

Air-Minded Considerations for Joint Counterinsurgency Doctrine

Written by Charles J. Dunlap Jr

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What would joint counterinsurgency (COIN) doctrine that includes “air-mindedness” look like? The Army and Marine Corps have issued COIN doctrine—Field Manual (FM) 3-24 / Marine Corps Warfighting Publication (MCWP) 3-33.5, *Counterinsurgency*—that clearly articulates what one might call a “surface-minded” perspective.[1] Unfortunately, that doctrine relegates airpower to a five-page annex in a 282-page document. However, an effort is now under way to draft joint COIN doctrine that, presumably, not only will include a full exploitation of airpower per se, but also be informed by an air-minded perspective.[2]

“Air-minded” does *not* mean “air-centric” or even dominated by air, space, and cyberspace power. Rather, one should look to Gen Henry H. “Hap” Arnold’s use of the term to characterize an Airman’s “particular expertise and . . . distinctive point of view.”[3] According to Air Force doctrine, an Airman’s “perspective . . . is necessarily different; it reflects the range, speed, and capabilities of aerospace forces, as well as threats and survival imperatives unique to Airmen.”[4]

Air-mindedness actually means more than that. It includes, for example, an Airman’s predilection to especially value technology when seeking advantages over enemy forces. It reflects an Airman’s desire to avoid the carnage of ground-force engagements wherever possible. Moreover, whereas soldiers and marines may seek the “close fight,” airmen look for opportunities to obtain the desired effects from long distance—that is, without giving the enemy the opportunity to close. Properly applied, an air-minded approach provides many opportunities to create what COIN experts Steven Metz and Raymond Millen say is needed to win: an “effects-based approach designed to fracture, delegitimize, delink, demoralize, and deresource insurgents.”[5]

Providing a full-blown draft doctrine lies well beyond the scope of this article. Nevertheless, one may identify some considerations that an Airman might bring to the development of joint COIN doctrine, as outlined in the following examples.[6]

Exploit the Psychological Impact of Contemporary American Airpower on Adversaries

As thorough a job as FM 3-24/MCWP 3-33.5 does in reviewing previous conflicts involving nontraditional adversaries, it does not incorporate the implications of the psychological dimension of today’s airpower. This is not a discussion about the much-debated effect of airpower on civilian morale but about how current precision capabilities influence the morale of combatants. It concerns the targeting of insurgents’ “hearts and minds.”[7] Understanding how airpower drove the Taliban and their al-Qaeda allies from power in Afghanistan, for example, is essential to designing the effective use of the air weapon in future COIN operations.

Accomplishing this feat proved a considerable challenge. Afghans, numbered among the world’s most fearsome fighters, have enjoyed that reputation for thousands of years. The Soviets sought to tame them with an enormous application of raw combat power but ultimately failed. Yet, the United States managed to oust the Taliban and al-Qaeda from power in a matter of weeks. How? By inflicting helplessness as only the newest developments in airpower can.

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Technology that the Soviets did not possess in the 1980s enabled airpower's decisiveness in the downfall of these adversaries. Russian aviators had neither the sensor suite nor the precision technology of today's US airpower. Typically, Soviet pilots had to fly low enough to acquire their targets visually, which caused devastating aircraft losses once the mujahideen acquired American-made Stinger antiaircraft missiles.[8] Although the Russians devised various tactics to counter that threat, the missiles eventually forced them to the safety of higher altitudes that, in turn, caused accuracy and combat effectiveness to suffer.[9]

Unlike Soviet airpower in the 1980s, that of the United States in the twenty-first century can inflict devastating, highly accurate attacks not only by tactical aircraft, but also by heavy bombers flying at altitudes that rendered the Taliban's already meager air defense completely ineffective. According to Gen Tommy Franks, USA, retired, the newly acquired linkage of ground-based controllers to "B-52s orbiting high above the battlefield had proven even more lethal than military theorists could have imagined." [10] Enemy forces in long-held positions often never saw or heard the plane that killed them. This new-style air onslaught rapidly collapsed enemy morale and resistance.

Moreover, it did so with minimal risk to US personnel. One discouraged Afghani told the *New York Times* that "we pray to Allah that we have American soldiers to kill" but added gloomily that "these bombs from the sky we cannot fight." [11] The Taliban found the precision fire of AC-130 gunships—another weapon the Soviets did not possess—equally dispiriting. An Afghan ally related to General Franks that this "famous airplane . . . [has] destroyed the spirit of the Taliban and the Arabs." [12]

These capabilities capture one of the foremost features of contemporary American airpower in COIN situations: its ability to impose the psychology of "engagement dominance" on otherwise dogged adversaries.[13] Death per se does not extinguish the will to fight in such opponents; rather, it is the hopelessness that arises from the inevitability of death from a source they cannot fight.

Sheer impotence in the face of superior weaponry and the denial of a meaningful death will crush war-fighting instincts. Essentially, this amounts to exploitation of an inherent fear of soldiers of all cultures: confronting technology against which they cannot fight. Even experienced soldiers can be driven to near panic, as happened when British soldiers faced German tanks during World War II with inadequate weaponry.[14]

The psychological effect of air attack's infliction of helplessness may exceed the physical effects. Commenting on British use of airpower to suppress insurgencies in Arab territories during the 1920s and 1930s, Sir John Bagot Glubb concluded that although aircraft do not generally inflict heavy casualties, "their tremendous moral effect is largely due to the demoralization engendered in the tribesman by his *feelings of helplessness and his inability to reply effectively to the attack*" (emphasis added).[15]

One might say that American precision airpower is analogous (on a much larger and effective scale) to the effect that insurgents try to impose on US and other friendly forces through the use of improvised explosive devices, the most deadly weapon faced by COIN forces.[16] The seeming randomness, unpredictability, and persistence of these attacks are just as effective at destroying morale as causing casualties. Airpower, though, uses what might be called "devised" explosive devices that nevertheless share many of the same morale-destroying and stress-inducing qualities. The Air Force, however, uses these devices against legitimate military targets and can employ them in vastly greater numbers.

Properly employed, the air weapon can impose friction and extreme psychological stress on insurgents.[17] Airmen may soon have a new weapon to carry out such devastating attacks—the MQ-9 Reaper unmanned aerial vehicle.[18] With a weapons load equivalent to that of the F-16, the Reaper represents a new generation of "hunter/killer" aircraft that can relentlessly pursue insurgents at *zero risk* of losing an American.

None of this suggests that Airmen believe they should resolve COIN operations in the twenty-first century exclusively through the use of force. It does say that there is still a place for its aggressive, offensive use as an important part of a holistic COIN doctrine, even in today's highly scrutinized operations. Nor does it mean that one should use only airpower when force is required. As Operation Enduring Freedom has demonstrated, airpower—along with allied

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forces on the ground and enhanced by tiny numbers of US special forces—can produce results that minimize risk to Americans.

Clearly, however, not all air-minded approaches to COIN involve kinetic attacks against insurgents. Airmen can also help devise nonkinetic approaches to aid the host-nation population caught in the violence.

Consider Air-Minded Approaches to Securing Fixed Locations

Of particular relevance to COIN operations—especially with respect to securing fixed locations—is the transformation undergone by Air Force security forces. It is quite true that “today’s security forces career [field] barely resembles its own Air Force specialty code from a decade ago.”[19] As a result of policy decisions in the 2005 time frame now enshrined in joint doctrine, the Air Force assumed responsibility for defending air bases “outside the wire.”[20]

Airmen have shown that ground defense of a fixed location can succeed by applying air-mindedness. Specifically, the Air Force applied its own organizational theory and technological expertise to develop a unique approach to air base defense, as it did with great success at Balad Air Base, Iraq, during Operation Safeside, a 60-day drive to quell hundreds of mortar and rocket attacks launched from a particularly vexing sector of the perimeter.[21] According to the Airmen involved, the operation’s achievements “dispelled the perception that Army units are better organized, trained, and equipped than Air Force security forces to conduct such operations. Unlike previous Army units, the task force achieved the desired effect.”[22] The Air Force now has specially trained ground-force units, including the airborne-capable 820th Security Forces Group, ready to apply its distinctive approach to securing particular areas from insurgent attacks—an obvious advantage in COIN situations.[23]

The Air Force continues to look for other technological solutions especially suited for the COIN environment. Currently, security forces are testing the Active Denial System, technology originally developed by the Air Force Research Laboratory and designed to “engage and repel human targets by projecting a beam of energy that creates an intolerable heating sensation on the skin.”[24]

An additional technique for offsetting insurgent tactics against logistical lines of communication for fixed locations involves airlifting vital materials so as to minimize the need for surface resupply. One could send airlifted materiel to those fixed locations with airfields. As Gen Barry McCaffrey, USA, retired, tells us, American airlift “flew 13,000 truckloads of material into Iraq for pinpoint distribution last year.”[25] Such “pinpoint distribution” by air, however, no longer requires an actual airstrip. High-technology has reached airdrop processes, which could significantly reduce risk.

Specifically, US airpower is undergoing a “revolution in airdrop technology.”[26] Although the Army serves as technical manager for the Joint Precision Air Drop System (JPADS), which enables precision airdrop from 24,000 feet and higher—well above the threat altitudes that bedevil rotary-wing operations—it was developed from Air Force basic research.[27] The JPADS diminishes the enemy’s opportunity to inflict casualties. *USA Today* reports that “the precision airdrop system is seen as a way of minimizing danger to convoys, which are frequent targets of roadside bombs. It can also quickly resupply troops on the far-flung battlefields.”[28] Although the JPADS will probably never replace surface convoys, experiments will soon begin with bundles weighing up to 60,000 pounds, leading experts to conclude that “the sky is the limit on where this can go for improving operations on the battlefield.”[29]

Maximize Airmen’s Expertise in Cyberspace and Information Operations

Cyberspace—the “physical domain within the electro-magnetic environment”—is the newest entry in airpower’s portfolio.[30] The Air Force has established a cyberspace command aimed at maintaining not only dominance in communications and information technology, but also “superiority across the entire electromagnetic spectrum.”[31] Given the “inherently technical . . . nature” of cyberspace operations, it fits naturally with the culture of Airmen.[32]

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Moreover, cyber operations are a direct expression of an air-minded approach. As the Air Force's doctrine on irregular warfare points out, "Like air operations, cyber operations can strike directly at nodes of interest."^[33] Properly executed, cyber operations minimize the enemy's opportunity to inflict casualties that might otherwise result from close combat.

Consequently, in perhaps no other area are the antitechnology views espoused by some individuals more off target.^[34] Actually, in the cyber arena, high tech is both central to twenty-first-century peer-competitor conventional war and one of the most revolutionary features of putatively "low-tech" contemporary COIN environments. Max Boot points out that Islamist insurgents rely heavily on information technologies that "barely existed in 1980."^[35] Gen Ronald Keys, USAF, retired, former commander of Air Combat Command, provides more detail: "The terrorists are using cyberspace now, remotely detonating roadside bombs. Terrorists use global positioning satellites and satellite communications; use the Internet for financial transactions, radar and navigation jammings, blogs, chat rooms and bulletin boards aimed at our cognitive domain; e-mail, chat and others providing shadowy command and control [C2]; and finally overt and covert attacks on our servers."^[36]

Airmen work to place an "information umbrella" over friends and foes alike.^[37] Although one encounters legal constraints in many areas regarding what one may do in cyberspace, such restrictions may prove less of an issue in Iraq. Lt Gen Abboud Gamber, Iraqi commander of the Baghdad security effort, declared that under Iraqi law, the government could "search, control, and seize all parcel post, mail, telegraphs, [and] communication devices as needed."^[38]

Integral to cyberspace capability are information operations (IO), which Airmen, especially in the Air Force, consider a "key operational function" of their component.^[39] Thus, an air-minded approach would look for opportunities to exploit technological means to "influence, disrupt, corrupt, or usurp" the unconventional kinds of C2 systems used by insurgents.^[40]

Cyber operations may present opportunities to limit the vulnerability of US troops. As one of its central means of assisting the host-nation population, FM 3-24/MCWP 3-33.5 advocates a "clear-hold-build" strategy that requires COIN forces to "eliminate insurgent presence" in selected areas, followed by efforts to keep the location secure and rebuild host-nation institutions.^[41] Unfortunately, these clearing operations are very high risk. To minimize that risk, one might do better to focus on the "build and hold" portions in more benign and cooperative areas.

That said, one may need an aggressive air-minded approach to prevent "uncleared" areas from becoming electronic C2 sanctuaries. One author offers an "extreme proposal" perhaps worth considering: "to completely shut down the information technology grid in the insurgent areas—telephones, cellular towers, and so on."^[42] The proposal raises complex issues but does have the attractive feature of being virtually casualty free.

For Airmen, IO includes influence operations (although they are separate from traditional public-affairs functions).^[43] Unfortunately, the United States has enjoyed little success in this area. In January 2007, the title of a *Newsweek* article accurately noted that the United States is "Losing the Infowar" in Iraq.^[44] Granted, this difficulty is not a new one, but the fact that the insurgents are exploiting *technology* to defeat American efforts (as General Keys also noted) is especially frustrating.^[45] Specifically, *Newsweek* observes that "insurgents using simple cell-phone cameras, laptop editing programs and the Web are beating the United States in the fierce battle for Iraqi public opinion."^[46]

As suggested above, one can take extreme measures to deny insurgents access to or use of these technologies. Some situations, such as an unauthorized television station broadcasting from within Iraq, ought to be relatively easy to interdict technically (although it has evidently proven difficult).^[47] This particular station's anti-American invective has made it the "face" of the insurgency within Iraq, so shutting it down would clearly benefit the COIN effort and would seem to be in keeping with democratic values.^[48]

In any event, this may be the only way to control enemy propaganda that is dangerously inciting violence in certain areas. If we take such action, we might use a low-tech airpower means (e.g., air-delivered leaflets—a technique used

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successfully in Iraq in the past) to partially replace information that the host-nation population in the affected area would lose.[49] Additionally, Commando Solo aircraft can broadcast appropriate messages to otherwise denied areas.[50]

Utilizing military deception at this point in Operation Iraqi Freedom would prove more problematic. Although such deception remains an internationally accepted means of warfare, one must take care to ensure it complies with US and Iraqi law, as well as the political aims of both countries.[51] Still, COIN expert Bard O'Neill advises that "propaganda and disinformation campaigns" to discredit insurgent leaders can be effective.[52]

Again, this idea is not especially new. Back in 1995, Thomas Czerwinski, then a professor at National Defense University's School of Information Warfare, postulated one scenario: "What would happen if you took Saddam Hussein's image, altered it, and projected it back to Iraq showing him voicing doubts about his own Baath Party?"[53] If it can be updated effectively to apply to today's insurgent leaders in Iraq, the concept deserves careful consideration.

Influence operations must also have positive, accurate messages—what one might call a "compelling counter-narrative." [54] Such a narrative will help separate insurgents from sources of support, an aim of many COIN strategies.[55] In Iraq, this becomes an especially complex task because, as one analyst puts it, there may be as many as four "wars" occurring simultaneously, which may overlap and vary widely.[56] Designing messages and selecting targets for them that would have the effect of disrupting or even severing the insurgents' support are extremely difficult tasks.

One segment, however, cuts across all the groups and sects and might serve as a potential US ally—women, who arguably represent the largest oppressed group in Iraq.[57] Indeed, war widows suffer especially now, and women stand to lose much if extremists take hold.[58] The idea of reaching out to women has resonance in classic COIN theory. David Galula's book *Pacification in Algeria, 1956–1958* discusses just such an effort with the subjugated Kabyle women during France's Algerian COIN operation.[59] Furthermore, recent scholarship indicates that the empowerment of women leads to clear economic and political gains, particularly when they assume leadership roles.[60] In today's Algeria, Muslim women are emerging as the nation's "most potent force for social change . . . [and are] having a potentially moderating and modernizing influence on society." [61]

Positive messages to women about the value of a democracy that respects individual rights and offers opportunities for participation must be matched with complementary action. One innovative possibility would entail establishing secure compounds explicitly designed to aid women. Among other things, providing a secure environment for women's educational and organizational opportunities could catalyze the process of winning the hearts and minds of a potentially decisive part of Iraqi society.

To be sure, many influential Iraqis oppose women's rights. According to Edward Luttwak, clerics say that women's rights are "only propagandized [by the United States] to persuade Iraqi daughters and wives to dishonor their families by imitating the shameless nakedness and impertinence of Western women." [62] Nevertheless, we may have a real opportunity to reach out to such a substantial portion of the population that could benefit so greatly.

Develop a Truly Joint Approach to Counterinsurgency That Respects the Airman's Expertise

FM 3-24/MCWP 3-33.5 also raises the serious and persisting issue of the control of airpower, indicating that the ground commander should exercise that authority. According to *Air Force Magazine*, FM 3-24/MCWP 3-33.5 argues, in effect, "that airpower is best put under control of a tactical ground commander or, at the highest level, the multinational force commander, but not an airman." [63]

It is remarkable that FM 3-24/MCWP 3-33.5 chooses to resurrect a debate that has been a source of acrimony almost from the beginning of the history of the air weapon. Airmen hold as an article of faith, embedded in doctrine, that "Airmen work for Airmen" so as to preserve the principles of unity of command and simplicity.[64] The air-mindedness of Airmen can ensure that the full capabilities of airpower are brought to bear on the COIN challenge.

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Airmen believe that US ground forces are the finest in the world. Unfortunately, that feeling evidently is not mutual. Many members of the ground component have an entrenched belief that the Air Force disdains close air support of ground forces—an ironic notion since, for example, about 79 percent of the targets struck by airpower during Iraqi Freedom fell into that category.[65] Also troubling is the report of Lt Gen Tom McInerney, USAF, retired, regarding signs that the Army wants to build, in effect, its own air force even though it has not always demonstrated, as discussed below, the same level of expertise in handling aviation assets as it has with its ground forces.[66]

A recent example from Iraqi Freedom might prove instructive. In a *Joint Forces Quarterly* article, Maj Robert J. Seifert points out that AC-130 gunships are controlled by ground commanders who limit them to providing air cover to specific units. This makes the aircraft unavailable to attack emerging targets in another unit's area of operations. Major Seifert contends that this situation represents something of a reversion to the airpower-control practices that proved so inefficient in North Africa during World War II. He suggests a more air-minded approach that would allow the gunships to achieve their full potential by putting the weapon in an on-call status, continually linked to joint terminal attack controllers in several units (or other aircraft), thus optimizing each sortie.[67]

In reality, American ground-force commanders often do not understand how to use airpower effectively and efficiently. Consider the Army's nearly disastrous Operation Anaconda in Afghanistan. Seymour Hersh's book *Chain of Command* suggests that Army leaders mistakenly thought that they "could do [the operation] on [their] own," with little assistance from the air component.[68] As a result, the air component entered the planning process very late, forbidden to conduct major preparatory strikes.[69] Although fixed-wing airpower eventually rescued the operation from serious difficulties and accounted for most of the terrorists killed in the operation, the Army commander nevertheless denigrated the Air Force's efforts in a subsequent magazine interview.[70]

That interview really demonstrates the degree to which this senior Army commander lacked sufficient understanding of airpower capabilities to ensure optimal planning. Although Ben Lambeth's analysis of Anaconda in his book *Air Power against Terror* was too gentle, it still concluded that "those who planned and initiated Operation Anaconda failed to make the most of the potential synergy of air, space, and landpower that was available to them." [71] Indeed, that unfamiliarity—reflected in the airpower annex of FM 3-24/MCWP 3-33.5—evidently persists.

Today's airpower capabilities can amaze ground commanders engaged in the COIN fight. One candidly expressed his astonishment about an incident in Iraq in which an F-15 used its sensors to follow individual insurgents as they tried to hide in reeds near a river: "I'd walked in the dark within ten feet of one guy and [the aircraft] sparkled the target right behind me, told the [ground controller] to tell me to turn around." [72] He was then able to capture the otherwise-hidden insurgents.

Given the approach to airpower in FM 3-24/ MCWP 3-33.5, it is not surprising that ground commanders fail to appreciate its potential—a situation that hurts the COIN effort. One battalion commander admitted that in his first few months in Iraq, he "rarely put air into [his] plan . . . because [he] did not understand how it could assist . . . in a counter insurgency fight." [73]

When it does consider airpower, FM 3-24/ MCWP 3-33.5 clearly favors rotary-wing options. For example, it speaks of "technological advances" that "greatly [increase] the accuracy and utility of helicopter airdrops" for sustainment.[74] Unfortunately, the survivability of helicopters in hostile COIN environments is becoming increasingly suspect. One of the few Iraqi successes during the conventional phase of Iraqi Freedom occurred in March 2003, when Iraqis used ordinary cell phones to orchestrate an ambush of Apache helicopters that left 27 of 33 unable to fly.[75] Even more disturbing are reports that Iraqi insurgents are fielding capabilities that exploit rotary-wing vulnerabilities.[76] Although enthusiasts of the Army attack helicopter continue to argue for the efficacy of that weapon in the close fight, it seems that the Air Force's fixed-wing aircraft such as the A-10 (highly survivable in the COIN environment) are more prudent choices for the strike mission.[77]

Having Airmen control airpower produces a unique benefit for the COIN fight because it enables COIN forces to capitalize on a gap in insurgents' understanding of military power. In fact, COIN forces can dominate airpower's asymmetric advantage *if* Airmen are allowed to exercise their advantage in expertise. Doing so has great potential

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because few insurgents really understand the capabilities of airpower that the United States can field today. Such gaps have caused insurgents to make catastrophic mistakes.

In 1968, for example, Gen Vo Nguyen Giap of North Vietnam lay siege to the Marine position at Khe Sanh. He mistakenly assumed that American airpower would prove no more effective than French airpower during the 1954 siege of Dien Bien Phu, the surrender of which spelled the end of France's colonial empire in Southeast Asia.[78] The result of this "insurgent" misperception of airpower? Destruction and defeat. Under ferocious air attack called, appropriately, Operation Niagara (B-52s alone showered over 59,000 *tons* of bombs on enemy forces), Giap's troops abandoned their attempt after 77 bloody days.[79]

There is no reason to believe that Iraqi insurgents have any particular airpower expertise, even among members of the former regime. In the aftermath of the destruction of the Republican Guard by air attack during Iraqi Freedom, a stunned Iraqi Army officer expressed his frustration about his leadership: "They forgot that we are missing air power. . . . U.S. military technology is beyond belief." [80]

And More. . . .

Many other possibilities exist for creatively exploiting airpower and technology to the benefit of the COIN effort—especially those capabilities that would reduce reliance on American boots on the ground. The following represent some of the innovations already occurring or nearing readiness to enter the fight.

Protecting Iraqi infrastructure has been a major challenge—one that COIN efforts historically have faced.[81] Modern airpower, however, has the persistence and ability to use technology to leverage the ratio of force to space—elements critical to effective COIN strategies.[82] Thus, techniques such as employing alert fighter aircraft to conduct "infrastructure-security missions" instead of simply orbiting while awaiting calls is the kind of innovation that can help secure vital Iraqi oil and electricity systems.[83] To do so successfully still requires "boots on the ground," but in smaller numbers than would otherwise be required because of the size of the areas involved.[84]

Most COIN studies emphasize the need for border security.[85] In a new preface to his classic history, *A Savage War of Peace: Algeria, 1954–1962*, Alistair Horne notes that, just as in the Algerian conflict, insurgents in Iraq rely on support from other countries.[86] Airpower can assist in degrading the insurgents' ability to obtain that assistance from abroad by surveilling borders and interdicting unauthorized transits. Like infrastructure protection, airpower has the ability to obviate the need for large numbers of surface forces. The newly fielded MQ-9 Reaper appears ideally suited to provide the persistence required by this surveillance mission and to take decisive kinetic action when needed.

Besides interdicting cross-border transits, airpower can also deter nations disposed to assist the insurgency. Even if one assumes, as do James S. Corum and Wray R. Johnson in their book *Airpower in Small Wars*, that COIN conflicts "rarely present lucrative targets for aerial attack, and even more rarely is there ever a chance for airpower to be employed in a strategic bombing campaign or even in attack operations on any large scale," that is not the case with nation-states supporting insurgents.[87] They present a surfeit of targets and have economies vulnerable to air-delivered coercion.[88]

This latter truth raises another aspect of airpower: it is the ultimate "Plan B." FM 3-24/ MCWP 3-33.5 identifies "protracted popular war" as one of the common insurgent approaches. In phase three of this method, the insurgents "transition from guerrilla warfare to conventional warfare." [89] Because insurgents rarely have much capability or experience with airpower, they are especially vulnerable to the air weapon during this stage.[90]

Not every insurgent movement passes through this conventional stage—it is even questionable whether some ever intend to take over the governments they are attacking.[91] Nevertheless, at some point most insurgencies seek to assume power. If for some reason they succeed, airpower can debilitate—if not destroy—their ability to function as a government or threaten US interests. What Col Jeffery Barnett argued in 1996 is just as true today: "It's important to emphasize *the ability of high-technology airpower to deny insurgent victory over an extended time with minimal risk*

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of US casualties” (emphasis in original).[92]

Finally, Professors Metz and Millen contend that containment strategies may be “more logical” than other approaches in “liberation” insurgency scenarios such as in Iraq.[93] Air and naval power proved quite effective in enforcing the no-fly zones and sanctions against Iraq; in conjunction with ground-force raids and strikes, it could again provide a way to protect US interests by containing the effects of an insurgency in Iraq or elsewhere.[94]

Obviously . . .

This article has certainly not included a complete list of all the possible considerations an Airman would bring to an air-minded COIN doctrine—or, quite possibly, not even the most important ones. One might properly view some or all as tactics, techniques, and procedures rather than doctrinal elements. At best, the article has offered a few illustrations of how an Airman’s perspective might *enlarge and enhance* a more joint approach in a doctrine that superbly represents the ground-force conception of addressing the very difficult problem of COIN in the twenty-first century.

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