

NAVAL WAR COLLEGE
Newport, R.I.

Independent Air Operations: A Gap in Joint Doctrine

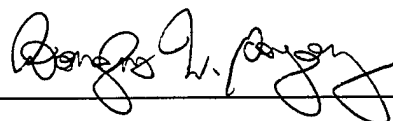
By

Douglas W. Gregory
Lieutenant Colonel, USAF

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____



17 May 1999



Faculty Advisor
Commander Angus Ross, RN
Professor, Operations Department

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: JOINT MILITARY OPERATIONS DEPARTMENT			
6. Office Symbol: C		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): Independent Air Operations: A Gap in Joint Doctrine (UNCLASSIFIED)			
9. Personal Authors: Douglas W. Gregory, Lieutenant Colonel, USAF			
10. Type of Report: FINAL		11. Date of Report: 17 May 99	
12. Page Count: 23 pages			
13. Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the Department of Joint Military Operations. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.			
14. Ten key words that relate to your paper: Doctrine, Joint Operations, Airpower, Bombing, War, Planning, Military, Objectives, Legitimacy			
15. Abstract: Sustained air strikes to coerce enemies are operations that joint doctrine does not describe well. Such "independent air operations" are often less effective than desired due to competing objectives and limited legitimacy. Joint doctrine for military operations other than war should be revised to include new combat-related categories, stress the importance of legitimacy, and describe application of the principles of mass and perseverance to independent air operations.			
16. Distribution / Availability of Abstract:	Unclassified X	Same As Rpt	DTIC Users
17. Abstract Security Classification: UNCLASSIFIED			
18. Name of Responsible Individual: CHAIRMAN, JOINT MILITARY OPERATIONS DEPARTMENT			
19. Telephone: 841-6461		20. Office Symbol: C	

Abstract of

INDEPENDENT AIR OPERATIONS:

A GAP IN JOINT DOCTRINE

Three times since 1995, American policymakers have called upon airpower, without support from American ground forces, to conduct sustained bombing campaigns in pursuit of national policy goals. These “independent air operations” are attempts to violently coerce adversaries to do our will, but lack other important characteristics of wars. They therefore fall in a gap in joint doctrine between war and Military Operations Other Than War (MOOTW), a gap that leaves commanders without adequate guidance to plan independent air operations.

Independent air operations have two characteristics that make operational planning especially difficult. They seek to attain multiple objectives that are usually competitive rather than complementary. And their planning and execution are dominated by legitimacy concerns that reduce the effect of their strikes. Doctrine does not adequately describe these factors.

To close the doctrinal gap, MOOTW doctrine should be reorganized, placing the types of MOOTW into four categories reflecting the intensity and probability of combat, and adding independent air operations to the MOOTW list. Doctrine should also stress that legitimacy is a pivotal consideration in many MOOTW and especially in independent air operations. Finally, doctrine for independent air operations should highlight the principles of mass and perseverance, encouraging commanders to focus their combat power on striking enemy capabilities rather than enemy will, and to persist in strikes until positive objectives are attained.

List of Tables

Table I: Relative Intensity of Air Operations.....4
Table II: Indicators of Legitimacy.....9
Table III: New MOOTW Categories.....13

The first, the supreme, the most far-reaching act of judgment that the statesman and the commander have to make is to establish...the kind of war on which they are embarking.

- Carl von Clausewitz¹

Six times since 1993, American warplanes and missiles have, without support from American land forces, conducted offensive operations in pursuit of national policy objectives. Three of those operations were single-day cruise missile strikes, against Iraq in 1993 and 1996, and against terrorist targets in Afghanistan and Sudan in 1998. The other three, Operations *Deliberate Force* against Bosnian Serbs in 1995, *Desert Fox* against Iraq in 1998, and *Allied Force* against Serbia in 1999, were sustained over longer periods of time and included hundreds of sorties by manned aircraft in addition to cruise missile attacks.

Conducting offensive military action with airpower alone is a recent phenomenon in American history, but is occurring more frequently. Operation *El Dorado Canyon*, the one-night strike against Libya in 1986, was the only similar use of airpower during the 1980's. Joint Doctrine calls that operation an example of "strikes and raids," a form of Military Operations Other Than War (MOOTW) that seeks to "inflict damage on, seize, or destroy an objective for political purposes."² The three more recent cruise missile strikes also fit that definition.

A challenge confronting Joint Force Commanders (JFCs) today is deciding whether or not *sustained*, independent air operations like *Deliberate Force*, *Desert Fox*, and *Allied Force* are simply larger forms of "strikes and raids" or constitute something more. This is not a trivial, semantic question. Indeed, if we accept Carl von Clausewitz's advice above, then defining independent air operations as either MOOTW or war is a central prerequisite to operational planning, particularly since MOOTW doctrine is broader than wartime doctrine. If *El Dorado Canyon* was an example of a "raid," and the month-long air campaign during *Desert Storm* was part of a "war," where do the three operations listed at the start of this paragraph belong?

The answer is that independent air operations fall between doctrinal definitions of war and MOOTW. Because of this doctrinal gap, current joint doctrine does not provide sufficient guidance to JFCs who must plan independent air operations. This essay, using evidence from Operations *Deliberate Force*, *Desert Fox*, and *Allied Force*, will demonstrate that joint doctrine fails to describe the true nature of independent air operations by defining them as another form of MOOTW, despite the fact that they resemble wars in many ways. It will also show that doctrine does not adequately stress the principle of *legitimacy*, which severely limits the effectiveness of independent air operations and is often more important than their objectives. Finally, it will recommend that JFCs apply the principles of *mass* and *perseverance* during independent air operations to compensate for the operational limitations imposed by legitimacy concerns.

War or MOOTW? Joint doctrinal publications define war as “large-scale, sustained combat operations to achieve national objectives” that other instruments of power cannot achieve, doing so with as few casualties as possible.³ By this definition, independent air operations could easily be termed “wars.” For example, all pursued policy objectives that other means had failed to achieve. *Deliberate Force* began after a Bosnian Serb mortar attack killed 37 people at a Sarajevo marketplace. The attack was evidence that years of effort by peacekeepers and negotiators were not enough to protect safe areas in Bosnia or resolve the ethnic conflict. As The New York Times put it, “...the moment came at last when there was no other option but wide-ranging military action.”⁴ *Desert Fox* responded to the inability of United Nations weapons monitors to perform their mission due to Iraqi interference, despite ongoing economic sanctions and military threats. According to his advisers, President Clinton “...in the end had little alternative but to finally unleash his arsenal.”⁵ And *Allied Force*, initiated after Serbian ethnic atrocities and rejection of an internationally-monitored peace in Kosovo, was an

even more reluctant policy choice. As one reporter put it, "There was no easy or obvious alternative to bombing the Serbs. In the end, it seemed there was nothing else to do."⁶

Each operation also involved extensive and sustained strikes intended to achieve U.S. goals with minimal casualties. *Deliberate Force* included over 3500 total sorties, 750 of which were strikes that attacked 48 targets on 12 flying days.⁷ *Desert Fox* lasted only four days but included 650 total sorties, plus over 400 cruise missiles (compared to only 13 in *Deliberate Force*), on 100 targets.⁸ *Allied Force* has lasted over six weeks; in its first week it involved over 1700 sorties (450 of them strike) against 100 targets, plus over 100 cruise missiles.⁹ Each operation sought to minimize losses by striking air-defense-related targets at the outset and using stand-off ordnance against heavily protected sites. And each succeeded in limiting losses, with only one aircraft shot down in *Deliberate Force* and no more than two (so far) in *Allied Force*.

Thus, each operation represented a sustained use of military force to achieve objectives not otherwise achievable while limiting friendly casualties. *Deliberate Force* and *Allied Force*, in particular, were open-ended offensives intended to compel an adversary leadership to accept our peace terms; in doctrinal words, their goal was "...concluding hostilities on terms favorable to the United States and its multinational partners."¹⁰ To call these operations "wars" therefore seems appropriate. Nonetheless, there are other aspects of joint doctrine's definition of war that do not apply well to independent air operations.

For one thing, while each campaign was sustained over a period of days or weeks, whether any meet the doctrinal criterion of "large-scale" operations is questionable. Desert Storm was far more intense, involving over 117,000 total coalition sorties (46,000 of them strike) during 43 days, an average of about 2600 sorties *per day*.¹¹ Table I shows several indicators of

the relative intensity of various air operations, demonstrating that none of the three independent air operations (themselves comparable in intensity) neared Desert Storm's level of effort. Plus,

Table I: Relative Intensity of Air Operations¹²

Operation	Dates	Total Sorties Per Day	Weapons Expended Per Day	Cruise Missiles Per Day	PGM Use
Deliberate Force	30 Aug-20 Sep 95	200	85	1	70%
Desert Fox	16-19 Dec 98	160	150	104	"Most"
Allied Force	24 Mar 99 +	230*	N/A	16*	90%
Desert Storm	17 Jan-28 Feb 91	2600	5300	8	8%

* Data are for first week of the operation.

joint doctrine states that, in war, the United States will be "in a wartime state."¹³ While joint publications do not elaborate on what such a state involves, one can infer that it means at least some mobilization of reservists and the direct, prior consent of Congress. *Desert Storm* included both steps; *Deliberate Force* and *Desert Fox* featured neither. *Allied Force* was preceded by a Senate vote on 23 March authorizing air strikes and, a month later, the President mobilized 33,000 reservists.¹⁴ In this regard, *Allied Force* is closer to a war than the other two operations, but the late reserve call-up implies that it was not meant to be so. The United States also typically fights "wars" to eliminate threats to vital interests following overt aggression by another state. For each independent air operation, in contrast, the threat to American interests was indirect, and no such operation responded to an armed invasion of a sovereign state. Thus, independent air operations fall short of wars on both the operational and strategic levels.

Nonetheless, if independent air operations are less than war, describing them as MOOTW is of little value because MOOTW is defined very broadly. Joint Pub 3-07 lists no less than 15 different types of MOOTW operations ranging from arms control to strikes and raids.¹⁵ In

essence, this is a list of every conceivable use of military force short of war; the resulting doctrine is much more diluted and qualified than that in Joint Pub 3-0, making it less useful. This long MOOTW list results from the vagueness of MOOTW's definition as operations that "focus on deterring war, resolving conflict, promoting peace, and supporting civil authorities" during crises.¹⁶ This definition is at once too broad (warfare is, of course, a way to "resolve conflict") and not broad enough, since limited offensive operations initiated to accomplish policy aims fit into none of the four above categories. For example, freedom of navigation exercises and air operations like Desert Fox may, in fact, *prolong* conflict and even generate responses that result in warfare. Most importantly, the essence of most MOOTW is creating peace with means other than violently compelling an enemy to alter its policies.¹⁷ When sustained, offensive military actions like independent air operations seek to resolve conflict in our favor by force, they cross the bounds of what MOOTW was intended to define.

Objectives and Legitimacy. Independent air operations therefore occupy a place in the spectrum of war that joint doctrine does not adequately describe. JFCs must consider them as either highly limited wars or very intense and coercive MOOTW; in either case a JFC must blend wartime and MOOTW doctrine in order to comprehend the true nature of the conflict. Doctrine acknowledges this limitation somewhat by advising JFCs to "fully consider principles of war and principles of MOOTW" when commanding MOOTW that involve combat.¹⁸ Doctrine also stresses (with no apologies to Clausewitz) that greater sensitivity to political considerations is the chief way MOOTW differs from war.¹⁹ This advice is good as far as it goes, but it doesn't go far enough. Evidence from independent air operations suggests that MOOTW doctrine could improve by amplifying its valuable description of the principles of MOOTW, stressing that the two overriding principles are *objective* and *legitimacy*, and showing how legitimacy often

impedes the attainment of desired objectives. Second, it should stress that JFCs can overcome the limitations imposed by legitimacy only by applying the principles of *mass* and *perseverance* to independent air operations.

Joint publications describe the principles of war as “the enduring bedrock of US military doctrine,”²⁰ though they are inconsistent in how much they stress those principles. Joint Pub 3-0, the “keystone document”²¹ of joint doctrine, describes the principles of war only in an appendix, while Joint Doctrine for MOOTW devotes an entire chapter to them. Both publications, however, list *objective* before any other principle and rightly so, for understanding an operation’s objective is essential before applying any other principles to military plans. This seemingly basic task is, nonetheless, extremely difficult for JFCs conducting independent air operations because those operations consistently involve multiple, sometimes competing objectives.

Each previous independent air operation had a policy objective that was easily translated into operational plans because it sought to affect enemy capabilities. *Deliberate Force*’s aim was to defend the safe areas in Bosnia, especially Sarajevo, by forcing removal of Serbian guns ringing the city.²² *Desert Fox* was intended to degrade Iraq’s ability to produce weapons of mass destruction (WMD).²³ And *Allied Force*, according to President Clinton, began in order to deter Serbia from escalating violence in Kosovo and “to damage Serbia’s capacity to wage war in the future.”²⁴ JFCs could choose to pursue these objectives directly by destroying the proper target sets, such as heavy weapons in the field, WMD facilities, supply areas, and so on. And in each case JFCs sent strikes against many targets directly related to the stated objectives.

But the simple objectives listed above were not the only ones policymakers hoped to fulfill. In each case, air operations attempted to undermine the will of the adversary leadership to resist allied demands, a goal far more difficult to achieve. For example, *Deliberate Force* was

not just about eliminating Serbian heavy weapons but also sought to convince the Bosnian Serbs to participate seriously in peace talks.²⁵ According to The Washington Post, *Desert Fox* was less about WMD than it was about affecting Iraqi leadership, trying “to either fatally weaken the underpinnings of Saddam Hussein’s regime or kill him outright.”²⁶ And *Allied Force*’s aim of preventing persecution of Albanian Kosovars was less important than another goal—coercing Serbia into accepting a peace agreement it had earlier rejected.²⁷

From a JFC’s perspective, the objectives of destroying enemy capabilities and weakening enemy will to resist are often competitive rather than complementary, since they usually require striking different sorts of targets. For example, nearly half of all *Desert Fox* targets (49 of 100) struck regime-related sites such as Republican Guard barracks, secret police headquarters, and others not at all connected with WMD production.²⁸ Similarly, *Allied Force* targets have included Slobodan Milosevic’s house, the Socialist Party building, national television facilities, and the Serbian Ministry of the Interior building in Belgrade.²⁹ Competitive objectives reduce a JFC’s ability to mass effects on either set of targets. But more important is the fact that targeting the regime rarely, if ever, succeeds in breaking enemy will; indeed, in the short run such attacks strengthen enemy governments. An unnamed foreign envoy speaking to The New York Times after *Desert Fox* said, “The real purpose was to weaken the regime, but (Saddam is) stronger than ever now. He’s a hero among the so-called Arab masses because he defied the Americans.”³⁰ And after the first bombs fell on Belgrade during *Allied Force*, even critics of Slobodan Milosevic’s regime rallied to his cause. Said one Serb, “These bombs will just increase the sense that the world is against us and we must stick together.”³¹

The alternative priority—targeting enemy military capabilities—also has unintended drawbacks, but these are related to *legitimacy* rather than *objective*. Legitimacy is not a warfare

principle; rather, it is a principle of MOOTW (and the last one listed in doctrine). Joint Pub 3-07 defines legitimacy as "...the perception by a specific audience of the legality, morality, or rightness of a set of actions."³² This succinct definition conveys far more complexity than is apparent at first glance. For example, there are many audiences for which legitimacy matters, such as American citizens and the governments of allies and essential coalition partners. The legality of an operation depends on its conformance to domestic and international law; its morality depends on striking only at legitimate, belligerent targets with measured force; its rightness depends on a perception that its ends are just and its risks acceptable. Consequently, there are many dimensions of legitimacy.

At the domestic level, the chief American legitimacy concern is the rightness (or match of ends and means) of foreign military interventions like independent air operations. Without an act of aggression, declaration of war, or direct attack on Americans to stir up popular passion prior to an intervention, leaders know that their freedom of action depends largely on keeping U.S. casualties to a minimum—a chief reason they avoid using ground forces. JFCs have reacted to this limitation by basing all operational planning on risk reduction. Every independent air operation initially pounded enemy air defenses; *Deliberate Force*, in fact, struck primarily those sorts of targets from start to finish. Risk reduction also involved extensive use of cruise missiles, more of which were fired in *Desert Fox*'s four days than in *Desert Storm*'s 43 days. Other safety measures included flying only at night during the operation's initial stages to avoid optically-guided threats, and keeping aircraft at high altitudes where anti-aircraft guns are ineffective. And a most basic safety measure is cutting sortie rates to reduce the number of aircraft exposed to threats; as Table I showed, all independent air operations were limited in intensity.

These operational limitations imposed by domestic legitimacy undermine efforts to achieve capabilities-related objectives. Night-only flying builds in pauses an enemy can use to recover, disperse, and employ forces, a factor that helped the Serbs conduct ethnic cleansing early in *Allied Force*. Cruise missiles require prior knowledge of a target's location, making them unsuitable weapons against mobile targets. Controlling sortie rates limits the number of targets struck. And high-altitude flying complicates target identification, as well as causing unintended pauses during periods of bad weather, further reducing airpower's effect against fielded forces. In these ways, *objective* and *legitimacy* compete—and *legitimacy* wins.

Yet it is strikes against enemy capabilities that are the most legitimate to another audience—states whose cooperation is vital to conducting the operation. These states include allies contributing forces, UN Security Council members, and coalition partners supplying bases and overflight rights. These states all worry about the legality, morality, and rightness of military operations, particularly in cases where the UN Charter has not been violated. Legality can be demonstrated in many ways, such as the events shown in Table II, and by linking attacks to “triggering” events such as the Sarajevo mortar attack or the UNSCOM (UN Special Commission) inspection report. But the need for legality reduces operational surprise; in both *Deliberate Force* and *Allied Force*, a full day passed between NATO's strike authorization and the first sorties. *Desert Fox*, in contrast, achieved some surprise at the expense of legality, generating criticism from Congress, Russia, and allies, all of which helped to limit its length.³³

Legality issues limit a JFC's freedom of action in ways other than reducing surprise. For example, if a triggering event strengthens the legality of independent air operations, then strikes against targets directly related to that event (which are capabilities-related, like heavy weapons and WMD facilities) are desirable. This factor pushes JFCs to attack the very targets that

Table II: Indicators of Legitimacy

Event	Deliberate Force	Desert Fox	Allied Force
Specific authorization by UN	Y	N	N
Specific authorization by NATO	Y	N	Y
Lack of strong protests by UNSC members*	Y	N	N
Public endorsement from UN Secretary General	Y	N	Y
Non-US forces participate	Y	Y	Y

*United Nations Security Council members are China, France, Russia, the United Kingdom, and the United States.

domestic legitimacy concerns make difficult to hit. Plus, in every independent air operation, the United States has chosen to incorporate allied forces and use foreign bases to demonstrate a wide perception of legality. But combined operational planning and execution are complex affairs that reduce a JFC's ability to take risks or alter plans. Finally, JFCs must take care not to act beyond their "legal" mandate. *Deliberate Force*, for example, was based upon NATO acting as a neutral broker between Muslims and Serbs; strikes too intense would have undermined NATO's legitimacy, angered Russia, and jeopardized the peace talks the operation sought to produce.

An operation's perceived morality creates more operational problems. For example, British Prime Minister Tony Blair said at the start of *Allied Force* that "It is important the people of Serbia know our quarrel is not with them. It is with the architects of Kosovo's ethnic cleansing."³⁴ He made very similar remarks at the start of *Desert Fox*.³⁵ These remarks, which try to counter perceptions that allied bombing is immoral, make it imperative that JFCs minimize collateral damage to civilian populations in enemy states. Of course, striking the civilian populations an operation seeks to protect is equally damaging to the legitimacy of actions like *Deliberate Force* and *Allied Force* (not to mention their objectives). Thus, when it comes to the moral dimension, *legitimacy* mandates extreme operational care to avoid collateral damage.

Numerous operational constraints result from the imperative of avoiding collateral damage, the most significant of which is deleting certain targets altogether. *Deliberate Force* avoided strikes on Serbian heavy weapons and troop concentrations in large part because of their proximity to civilian populations on both sides. Many dual-use industrial and chemical facilities were dropped from *Desert Fox's* target list when planners could not be absolutely sure they were legitimate military targets, creating the potential for another "baby-milk factory" incident.³⁶ And attacks on Serb forces during *Allied Force* were scaled back after NATO mistakenly struck a civilian convoy on 14 April. Another constraint is reliance on precision-guided munitions (PGMs). Table I shows that all independent air operations used PGMs almost exclusively, a major shift from *Desert Storm*. While PGMs make operations more lethal, they can reduce the intensity of operations by limiting the types of ordnance and platforms available to the JFC.

Yet more constraints arise from the fact that foreign audiences have concerns about the rightness of independent air operations, beyond concern over casualties. During *Deliberate Force*, these concerns focused on the campaign's intensity; striking the Bosnian Serbs with cruise missiles caused alarm in many capitals since it seemed like a powerful, unwarranted escalation. Concern over escalation also caused Italy to refuse to host F-117's, which were consequently never employed in the operation.³⁷ *Desert Fox* had similar problems. Because the Saudi Arabians felt its strikes were too limited to topple Saddam Hussein, they prevented coalition aircraft from using Saudi bases to attack Iraq.³⁸ *Desert Fox* also lasted only four days since bombing during the Muslim holy month of Ramadan would further offend Arab populations in the region. This time limit forced planners to cut 150 or more targets from the initially proposed list.³⁹ And *Allied Force*, despite NATO's blessing, rested on shaky ground because it was NATO's first attack on a sovereign state (exceeding NATO's defensive purpose)

and sought to change how Yugoslavia's government treated its own citizens within its own borders. Only Serbian atrocities have permitted NATO to escalate its operations during *Allied Force* by showing that the operation's ends indeed justified its means.

The sum total of all these legitimacy-related constraints is to reduce a JFC's freedom of action far more than enemy activity ever could. Since JFCs see numerous risks in striking mobile enemy forces, they target instead logistics and command and control networks, which consist mostly of fixed targets. Since the effects they create upon enemy forces are consequently limited, they regularly strike regime-related targets, attempting to attain the strategic goal of undermining enemy will to resist. But since striking regime-related targets is counterproductive in the short term, and striking force-related targets is risky and marginally effective, JFCs are left in a quandary. They may be tempted to give up on achieving either set of objectives and concentrate on what to avoid (losses, collateral damage, and escalation) while waiting for diplomacy to solve the conflict. This course, however, is even more risky. It turns the operation into a test of wills in which one side thinks it is at war while the other does not, a recipe that turned sour in Vietnam. And it enables enemy regimes to pursue their goals simply by absorbing punishment that does little to hinder their capabilities. Thus, the operational decisions JFCs make about how to prosecute independent air operations have profound strategic consequences.

Recommendations. Doctrine cannot show JFCs a guaranteed way to resolve the many paradoxes inherent in independent air operations. But it can be modified in ways that will help planners to understand such situations better and devise more effective operational schemes.

First, doctrine should organize MOOTW categories based upon the probability of combat operations and tailor guidance accordingly. This is a way to bridge the doctrinal gap by adding independent air operations to joint doctrine while simultaneously listing MOOTW actions more

logically. Joint Pub 3-07 currently lists the various types of MOOTW in alphabetical order, a listing useful for finding the description of each type but not useful for understanding their similarities and differences. Table III shows a revision separating MOOTW into categories.

Table III: New MOOTW Categories

Offensive (we initiate combat actions)	Enforcement (combat in response to violators probable)	Protection (combat in self- defense only)	Non-Combat (combat unlikely)
Independent Air Ops	Exclusion Zones	Freedom of Navigation	Arms Control
Strikes and Raids	Maritime Intercept Ops	Noncombatant Evac Ops	Humanitarian Assist
Counterterrorism	Sanction Enforcement	Protection of Shipping	MSCA
Peace Enforcement Ops	Support Counterdrug Ops	Recovery Operations	Peace Building
Some FID		Show of Force	
		Some FID	
		Peacekeeping	

FID=Foreign Internal Defense

MSCA=Military Support to Civil Authorities

Such categories permit MOOTW doctrine to retain the variety of actions it now describes while helping doctrine's authors create more specific guidance for similar classes of operations. The resulting doctrine will be less watered down, more understandable, and more capable of explicitly incorporating specific principles of warfare where appropriate. This is clearly a significant recommendation, the merits and drawbacks of which require more examination. But it is also an essential step toward finding an appropriate place in doctrine to describe the unique nature of independent air operations and how JFCs can best execute them.

Second, doctrine should stress *legitimacy* as strongly as *objective* when describing MOOTW principles. Doctrinal principles are not listed alphabetically but instead are in an order that connotes their relative importance. It is right to place *objective* at the top of the MOOTW list, but it is wrong to list *legitimacy* at the bottom. Doctrine repeatedly stresses that political considerations affect every aspect of MOOTW but omits the idea that the most important and pervasive political factor is building and preserving legitimacy. Connecting the vague notion of

“political considerations” with the more specific and understandable concept of legitimacy will go far to make doctrine a more effective guide to action. Doing so also effectively recognizes that *legitimacy*, as much or more than *objective*, determines restraints and constraints upon action, in many cases dictating how to apply the other principles of MOOTW (and war).

Third, new doctrine for independent air operations and other offensive forms of MOOTW should recommend applying mass. This recommendation may seem out of place since experience has shown that the principle of mass has been inconsistently applied to independent air operations. Indeed, the presence of multiple objectives and legitimacy-related restraints has complicated the ability of commanders to create massed effects upon adversaries. Nonetheless, JFCs still can apply mass in specific ways to overcome those problems and prevent an independent air operation from being little more than a futile, watered-down gesture.

Applying mass means focusing as much combat power as possible on the most decisive targets. For independent air operations, this concept has two vital implications. First, JFCs should try to assemble an air armada considerably larger than the ones available at the start of previous examples. Such a force can overwhelm an adversary’s defenses, keeping losses low, while striking more targets per day. It will also make it possible for the JFC to devote effort to regime-related targets as well as enemy military capabilities, should he desire to do so. This lesson is becoming apparent in Kosovo. NATO started *Allied Force* with around 400 aircraft, but by mid-April commanders were requesting additional deployments that would increase that number to 1000.⁴⁰ Those requests, however, came only after three weeks of bombing.

In addition, JFCs must mass the effects of airpower against the targets whose destruction is most likely to achieve positive objectives. For independent air operations, these are usually enemy military capabilities rather than regime-specific targets. This recommendation turns air

doctrine on its head, arguing that airpower is unlikely to accomplish strategic goals by destroying targets related to leadership or economic infrastructure because no ground war is ongoing. If time and friendly forces are limited, attacking the enemy regime directly can even be self-defeating. And without a ground war to force enemy movement and supply usage, air operations against logistics and command and control systems will have little effect. Thus, the lack of air-ground synergy forces airpower to attrit enemy capabilities in the field (an unheralded lesson of *Desert Storm*, which sent 56% of its strikes against Iraqi land forces)⁴¹, a scheme that simultaneously focuses on the “triggering” targets most related to the operation’s legality.

Still, generating massed effects against enemy capabilities raises the risk of losses and collateral damage; controlling such risk will dilute the massed effects the JFC wants to create. For this reason, doctrine should also stress perseverance in executing independent air operations. If mass is limited, the only other way to attrit enemy capabilities reliably is to extend operations over a longer period of time. Persistent operations reduce the extent to which the initial air superiority phase will delay the massing of effects on decisive targets. Persistent and massed operations also convey greater determination to the adversary and give our efforts more time to undermine enemy will, something that is not possible over a short period.

So long as JFCs preserve operational legitimacy, they also should be able to persist in their actions, but doctrine must remind JFCs that legitimacy is not an end in itself. If legitimacy is vital to preserve freedom of action, still it should not merely preserve our freedom to act ineffectively. Revised joint doctrine is therefore crucial to help JFCs comprehend the true nature of independent air operations by describing the problems associated with limited legitimacy and multiple objectives. By stressing the proper principles, new doctrine will also help JFCs overcome those problems and maximize the effectiveness of future independent air operations.

NOTES

¹ Carl von Clausewitz, On War, Michael Howard and Peter Paret, eds. (Princeton, NJ: Princeton University Press 1976), 88.

² U.S. Joint Chiefs of Staff, Joint Doctrine for Operations Other Than War (Joint Pub 3-07) (Washington, D.C.: 16 June 1995), III-15.

³ U.S. Joint Chiefs of Staff, Doctrine for Joint Operations (Joint Pub 3-0) (Washington, D.C.: 1 February 1995), vii.

⁴ R. W. Apple, Jr., "Goal of Bombers: The Bargaining Table," The New York Times, 31 August 1995, A16.

⁵ John F. Harris, "A Decision Reconfirmed," The Washington Post, 17 December 1998, A1.

⁶ Joseph L. Galloway, "Balkan Nights," U.S. News & World Report, 5 April 1999, 21.

⁷ Robert C. Owen, Colonel, USAF, "The Balkans Air Campaign Study, Part 2," Airpower Journal, Fall 1997, 8.

⁸ Duncan Lennox, "'Fox': the results," Jane's Defence Weekly, 13 January 1999, 25.

⁹ John D. Morrocco, David A. Fulghum and Robert Wall, "Weather, Weapons Dearth Slow NATO Strikes," Aviation Week & Space Technology, 5 April 1999, 26-7.

¹⁰ Joint Pub 3-0, p. vii.

¹¹ Thomas A. Keaney and Eliot A. Cohen, Gulf War Air Power Survey Summary Report (Washington D.C.: Department of the Air Force 1993), 184-5.

¹² *Sources: Desert Storm:* Thomas A. Keaney and Eliot A. Cohen, Gulf War Air Power Survey Summary Report. *Deliberate Force:* Robert C. Owen, "The Balkans Air Campaign Study: Part 2." *Desert Fox:* Duncan Lennox, "'Fox': the results". *Allied Force:* John D. Morrocco, *et al.*, "Weather, Weapons Dearth Slow NATO Strikes".

¹³ Joint Pub 3-0, vii.

¹⁴ Elizabeth Becker, "U.S. orders largest call-up of reservists since Gulf war," The Providence Journal, 28 April 1999, A1.

¹⁵ Joint Pub 3-07, III-1.

¹⁶ *Ibid.*, I-1.

¹⁷ The most significant exception to this statement is Peace Enforcement Operations (PEO), which can involve forceful intervention "...to compel compliance with resolutions or sanctions designed to maintain or restore peace and order," according to Joint Pub 3-07, III-13. Such operations are meant for situations in which two armed adversaries are fighting each other, not cases when, as for both *Deliberate Force* and *Allied Force*, one side is attacking civilians. Doctrine lists restoring peace and order and forcibly separating belligerents as tasks for PEO, tasks that require ground forces to be successful. And the examples of PEO given in doctrine—interventions in the Dominican Republic in 1965 and Somalia in 1992-3—were dominated by ground forces. Thus, independent air operations do not fit well within the definition of PEO.

¹⁸ *Ibid.*, II-1.

¹⁹ *Ibid.*, I-1.

²⁰ Joint Pub 3-0, A-1.

-
- ²¹ *Ibid.*, i.
- ²² Roger Cohen, "NATO jets attack Serbian positions around Sarajevo," The New York Times, 30 August 1995, A1.
- ²³ Bradley Graham and Dana Priest, "U.S. Targets Sites Crucial to Weapons-Making," The Washington Post, 17 December 1998, A31.
- ²⁴ R. W. Apple Jr., "A Fresh Set Of U.S. Goals," The New York Times, 25 March 1999, A1.
- ²⁵ Apple, "Goal of Bombers: The Bargaining Table," A1.
- ²⁶ Rick Atkinson and Vernon Loeb, "A Limited Operation Could Limit Success," The Washington Post, 17 December 1998, A1.
- ²⁷ Craig R. Whitney, "NATO's Plan: A Barrage, Not a Pinprick," The New York Times, 24 March 1999, A1.
- ²⁸ Arkin, B4.
- ²⁹ *Deliberate Force* offered virtually no opportunity for similar strikes since the adversary leadership did not constitute a sovereign government with an identifiable capital or many other fixed symbols of political power.
- ³⁰ Stephen Kinzer, "This Time, Little Damage Is to Be Seen in Baghdad," The New York Times, 21 December 1998, A12.
- ³¹ "Belgrade's citizens unite in wake of bombing in city," The Providence Journal, 4 April 1999, A9.
- ³² Joint Pub 3-07, II-5.
- ³³ William Drozdiak, "Opposition to Airstrikes Voiced in Key Capitals," The Washington Post, 17 December 1999, A29.
- ³⁴ Tony Blair, "A New Generation Draws the Line," Newsweek, 19 April 1999, 40.
- ³⁵ Drozdiak, A29.
- ³⁶ William M. Arkin, "Precision Undermined Its Purpose," The Washington Post, 17 January 1999, B4. The "baby-milk factory" was a suspected chemical plant in Iraq destroyed by coalition air strikes during *Desert Storm*. The Iraqis insisted it made only baby formula and widely propagandized the attack as illegally targeting civilians.
- ³⁷ Eric Schmitt, "Wider NATO Raids on Serbs Expose Rifts in Alliance," The New York Times, 12 September 1995, A12.
- ³⁸ Douglas Jehl, "U.S. Fighters in Saudi Arabia Grounded," The New York Times, 19 December 1998, A9.
- ³⁹ Lennox, 25. Since Desert Fox struck no more than 100 targets, the "Ramadan factor" may have caused its intensity to have been reduced by as much as 60%.
- ⁴⁰ Steven Lee Myers, "Military seeks authority to call up 30,000 reservists," The Providence Journal, April 16, 1999, A12.
- ⁴¹ Keaney, 65. Note also that *Deliberate Force*, arguably the most successful independent air operation, had two forms of air-ground synergy. First, some British and French ground forces were present, constituting NATO's Rapid Reaction Force (RRF). The RRF, rather than aircraft, used artillery to strike suspected heavy weapons emplacements around Sarajevo. Second, in the later stages of the operation, the Bosnian Government and Croatia

attacked the Serbs on the ground, retaking around 20% of Bosnia with little Serb resistance. This factor created an unintentional synergy with NATO's air strikes, motivating the Serbs to remove their heavy weapons and return to negotiations which, later in 1995, resulted in the Dayton Accords. See, for example, Mike O'Connor, "Bosnian Serb Civilians Flee Joint Muslim-Croat Attack," The New York Times, 14 September 1995, A10.

Bibliography

- Apple, R. W. Jr. "A Fresh Set Of U.S. Goals." The New York Times, March 25, 1999, A1 & A12.
- Apple, R. W. Jr. "Goal of Bombers: The Bargaining Table." The New York Times, August 31, 1995, A1 & A16.
- Arkin, William M. "Precision Undermined Its Purpose." The Washington Post, January 17, 1999, B1 & B4.
- Atkinson, Rick and Vernon Loeb. "A Limited Operation Could Limit Success." The Washington Post, December 17, 1998, A1 & A33.
- Becker, Elizabeth. "U.S. orders largest call-up of reservists since Gulf war." The Providence Journal, April 28, 1999. A1 & A12.
- "Belgrade's citizens unite in wake of bombing in city." The Providence Journal, April 4, 1999, A9.
- Blair, Tony. "A New Generation Draws the Line." Newsweek, April 19, 1999, 40.
- von Clausewitz, Carl. On War. Edited and translated by Michael Howard and Peter Paret. Princeton, N.J.: Princeton University Press, 1976.
- Cohen, Roger. "NATO jets attack Serbian positions around Sarajevo." The New York Times, August 30, 1995. A1 & A8.
- Drozdiak, William. "Opposition to Airstrikes Voiced in Key Capitals." The Washington Post, December 17, 1999. A29-A30.
- Galloway, Joseph L. "Balkan Nights." U.S. News & World Report, April 5, 1999, 18-28.
- Graham, Bradley and Dana Priest. "U.S. Targets Sites Crucial to Weapons Making." The Washington Post, December 17, 1998, A29-A31.
- Harris, John F. "A Decision Reconfirmed." The Washington Post, December 17, 1998, A1 & A34.
- Jehl, Douglas. "U.S. Fighters in Saudi Arabia Grounded." The New York Times, 19 December, 1998, A10.
- Keaney, Thomas A. and Eliot A. Cohen. Gulf War Air Power Survey Summary Report. Washington, D.C.: Department of the Air Force, 1993.

Kinzer, Stephen. "This Time, Little Damage Is to Be Seen in Baghdad." The New York Times, December 21, 1999, A1 & A12.

Lennox, Duncan. "'Fox': the results." Jane's Defence Weekly, January 13, 1999, 25.

Morocco, John D., David A. Fulghum and Robert Wall. "Weather, Weapons Dearth Slow NATO Strikes." Aviation Week & Space Technology, April 5, 1999, 26-29.

Myers, Steven Lee. "Military seeks authority to call up 30,000 reservists." The Providence Journal, April 16, 1999, A1 & A12.

O'Connor, Mike. "Bosnian Serb Civilians Flee Joint Muslim-Croat Attack." The New York Times, September 14, 1995, A10.

Owen, Robert C. "The Balkans Air Campaign Study, Part 2." Airpower Journal, Fall 1997, 6-26.

Schmitt, Eric. "Wider NATO Raids on Serbs Expose Rifts in Alliance." The New York Times, September 12, 1995, A1 & A12.

U.S. Joint Chiefs of Staff. Doctrine for Joint Operations (Joint Pub 3-0) Washington, D.C.: February 1, 1995.

U.S. Joint Chiefs of Staff. Joint Doctrine for Military Operations Other Than War (Joint Pub 3-07) Washington, D.C.: June 16, 1995.

Whitney, Craig R. "NATO's Plan: A Barrage, Not a Pinprick." The New York Times, March 24, 1999, A1 & A12.

Wyatt, William F. "Attacking the Serbs is filled with risk." The Providence Journal, April 2, 1999, B7.