OPERATION DELIBERATE FORCE: A CASE STUDY ON HUMANITARIAN CONSTRAINTS IN AEROSPACE WARFARE

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Introduction

n the surface, the notions of humanitarian war and humanitarian constraint in war appear conflicted. The first concept, that of going to war in pursuit of humanitarian objectives, can be viewed as a product of moral self deception at best, or as self-serving propaganda at worst. Opinions on the notion of constraining the employment of military force in deference to humane values vary widely, depending on whom one asks.

However, the humanitarian values exemplified by these two notions have deep roots in Western warfare, as attested by the various articulations of just war theories, and by the Geneva conventions. Even Karl von Clausewitz, who still reigns preeminent among the philosophers of war, recognized that various factors restrain warfare, including moral values. Certainly in contemporary conflicts, the commanders of military forces provided by democratic states are expected to conduct operations in ways that respect international law and sensibilities, show respect for human life, and do not poison the peace through real or

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apparently injudicious and/or uncaring applications of military force. Humanitarian objectives and values are natural and integral elements to any broad discussion of modern warfare, in particular warfare by liberal democracies predicated on those very values.

Airpower theory and practice have always been infused with humanitarian considerations to a degree probably exceptional in the military. Early airpower theorists, such as Guilio Douhet and William Mitchell, articulated city- and economy-busting air strategies that had such obvious implications for non-combatant casualties that both sought humanitarian justification by arguing that such attacks would shorten and/or mitigate wars and minimize suffering. Later, the practice of strategic bombardment during World War II, which basically amounted to the leveling of whole districts in order to strike specific military or economic targets, forced military and civilian leaders to justify such widespread destruction as either a legitimate objective of total war or an unfortunate consequence of the limitations of the aircraft and weapons of the time. At least implicitly, these justifications also underpinned nuclear warfighting theories during the Cold War.

Since the Gulf War, some discussion of the humanitarian aspects of air warfare have assumed that a vastly superior air force armed with precision weapons is obliged to be sensitive to humanitarian concerns because new technology means that airpower has the capability to be selective and precise in its targeting. It should not be surprising, then, that both the advocates and critics of the preeminence of aerospace forces in American military endeavors over the past decade have often supported their cases with normative suppositions about air warfare's effectiveness and fundamental humanity.

Given the current primacy of aerospace operations in American warfare, this is a good time to re-examine and update our understanding of the connection between air warfare and humanitarian objectives. This examination presents at least two fundamental questions: First, is effective air warfare possible under humanitarian constraints? Second,

regardless of the answer to the first question, *should* air warfare be fought under humanitarian constraints? For air strategists, these questions are key to the tactical, operational, and strategic planning of modern warfare.

This paper examines Operation Deliberate Force, the 1995 NATO air campaign against the Bosnian Serbs, as a case study to evaluate the implementation and impact of humanitarian constraints in air warfare. The Deliberate Force experience provides unique insights into the two questions raised above. On the whole, humanitarian constraints did not debilitate the tactical execution of Deliberate Force, and the humanitarian conduct of the campaign was a vital underpinning of its strategic success.

DELIBERATE FORCE

Deliberate Force was conducted between August 30 and September 14, 1995. During that period, actual bombing operations occurred only on twelve days due to periods of poor weather and a brief operational pause in the first week of September.² Nations contributing combat and support aircraft included the United States, Great Britain, France, Germany, the Netherlands, Italy, Spain, and Turkey. On a typical day, those air forces launched about 300 individual aircraft sorties, of which about 200 went "feet dry" over Bosnia, and about 70 actually carried weapons. In all, NATO aircraft released 1070 heavy bombs and missiles against Serb targets for a total ordnance tonnage of about 500. For perspective, this level of effort was a fraction of the 2,000-plus sorties-per-day and 70,000-ton overall effort expended by allied air forces during the forty-three days of the Gulf War.

NATO focused its attacks on a list of targets categorized as "options 1, 2, and 3."³ Option 1 targets mainly consisted of Serb artillery, mortar, and other combat systems

directly involved in attacks on Bosnian cities declared "safe areas" by the United Nations. NATO planners presumed that these targets could be attacked with minimal risk of collateral damage to non-combatants and their property. Option 2 targets consisted of other heavy weapons, munitions storage sites, and air defense systems in the vicinity of the safe areas and presenting only "medium" risk of collateral damage if attacked. Option 3 targets were dispersed throughout Bosnia-Herzegovina, including the full array of Serb munitions and fuel depots, and their anti-aircraft and communications systems. These options were described in NATO planning documents as campaign phases to bring increasing pressure against the Serbs. In the actual event, NATO commanders focused their attacks on Option 2 targets, with some overlap into Option 3, and on some bridge and road targets added to rob the Serbs of their mobility advantage over Bosnian Federation forces.

Within the history of air warfare, Deliberate Force has several distinguishing features. First and foremost, the NATO air forces quickly surmounted and suppressed Bosnian Serb air warfare capabilities. The Serbs had no air force of consequence in the face of an air assault, and their ground-based air defenses consisted of a net of air defense radars, command and control systems, a few medium surface-to-air missile (SAM) batteries, and a ubiquitous scattering of light anti-aircraft (AA) guns and man-portable air defense missiles (MANPADs). NATO aircraft largely suppressed the missile batteries in the first day of the campaign, kept them ineffective throughout operations, and countered the light AA and MANPADs by operating generally above 15,000 feet.⁴

Deliberate Force was also distinguished by an unprecedented reliance on precision weapons, which comprised 708 of the 1070 heavy weapons delivered against the Serb Republic. Thus, 69% of the weapons dropped during Deliberate Force were precision, compared to 8% during the Gulf War. The precision air weapons used in Bosnia primarily were free falling, laser-guided bombs, but also included some Tomahawk Land Attack Missiles (TLAMs) and Standoff Land Attack Missiles (SLAMs). The air campaign was

concurrent to, but not coordinated in detail with, surface operations by the Croatian and Bosnian Federation armies.

Lastly, and perhaps most importantly, Deliberate Force resulted in few casualties on either side. Only two allied aviators were shot down and captured, the crew of a French Mirage. None were killed. Casualties among the Serb military and non-combatant civilians are not precisely known, but the latter were less than thirty, or about one for every thirty to forty heavy weapons dropped. This is a notably low ratio given that many of the targets were joint use, such as bridges, or located in or very near civilian dwellings, such as radio (microwave) relay towers (RADRELs) and barracks.

It was a war fought, albeit reluctantly, in defense of humanitarian values in the face of undeniable Serb brutality against military prisoners and noncombatant civilians. For three years before launching the air campaign, the United Nations had pursued a Fabian strategy of public moralizing, diplomacy, and inter-positioning peacekeeping troops between warring factions. NATO air units patrolled the skies over Bosnia during this period, mainly providing surveillance in support of UN no-fly and safe zone resolutions. But they did conduct small-scale punitive air strikes against the Serbs in November 1994 and May 1995.

The Serbs responded to all of these efforts with intransigence, arrogance, hostage-taking, and counterattacks. Apparently convinced that UN and NATO vacillations meant an unwillingness to risk conflict, the Serb Republic army launched a systematic campaign to conquer the remaining cities under Bosnian Federation control in the spring of 1995 in an attempt to destroy the Federation. But the UN and NATO still held back until news came in July that the Serbs had systematically murdered over 6,000 unarmed Muslim men in the captured city of Srebrenica.

At a London conference in July, NATO ministers committed (some more reluctantly than others) to an air campaign to force the Serbs to halt their advances and adhere to UN directives protecting Bosnian cities from further attacks. As a parallel objective, most foreign ministries hoped that the bombing would force the Serbs to be more cooperative in the peace process. This was the case particularly for the five countries involved in the so-called Contact Group (the U.S., Britain, France, Germany, and Russia), which had been carrying on negotiations with the Serbs for nearly a year. By then, most, including the press, recognized that effective action in Bosnia had become a litmus test for the future of UN peacekeeping, and perhaps even for the survival of NATO.⁵

Humanitarian concerns pervaded the planning and execution of the campaign. Perceiving acute public sensitivity to NATO military and Serb civilian casualties, the NATO air commander, US Air Force Lieutenant General Michael Ryan, imposed strict rules of engagement and close, personal control over air operations. He insisted that his targeting and tactics planners make every effort to avoid collateral damage and casualties. Targets located immediately adjacent to civilian-occupied sites were not struck unless planners could come up with a combination of weapons and tactics that virtually precluded an errant weapon from causing unintended harm. For example, because smart bombs that went "stupid" generally struck long or short of their targets, Ryan directed that bridge attack runs be made along the rivers they crossed, even though this tactic theoretically placed the crews at risk to antiaircraft weapons arrayed along the banks. At one barracks facility, Ryan allowed the bombing of an outer row of munitions bunkers, but not an inner row, to minimize the risk of damage to potentially inhabited buildings.

At some increased risk to crewmen, NATO leaders adjusted standard procedures to further reduce the possibility of collateral damage. Reversing normal weapon selection doctrine, they often employed the smallest weapons capable of taking out targets rather than the largest available weapons their aircraft could carry. In outstanding examples of

this approach, A-10 fighters flew into the threat envelops of Serbian MANPADs and light AA in order to use cannons, rather than bombs, to cut down a microwave relay tower and to destroy the contents of a warehouse, both of which were located near civilian dwellings. While normal procedure called for attacking aircraft to minimize their exposure to enemy defensive systems by dropping all of their weapons in single passes, General Ryan required many aircraft over Bosnia to make multiple passes, dropping only one weapon at a time, and only after the dust from previous weapons had cleared. These tactics exposed crews to the potential of ground defenders improving their aim with practice, but they also assured that all bombs were released as accurately as possible and in no greater number than was required to destroy a target. In other instances, targets were hit late at night to minimize the likelihood that civilians and even military personnel would be in or on them.⁶

Finally, NATO pilots had overarching guidance to bring their bombs back home if they had any doubts about the identity or the presence of noncombatants in or too near the objects they had in their sights. As a consequence, almost 10 percent of the precision weapons sent against the Serb Republic were dumped into the sea, mainly by carrier-borne aircraft without the "take back" capacity to make deck landings with weapons hanging under their wings.

In terms of diplomatic effectiveness, it is hard to argue with the success of Deliberate Force. While other forces were important in coercing Bosnian Serb leaders to comply with UN resolutions—principally the war fatigue of all combatants, compromise negotiating terms worked out at Geneva during the bombing, and the Croatian and Federation land offensives—it is clear that the bombing had an immediate and compelling effect on decision-making. Both in post-action interviews and his memoir, Ambassador Richard Holbrooke declared that the bombing's effectiveness and the invulnerability of NATO airpower unnerved Slobodan Milosevic, President of Serbia, and Radovan Karadic, President of the Bosnian Serb Republic, and forced them to cooperate. Had they persisted

in their intransigence they faced the real danger that the air attacks would strip them of their military superiority over their enemies, a nightmarish thing to contemplate in the Balkans. Moreover, Secretary of State Warren Christopher not-too-subtly exploited the lingering emotional impact of the bombing by holding the initial dinner of the Dayton Peace Talks on the floor of the Air Force Museum, amidst the very aircraft and weapons that had done the Serbs so much harm in such a short time.

Assessing the factors that led to Serb cooperation, the Air Force's Balkans Air Campaign Study concluded that while Geneva diplomacy and ground advances unquestionably sent a message to the Serbs that the time for compromise was near, it was the bombing that put the Contact Group, NATO, and the UN in control of the pacing and ultimate shape of the Dayton Peace Conference and political events in Bosnia.⁸

The positive, humanitarian consequences of the air campaign are just as clear as its diplomatic impact. The war resulted in the deaths of about thirty civilians and a still undetermined number of Serbian soldiers. Regrettable as those deaths are, they should be viewed in comparison to the far greater numbers of civilian casualties in Bosnia in the weeks prior to Deliberate Force. The killing of innocents by factions on all sides did not stop completely during the air campaign, but it dwindled precipitously and approaches zero today.

The air campaign jump-started a process of political settlement that led to Bosnia's division, but today Bosnia is blessed by general peace and the possibility at least of gradual reconciliation between factions. There is a chance that the peace may not endure, but this is a challenge for future politicians and commanders, not a condemnation of those who launched Deliberate Force. They stopped the evil they faced, and that is enough.

THE IMPLICATIONS OF DELIBERATE FORCE

The experience of Deliberate Force contains several implications for the practicality and necessity of conducting aerospace warfare under humanitarian constraints. The lesson of that conflict is that air commanders can conduct effective air operations at the tactical, operational, and strategic levels of combat under humanitarian constraints, particularly in situations where they enjoy profound military advantage. A second lesson follows: strategic success in peace enforcement operations depends on the imposition of humanitarian constraints upon military operations. Unconstrained use of force in peace operations is counterproductive. Whatever advantage is gained from it in the short-run is likely to be lost in the long term. Thus, in conjunction with the basic moral imperative for military restraint, there is a fundamental military logic to "fighting" peace operations in as humane a manner as possible.

At the tactical level, the level at which forces fight and take or destroy their objectives, the Deliberate Force case suggests that humanitarian constraints did not undermine the ability of NATO air commanders to perform their duties without undue risk to their subordinates. The campaign's record of quick success, small numbers of friendly and collateral casualties, and the elegant execution of operations provide strong evidence that effective aerospace warfare under humanitarian constraints is a practical proposition.

At the operational level, the level at which individual tactical events are planned and linked to achieve strategic objectives, humanitarian constraints were pivotal to the successful execution of Deliberate Force. At the time, General Ryan and other key leaders were certain that a major incident of civilian casualties would fatally weaken NATO's political cohesion and resolve to stay the course. They knew that domestic political support

in Europe was vacillating over intervention in Bosnia. "Every bomb," said General Ryan, "is a political bomb." A collapse of domestic support in any NATO member state could have brought the air campaign to an abrupt halt since any member could have blocked positive action within the North Atlantic Council. While the North Atlantic Council's unhesitant decision to allow for the recommencement of bombing after the early September pause indicates that support for the campaign was more robust than some commanders assumed, we still do not know what would have happened if a particularly bad or avoidable incident of civilian casualties had occurred, since the leaders and their aircrews successfully prevented such incidents.

Long-range perspective is important in understanding the effects of humanitarian constraints on the outcome of Deliberate Force at the strategic level, the level at which national and alliance objectives are set and achieved. As described above, the campaign was immensely successful in achieving its immediate objectives. From its start, Deliberate Force suppressed attacks on the UN-declared safe areas and Bosnian Serb ethnic cleansing operations. Arguably, the campaign saved thousands of civilian lives. In conjunction with other military and diplomatic events, Deliberate Force pushed the Serbs back to the conference table.

Looking beyond Deliberate Force, but still within the Balkans region, it seems that the NATO's operational and humanitarian success in 1995 set it up for the intervention, and also some tough surprises, in Kosovo in 1999. NATO's successful blending of precision air power and humanitarian credibility led its leaders to expect a reprise of Deliberate Force in their confrontation with Serb misrule in Kosovo. The Alliance's confidence that Kosovo would replay Bosnia extended to restricting military planners to preparing for a two- or three day war only, with air attacks restricted to military installations unlikely to produce collateral civilian casualties. Alliance leaders generally believed that prewar planning for a longer war would undermine their domestic political support and be unnecessary, given

their expectation that Serbian leader Slobodan Milosevic would fold quickly, as he had in 1995. Of course, Milosevic did not fold in two or three days; Kosovo was much more central to his political power base and Serb nationalism than Bosnia and the Bosnian Serb Republic had been. Fortunately for his enemies, however, Milosevic proved even more inept strategically than NATO. Apparently gambling on NATO's risk aversion, he launched a major campaign of ethnic cleansing against the Kosovar Albanians even as the initial air attacks were underway. In the face of such blatant and brutal acts, NATO was virtually forced to stay the war's course even after its expectations of quick victory proved empty. Further, Milosevic's heavy-handed action reinforced the domestic and international political support for the Alliance, even when its attacks against Serb military forces and economic targets led to hundreds of civilian casualties.⁹

Deliberate Force has great strategic implications for the enduring, core interests of the United States and perhaps of the whole community of democratic and humanitarian states. As exemplified by Deliberate Force and Allied Force, this community faces something of a dilemma. Even though democratic and humanitarian in its foundational values, it asserts the right to intervene with military force in the affairs of other sovereign states or regions not adhering to, or in violation of, those values. Thus the international community saw the crimes against Bosnian Muslims and Croats committed by the Bosnian Serb Republic as repugnant and unacceptable in the context of humanitarian values, and concerned states decided to act.

In the course of asserting moral hegemony in the Balkans, NATO killed a number of civilians whose only "crime" was that of being citizens of the Serb Republic. In the eyes of international law, these deaths are the legal consequence of war, so long as the state that caused their deaths has taken reasonable and proportional efforts to avoid them. For many citizens within the community of democratic states, however, these deaths are morally wrong and the troubling products of actions that seem to violate humanitarian principles,

even as they are undertaken for their protection. If these citizens are galvanized by these contradictions inherent in warfare, they pressure their governments to put an end to the "humanitarian" wars, regardless of merit. Well-meaning states potentially could lose their ability to intervene in humanitarian disasters.

Thus the practice of humanitarian constraint in situations like Bosnia takes on deep political importance. We can infer that wars of humanitarian intervention must be conducted under humanitarian constraints if intervening powers are to retain their ability to intervene at all. "Fighting dirty" in defense of lofty democratic and humanitarian values would undermine those values in the eyes of the citizens of intervening states and of the world at large. In sum, NATO's modest two-week victory in Bosnia was far more influential than a resounding victory, won more quickly, and with less admirable restraint, could have been. The experience of Deliberate Force suggests that aerospace wars can be fought effectively under humanitarian constraints and that humanitarian concerns actually are essential prerequisites of meaningful strategic victory. Inhumane victory is an oxymoron, at least for states, coalitions, and societies professing to fight in defense of humanitarian values.

A final point regarding the practicality of humane restraint in warfare: Deliberate Force illustrates the profound importance of military superiority as the agent that spares commanders the painful choice between assuming greater risk of failure or shedding restraint in the conduct of military operations. By exploiting their great superiority in aerospace power, NATO commanders held the Serbs at arms length while knocking the daylights out of them. The Allies, therefore, experienced no counterblows or risks that might have driven them to escalate their objectives or reduce the care they were exercising in their attacks. The Serbs, in contrast, could only watch their power and long-term security steadily erode. Once they saw all of their avenues for diplomatic leverage closed at Geneva, and with the refusal of the Russians to intervene on their behalf, the Serbs gave in. How

differently might this story have unfolded had the Serbs been in a position to inflict significant and embittering "pain" on NATO military forces.

In conclusion, the experience of Deliberate Force offers at least three important lessons to those interested in the conduct of warfare under humanitarian restraint. First, at the present time, aerospace forces provide a preeminent tool for shaping conflicts in ways that permit the imposition of humanitarian restraint upon the armed forces with minimal increased risk or cost.

Second, beyond the immediate utility of aerospace power in the realm of peace operations, Deliberate Force also highlights the general importance of military superiority as an agent that mitigates the violence of war, at least in the hands of humane powers. Military superiority in the hands of the Bosnian Serbs would have brought about a humanitarian disaster. In the hands of NATO, it led to restraint and brought a period of relative peace to the region. There *was* a moral difference between the contestants.

Finally, governments founded on humanitarian principles must fight under humanitarian constraints if they are to hope for strategic success in any circumstances short of immediate survival. Certainly in peace operations, which are fought in part in the defense of humane values, humanitarian restraint is crucial to long-term success. Aerospace power provides the United States and its allies with the ability to exploit all of these lessons; enabling them to fight wars under humanitarian constraints with their skins, morale, and treasuries in good enough shape to consider going in again somewhere else.

¹ William Mitchell, *Winged Defense: The Development and Possibilities of Modern Air Power Economic and Military* (New York: G.P. Putnam, 1925; New York: Dover, 1988), 16, 136-8; Giulio Douhet, *The Command of the Air* (New York: Coward-McCann, 1942; Washington, D.C.: Office of AF Hist, 1983), 10, 61.

² Virtually all of the following details regarding Deliberate Force are extracted from Robert Owen, editor, *Deliberate Force: A Case Study in Effective Air Campaigning* (Maxwell Air Force Base, Ala: Air Univ. Press, 2000). See particularly Ch. 4, "The Deliberate Force Air Campaign Plan," by Col. Christopher M. Campbell; Ch. 10, "Deliberate Force Targeting," by Lt. Col Richard Sargeant; and Ch. 16, "Summary," by the author. ³ In reality, NATO air planners blended together target lists drawn from several pre-conflict plan to build the one actually applied to Deliberate Force. See, Sargent, "Targeting," 279-87 for details.

⁴ NATO pilots breached the 15,000 "floor" when required to improve target identification or to use unguided weapons more effectively. Generally, however, releasing precision guided weapons at or above 15,000 feet improved their accuracy by giving their guidance systems more time to make course corrections and then stabilize weapon trajectories.

⁵ Richard Holbrooke, *To End a War* (New York: Random House, 1998), 74.

⁶ For details of the NATO rules of engagement for bombing, see Lt. Col. Ronald Reed, "Chariots of Fire: Rules of Engagement in Operation Deliberate Force," in *Deliberate Force*, 381-429.

⁷ Holbrooke, *To End a War*, 148-52.

⁸ Robert Owen, "Summary," in *Deliberate Force*, 514-5.

⁹ Benjamin S. Lambeth, *NATO's Air War for Kosovo: A Strategic and Operational Assessment* (Los Angeles: RAND, 2001), 182-4.