2* …, 40.
[42]Peck, "Airpower's Crucial Role …," 14.
[43]Willi, "The Importance of Airpower in Supporting …," 107.
[44]*Ibid*., 107-108.
[45]*Ibid*., 109-113.
[46]*Ibid*., 109.
[47]*Ibid*., 109.

rapid recovery of the injured and the swift return of the deceased, which addressed the Muslim sensitivity to quick recovery and burial, produced invaluable effects and reactions from the individuals and their families, and perhaps in the larger society as well.[48] Additionally, possessing a casualty evacuation capability to transport wounded soldiers to medical facilities can increase operational effectiveness, improve confidence, and the chances of survival.[49] These types of missions clearly demonstrate tangible proof of the government's altruistic motives and support to its people, and may influence small communities or tribal leaders to shift their allegiance from the insurgents by "discrediting … [insurgent] propaganda describing the government and coalition partners as 'monsters' and adding credibility to the central government's claim of legitimacy."[50]

Perceptions play a crucial role in building legitimacy. Thus, a long-term foreign military presence can undermine the legitimacy of a HN government and risks turning the insurgency into a war against the coalition force.[51] The importance of reducing the visibility and involvement of foreign airpower in daily HN operations is necessary to bolster confidence and experience of the HN forces. The use of mentors can accomplish this task. When the support to the 2010 election was threatened by the Taliban, enthusiastic AAF members undeterred by the threats, along with NATC-A mentors, developed a plan and successfully executed an election support mission using Afghan Mi-17s and U.S. Army AH-64s as escorts.[52] By conducting the main component of the mission, the retrieval of the election ballots, the AAF clearly demonstrated to both the

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[48]*Ibid*., 109-110.

[49]Derek Read, "Airpower in COIN: Can Airpower Make a Significant Contribution to Counter-Insurgency?" *Defence Studies* 10, nos. 1-2 (March – June 2010): 128, http://eds.a.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=9&sid=bf36c7d2-d0a4-4151-b1e4-aa9482c74846%40sessionmgr4005&hid=4113.

[50]Willi, "The Importance of Airpower in Supporting …," 112.

[51]Bolkcom and Katzman, *Military Aviation* …, CRS-40.

[52]Willi, "The Importance of Airpower in Supporting …," 113.

population and the insurgents that they have the will and the capability, and are committed to the mission, the government, and the betterment of their country. By withdrawing to a support role, coalition airpower participation is reduced; it becomes less visible to the civilians and the insurgents, which may help foster a change in the perception of the HN government. The government should be seen as capable of maintaining security, protection, and stability for the population and of the state.

One of the most important contributions that airpower can make to any operation is the collection of near real-time data and intelligence.[53] Air- and space-based ISR systems can provide nearly unlimited, timely, and accurate intelligence due to the ability to maintain a persistent presence over the battlespace. The intelligence collected can augment, add value to situational awareness, and promote informed decision-making, but there is a limit what can be achieved by aerial ISR platforms.[54] Even if detecting small groups of adversaries is possible, the biggest challenge is distinguishing the enemy combatants from non-combatants.[55] Without the awareness and knowledge that comes from conversation, body language, eye contact, and personal interaction that can only be obtained by direct human contact, a significant component of intelligence can be missed.[56] A group of people can be identified, but the reason why they are at a certain location may not be readily discerned via ISR platforms alone. Consider a gathering of people outside a Mosque; could it be a meeting of key adversary leaders or simply a

[53]Read, "Airpower in COIN …," 128.
[54]Read, "Airpower in COIN …," 129.
[55]Bolkcom and Katzman, *Military Aviation* …, CRS-20.
[56]Smyth, "Airpower and Counterinsurgency …," 119.

family wedding? The need for an indigenous (human) ISR capability is essential to develop improved intelligence.[57]

Non-kinetic capabilities can play a significant role in winning the hearts and minds of a HN population. By possessing an airpower capability, a government should have the ability to effectively and quickly respond to a variety of internal security, safety, and disaster situations within their country. The anticipated result may be the enhancement of the relationship between the HN government and the population at large as well as decreased support to non-state actors.

Conclusion

There is ample evidence supporting the relevance of airpower in today's contemporary irregular wars. The dominance of Western airpower is not lost on potential adversaries. Its inherent characteristics of speed, responsiveness, global reach, and versatility, along with the ability to project overwhelming precision strike capabilities and to operate in a joint environment are attractive qualities. There is little surprise when political and military leaders routinely consider airpower as an integral component in a first response plan to the address security and matters of national interest. These are the same characteristics that contemporary adversaries, both state and non-state actors aim to avoid while attempting to exploit their weaknesses.

Possessing both kinetic and non-kinetic capabilities, airpower should be employed in a balanced, tailored approach capitalizing on both kinetic and non-kinetic capabilities to exploit the applicable advantages of each within the given operating environment. The key to overcoming the challenges posed by IW will be adaptability and flexibility.

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[57]Read, "Airpower in COIN …," 129.

Kinetic capabilities give an invaluable advantage to a commander. The traditional close air support and bombing roles will continue to be a significant cornerstone of airpower capabilities. Kinetic airpower can deliver precision-guide attack, deterrence, and an ability to shape the operating environment and possibly sway the advantage to a potentially smaller or weaker partner force. In IW, the deciding factors for success may be effective and innovative joint operations and the adaptation of existing TTPs tailored to conditions in the operating environment. Operations in Afghanistan and Libya suggest that joint operations will be a vital element to defeating IW combatants. The success of the Afghan Model showcased the ingenuity, skill, and determination of air and ground forces to accomplish the job with the available resources.

As IW focuses on the struggle for influence over the population, non-kinetic airpower capabilities must enable partner governments with a capability to address internal defence and security issues. The development of a sustainable and supportable air force that can provide intelligence, air mobility and transport, and support to ground forces, such as CAS will significantly enhance the HN government's ability to independently resolve internal security matters. The capacity to build partner capabilities by initiatives such as foreign internal defence will lead to improving government capabilities, credibility, and legitimacy and to the gradual reduction of foreign forces.

Airpower can provide a means to not only demonstrate a government's commitment, but also help set the conditions to win popular support of its citizens through the provision of basic services and security, addressing the root cause of the discontent, and as a result, decrease the support to the IW combatants. It is clear that airpower plays a relevant role in IW. However, commanders, leaders, and planners must

constantly assess the operating environment, find new or modified ways of combating the IW threat, and employ all applicable capabilities and resources to promote the achievement of the political and military objective.

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