NAVAL WAR COLLEGE
Newport, R.I.

Aerial Coercion as Operational Art: Past Lessons Were Forgotten in Kosovo

By

Mark F. Ramsay
Lieutenant Colonel, USAF

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

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

Signature: [Signature]

17 May 1999

William Kunzweiler, Lt Col, USAF
Professor, Operations
Aerial Coercion as Operational Art: Past Lessons Were Forgotten in Kosovo

Mark F. Ramsay, Lt Col, USAF

Type of Report: FINAL
Date of Report: 17 May 1999
Page Count: 24

Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC, or the Departments of the Navy or Air Force.

Key words that relate to your paper: Airpower, Coercion, Operational Art, Space, Force, Time, Center of Gravity

Abstract:
This paper examines the evolving use of airpower as the political weapon of choice to achieve U.S. strategic objectives. It focuses on the concept of "aerial coercion," which is the unilateral use of air and space power to achieve a desired end state without the credible threat or use of a powerful ground force.

The paper begins by evaluating the operational factors of space, force, and time, along with the strategic and operational centers of gravity, from past aerial coercion operations: Operations Linebacker II (1972), Deliberate Force (1995), and Desert Fox (1998). Next, operational lessons learned from these operations are detailed.

Finally, the first five weeks of Operation Allied Force (1999) are evaluated using the lessons of past operations as the comparative framework. Allied Force failed to quickly achieve the desired end state because: the stated political objectives could not be attained by airpower alone as Milosevic could "ethnically cleanse" Kosovo before the effects of airpower could destroy Serb ground forces, planners failed to adequately identify and attack the Serb strategic and operational centers of gravity, and airpower was applied gradually instead of using initial overwhelming force.

This paper asserts that valuable operational and strategic lessons from previous aerial coercion operations were largely ignored in the planning and execution of Operation Allied Force, leading to frustration in failure to quickly achieve U.S. strategic objectives.
# TABLE OF CONTENTS

INTRODUCTION .................................................................................. 1

NATIONAL SECURITY AND MILITARY STRATEGIES .................. 2

THREE “SUCCESS STORIES” .............................................................. 3
  Operation Linebacker II .................................................................. 3
  Operation Deliberate Force ............................................................ 6
  Operation Desert Fox ..................................................................... 8

LESSONS AVAILABLE FOR OPERATION ALLIED FORCE ........ 11

INITIAL ANALYSIS OF OPERATION ALLIED FORCE ............... 13

CONCLUSION .................................................................................... 15

BIBLIOGRAPHY ................................................................................. 17
I don’t want any more of this crap about the fact that we couldn’t hit this target or that one. This is your chance to use military power to win this war, and if you don’t I’ll consider you responsible.\textsuperscript{1}

President Nixon to CJCS Admiral Moorer, 1972

\textbf{INTRODUCTION}

In the aftermath of the Gulf War it appears that air power is emerging as the political weapon of choice to achieve U.S. strategic objectives. Today, the United States and its allies continue to employ air and space power in Europe and Southwest Asia to restore or maintain regional stability.\textsuperscript{2} What sets these operations apart from previous conflicts is the nearly independent use of air and space power to attempt to achieve strategic objectives. U.S. political leaders appear to have adopted a strategy of “aerial coercion,” defined as the unilateral joint or combined use of air and space power to achieve a desired end state without the credible threat or use of a powerful ground force. In fact, the United States and NATO have openly declared that no ground troops will be used in the current conflict with Yugoslavia in a hostile environment.\textsuperscript{3}

The purpose of this paper is to analyze past examples of aerial coercion to glean lessons that will be useful for Joint Force Commanders in future aerial coercion operations. The operational factors of time, space, and force will provide a framework to evaluate Operations Linebacker II (1972), Deliberate Force (1995), and Desert Fox (1998). In addition, strategic and operational centers of gravity will be identified due to their critical nature in operational planning \textit{and} execution.\textsuperscript{4} Lessons from these three historical examples will be measured against Operation Allied Force through 1 May 1999, which includes the first 38 days of the

\begin{footnotesize}
\begin{enumerate}
\item Department of the Air Force, \textit{Air Force Basic Doctrine}, (AFDD 1) (Maxwell Air Force Base, Alabama: 1997), 78. Air and space power is defined as “the synergistic application of air, space, and information systems to project global strategic military power (emphasis added—regardless of service or nation).”
\end{enumerate}
\end{footnotesize}
operation. The thesis of this paper is that strategic and operational lessons from previous aerial coercion operations have been largely ignored in the planning and execution of Operation Allied Force, leading to frustration in failure to quickly achieve its strategic objectives.

Since the Joint Force Commander’s focus is on employment of military force to achieve operational and strategic objectives, this analysis begins with a review of U.S. National Security and Military Strategies.⁵

**NATIONAL SECURITY AND MILITARY STRATEGIES**

Joint Force Commanders and their staffs must understand political, economic, diplomatic, and military influences on operational art. This is especially true in military operations short of declared war where aerial coercion was used in the past and will likely be called upon in the future. Current U.S. National Security Strategy articulates three broad objectives: to enhance our security, to bolster America’s economic prosperity, and to promote democracy abroad.⁶ These broad constructs should form the basis for U.S. national-strategic objectives during time of crisis or conflict, along with the desired end state following conflict resolution.

National Military Strategy is derived from National Security Strategy. Simply stated, the U.S. military must protect the United States from external threats, promote peace and stability abroad, and defeat adversaries when directed by the National Command

---

Authorities.\(^7\) When planning and preparing for military action, the Joint Force Commander must work closely with senior civilian and military leadership to clearly define theater-strategic objectives that support broader national objectives. Operational art is employed successfully when the Joint Force Commander employs military power at the strategic, operational, and tactical levels of war to achieve political aims.\(^8\) Indeed, well-defined objectives at the strategic and operational levels are key to operational success. This point will resonate clearly as the case study analyses are presented.

**THREE "SUCCESS STORIES"**

**Operation Linebacker II: Aerial Coercion in Undeclared War**

The first successful use of aerial coercion by the United States arguably occurred over North Vietnam in 1972 with Operation Linebacker II, where air power alone was used to force North Vietnam to agree to a peace settlement—the strategic objective of the United States. Previous American air operations had included the credible threat of and use of powerful ground forces. Air and ground forces had been used together in World Wars I and II, the Korean conflict, and Operation Rolling Thunder in Vietnam. By the fall of 1972, President Nixon had succeeded in diplomatically preventing a North Vietnamese escalation of the conflict by securing improved relations with China and the Soviet Union.\(^9\) Time, force, and space greatly influenced his course of action and U.S. military operations.

Time was paramount in Linebacker II. By November 1972, North Vietnam was again refusing to negotiate with the United States. The North had amassed a formidable conventional ground force and modern air force backed up by a sophisticated air defense

---

\(^8\) Vego, 6.
system. It appeared that victory over the South would happen very soon. The process of 'Vietnamization' and U.S. military force withdrawal had reduced the American ground presence in South Vietnam to about 26,000 troops—too few to win a major battle but enough for a huge contingent of prisoners in an inglorious defeat. Planners had envisioned a massive air operation earlier in the conflict, so planning time was adequate. Politically, President Nixon was concerned that the convening Congress would cut funds for further military operations in Vietnam in January 1973.

The force/time dynamic had a psychological impact on the North Vietnamese and their American prisoners of war. In air operations from 1965 through Linebacker I in the spring of 1972, the United States had conditioned the North Vietnamese to expect limited strikes followed by frequent halts for negotiation. Now, in late 1972, Nixon finally ordered around-the-clock strikes and lifted many previous targeting restrictions. For the first time in the conflict, U.S. airpower attacked targets in Hanoi and Haiphong, including aerial mine laying to blockade Haiphong naval and shipyard areas. This relentless, overwhelming use of airpower capitalized on time and force and raised the spirit of American prisoners of war while instilling fear in their captors. According to Colonel Risner, a prisoner of war for seven and a half years, "we saw reaction in the Vietnamese that we had never seen...they at last knew that President Nixon was willing to use those weapons [B-52s] in order to get us

11 Ibid.
out of Vietnam." The effects of unfettered bombing alone exceeded the psychological expectancy level of the North Vietnamese people conditioned by years of limited strikes.\textsuperscript{15}

President Nixon selected airpower due to time constraints and public will, and gave his operational commanders wide latitude and adequate forces to achieve the strategic objective. The President sent the largest bomber force since World War II to the region, along with five carrier battle groups.\textsuperscript{16} Enough supplies were deployed to allow continuous attacks against key targets. Despite lack of unity of command, the Navy and Air Force adequately coordinated integration of tactical aircraft with Strategic Air Command bombers.\textsuperscript{17} Space considerations were not favorable as the U.S. Air Force based the majority of its bombers in Guam. This resulted in 12-hour round-trip flights to North Vietnam and the need for a larger force to support continuous operations. Monsoon weather was another limiting space consideration during the operation. Planners and aircrews were directed to limit collateral damage, and heavy clouds limited the use of the new laser-guided bombs.\textsuperscript{18}

Linebacker II succeeded because the United States destroyed the North Vietnamese air defense system while protecting friendly airpower assets. Although the major target sets, or physical objectives, were severely damaged or destroyed, the operational center of gravity for North Vietnam in 1972 remained its sophisticated air defense system. In only eleven days, the North fired about 1,240 surface-to-air missiles (SAM), nearly depleting its stocks, and was virtually defenseless against aerial attack when they at last agreed to a cease-fire.\textsuperscript{19} Conversely, the United States lost 19 aircraft, of which 14 were the B-52s that the North both

\textsuperscript{15} Boyne.
\textsuperscript{16} Pike.
\textsuperscript{17} Boyne.
\textsuperscript{18} Ibid, and Pike.
feared and hated the most.\textsuperscript{20} The level of violence and scope of the operation reduced the will of the leadership to continue the war while the United States was directly involved. Aerial coercion threatened to inflict more cost in damages than the concessions demanded in the peace treaty.\textsuperscript{21} The inability to defeat the leadership of the North, its strategic center of gravity, led to the eventual fall of South Vietnam in 1975.

**Operation Deliberate Force: Aerial Coercion in Peace Enforcement**

Operation Deliberate Force was the NATO air operation conducted against Bosnian Serb forces between 30 August and 14 September 1995 as part of the international intervention effort to resolve the Bosnian conflict.\textsuperscript{22} NATO airpower was used in Bosnia starting in the fall of 1992 to enforce U.N. Security Council Resolutions (UNSCR) 781 and 816 aimed at banning unauthorized flights over Bosnia, keeping humanitarian supplies flowing into Sarajevo, and protecting lightly armed U.N. Protection Force (UNPROFOR) ground troops.\textsuperscript{23} Unlike Linebacker II, this was a coalition peace operation that included enforcement of sanctions and exclusion zones, strikes, humanitarian assistance, and domestic support operations.\textsuperscript{24} Due to the complexity of this international operation, military use of force required approval from both NATO and the U.N.\textsuperscript{25} Timing once again played a pivotal role in the application of aerial coercion.

In the spring and early summer of 1995, Bosnian Serb forces tested U.N. and NATO resolve by capturing or besieging six “safe havens” that were established to protect the

\textsuperscript{19} Boyne.
\textsuperscript{20} Ibid.
population and UNPROFOR troops.\textsuperscript{26} When NATO bombed a Serb ammunition depot on 24 May 1995, the Serbs retaliated by seizing 370 U.N. peacekeepers and renewing attacks on other safe havens. U.S. Secretary of State Christopher pushed the U.N. and NATO toward military action, and the London Ultimatum in July 1995 promised “substantial and decisive” air strikes. Secretary of Defense Perry announced that the strikes would be “effective” because they would be “disproportionate.”\textsuperscript{27} Moreover, air planners had refined the Operation Deny Flight employment plan for two months preceding Deliberate Force—they were fully prepared to issue the first air tasking order on 29 August 1995.\textsuperscript{28} The Serbs pushed NATO into action by bombing a Sarajevo marketplace on 28 August 1995.\textsuperscript{29} Timing, then, was driven by the failure of diplomatic efforts, the desire to safeguard UNPROFOR troops and local populace, and overt aggression of the Bosnian Serbs.

NATO airpower forces were directed to achieve the theater-strategic objectives of eliminating the threat of future Serb aggression in Bosnia and forcing a peace settlement.\textsuperscript{30} NATO employed a sizeable and adequate force in a relatively small triangular area of about 150 nautical miles on each side.\textsuperscript{31} Like Linebacker II, the substantial increase in the scale and scope of Deliberate Force surprised the war-hardened citizens of Bosnia.\textsuperscript{32} NATO provided further psychological shock value by employing precision guided munitions on 70 percent of strike aircraft sorties and launching 13 Tomahawk Land Attack Missiles (TLAM) to destroy key air defense nodes.\textsuperscript{33} Unlike Linebacker II, NATO had unity of command.

\textsuperscript{25} Owen, “...Part 1,” 15.
\textsuperscript{26} “On the Run in the Balkans,” 24.
\textsuperscript{28} Owen, “...Part 1,” 14-17.
\textsuperscript{30} “Will this Lead to Peace?,” U.S. News and World Report, 11 September 1995, 34.
\textsuperscript{31} Owen, “...Part 2,” 8.
\textsuperscript{32} “Will this Lead to Peace?,” 34.
\textsuperscript{33} Owen, “...Part 2,” 12.
under U.S. Navy Admiral Smith. Moreover, many U.S. Navy, Air Force, Marine, and coalition aircraft were stationed at Aviano Air Base, Italy, to improve interoperability.³⁴

Aerial coercion was instrumental in forcing the Bosnian Serbs to pull back heavy artillery surrounding key safe areas and proving that the U.N. and NATO were committed to rapidly forcing a peace settlement. NATO correctly identified Bosnian Serb heavy forces surrounding the safe havens as the Serb operational center of gravity. The air campaign drastically undermined their ability to command, supply, and move ground forces.³⁵ NATO effectively protected UNPROFOR troops on the ground and air assets aloft—no friendly aircraft were lost in the operation. Deliberate Force was indeed launched during a period of Serb weakness on the ground following several months of Bosnian army attacks. Diplomats and senior commanders, including NATO Secretary-General Claes, and Ambassadors Holbrooke and Hill, stated that airpower alone showed U.N. and NATO resolve and forced a rapid end to the conflict.³⁶ Like Linebacker II, the resolve shown by swift and powerful use of aerial coercion reduced Serbia’s ability to hold ground in Bosnia and the resistance of Bosnian Serb leadership, and hastened negotiations.³⁷ Once again, however, the U.S. and NATO failed to defeat the strategic center of gravity: Serbian leadership under Milosevic.

**Operation Desert Fox: Aerial Coercion in Post-Hostilities**

Operation Desert Fox was launched against Iraq in December 1998 with four theater-strategic objectives: to degrade Iraq’s military capability, increase regional stability, strike

---

³⁴ Owen, “...Part 2,” 10.
³⁵ Owen, “...Part 2,” 15. (Colonel Owen stated that Operation Deliberate Force was an “air campaign”)
³⁶ Owen, “...Part 2,” 16.
weapons of mass destruction (WMD) production facilities, and deprive Hussein of the means for delivering WMD.\textsuperscript{38} Again, the operational factor of time played a crucial role.

Planning for Desert Fox began on 15 November 1998, following the peaceful resolution of a standoff between U.N. weapons inspectors and Hussein.\textsuperscript{39} Heightened tensions between the U.N., Iraq, and the coalition reached a breaking point on 15 December, when U.N. weapons inspectors formally reported that Hussein was continuing his initiatives to produce WMD and they could no longer effectively complete their mission. Coalition forces from the U.S. and Britain began the attack on 16 December without warning in an attempt to prevent Hussein from dispersing his forces or production equipment.\textsuperscript{40} This timing also solidified the important linkage between the nature of the regional security problem (WMD) and the requirement for military action once the U.N. inspectors withdrew from Iraq.

As in Deliberate Force, forces in the region as part of another ongoing military operation provided the bulk of the strike assets.\textsuperscript{41} Coalition forces emphasized reducing collateral damage and minimizing friendly losses. No aircraft were lost during execution. The U.S. launched 415 cruise missiles, 325 of which were TLAMs, and 650 aircraft sorties against airfields, maintenance facilities, Republican Guard barracks, radio jamming centers, and WMD and ballistic missile facilities. Pentagon officials reported that an Air Force Air Expeditionary Wing scheduled for immediate deployment was cancelled when the operation ended on 19 December.\textsuperscript{42} As in Vietnam, the factor of space constrained the availability of aircraft for allied attacks due to limited basing rights in the region. In fact, attacks in the first

\textsuperscript{40} Garamone, “U.S. Strikes Aimed at...”
\textsuperscript{41} U.S., British, and French air and space forces have been supporting Operation Southern Watch since 1992.
night were limited to TLAMs, with Diego Garcia-based B-52s firing their cruise missiles on the second night.\(^{43}\)

According to General Anthony Zinni, the commander of Desert Fox, “the mission effectively achieved U.S. objectives.”\(^{44}\) General Zinni made this claim based on battle damage assessments that showed that 85 percent of the planned targets were hit during the operation. Seventy-four percent was CENTCOM’s threshold for “successfully meeting the intended objective.”\(^{45}\) Defense officials also estimated that the Iraqi missile program capable of delivering WMD was set back by at least one year.\(^{46}\) Given the broad and indeterminable strategic objectives of the operation, it is difficult to determine a single operational center of gravity. The coalition was clearly concerned with Hussein’s WMD program. Destroying or delaying this program would contribute to the other three strategic objectives. Moreover, like the Gulf War, the U.S. considered the Republican Guard as the source of Hussein’s power and a major destabilizing force in the region, and again concentrated on its destruction.

Although not a stated objective of Desert Fox, the fact that U.N. weapons inspectors have not been allowed back into Iraq since December 1998 is a blow to U.S. National Security Strategy in the region.\(^{47}\) Stability in the region has arguably not improved post-Desert Fox. Iraqi forces continue to violate the no-fly zones and fire SAMs at coalition forces almost on a daily basis. The coalition now retaliates in kind for Iraqi acts of aggression and claims to


\(^{44}\) Kozaryn, “Once Should Be Enough…”

\(^{45}\) Ibid.

\(^{46}\) Kozaryn, “Clinton Says ‘Mission Accomplished’

\(^{47}\) Clinton, 52.
have destroyed 20 percent of the Iraqi air defense system since Desert Fox officially ended.\textsuperscript{48} It does appear that Desert Fox achieved its vaguely defined strategic objectives, at least in the short term. The long-term effects of operational success on regional stability remain to be determined.

\textbf{LESSONS AVAILABLE FOR OPERATION ALLIED FORCE}

The most important lesson from the three cases is that aerial coercion must be carefully weighed against the desired strategic objective(s) during the planning phase. Simply stated, all three operations arguably stood at least a moderate probability of success given the stated strategic objectives and selected course of action. Linebacker II and Deliberate Force hastened the peace timetable against adversaries who had more to gain by peace than by war. Operation Desert Fox reduced the power of Iraq as a regional threat in Southwest Asia and delayed production of WMD.

Second, to ensure moderate probability of success, planners must employ an overwhelming firepower force that can \textit{directly} affect \textit{both} the strategic and operational centers of gravity through aerial coercion. In Linebacker II, President Nixon dropped many of the restrictions imposed on the previous air operations. Nixon allowed massive strikes in areas of the North previously unscathed by attacks in the history of the conflict, instilling fear in the population and military. At the same time, the sheer magnitude of the continuous assault led to the neutralization of the operational center of gravity, the North's air defense system. In Deliberate Force, NATO forces attacked Serb heavy forces that threatened UNPROFOR troops and safe havens. Destruction of the heavy forces using precision weapons and the first use of TLAMs in the Balkans degraded the operational center of

gravity, the Bosnian Serb army, and affected the strategic center of gravity, the Bosnian Serb leadership. Finally, in Desert Fox the U.S.-led coalition directly attacked the heart of the Hussein regime, the Republican Guard and Iraqi WMD facilities. Hussein, the strategic center of gravity, is now showing outward signs of losing his grip on Iraq.\textsuperscript{49}

Third, weather and terrain are major factors that can adversely impact air operations. U.S. airmen in Linebacker II were hampered by monsoon rain conditions that restricted their ability to employ new laser-guided bombs. Technology in the form of Global Positioning System-guided bombs and cruise missiles have helped reduce, but not eliminate, this restraint. In addition, visual identification demanded by rules of engagement to reduce collateral damage was difficult due to the jungle canopy in Vietnam and urban centers in Vietnam, Bosnia, and Iraq.

Finally, firepower should be applied quickly, relentlessly, and without adequate warning to maximize its paralyzing effects. Both the North Vietnamese and the Bosnian Serbs were unprepared psychologically and militarily for the onslaught of massive firepower. The speed and breadth of both Linebacker II and Deliberate Force led to a decline in will to continue the conflicts.\textsuperscript{50} To maintain a relentless offensive, operational planners must ensure an adequate supply of war materials to continue the tempo of operations. Senior leaders should provide ambiguous warning to potential adversaries, but not provide vital information about the scope and timing of operations. Finally, rapidity and relentlessness are key aspects of timing, and timing was identified as the driving operational factor in all three cases.

\textsuperscript{49} Ibid.
\textsuperscript{50} Fracker, 61-62. Fracker discusses the success achieved by the use of massive force compared to applying the gradualist approach where one side announces a halt to the bombing, but threatens escalation if the opponent exploits the situation. The gradualist approach failed in Vietnam in Operation Rolling Thunder.
INITIAL ANALYSIS OF OPERATION ALLIED FORCE

Operational Allied Force is a large aerial coercion campaign launched by NATO airpower on 24 March 1999 to stop the ethnic cleansing of Kosovar Albanians by Serb ground forces. NATO chose military airpower to enforce UNSCR 1160, which condemned the excessive use of force by Serb police against the citizens of Kosovo. President Clinton gave three strategic objectives for the attack:

1) To demonstrate the seriousness of NATO’s opposition to aggression and its support of peace;
2) To deter President Milosevic from continuing escalating his attacks on helpless civilians by imposing a price for those attacks; and
3) If necessary, to damage Serbia’s capacity to wage war against Kosovo in the future and seriously diminishing its military capabilities.\(^5^1\)

General Wesley Clark, Supreme Commander Allied Forces Europe, stated that NATO would “systematically and progressively attack, disrupt, degrade, devastate and ultimately destroy these [Serbian ground and air] forces and their facilities and support.”\(^5^2\) NATO officials simultaneously announced that this was a limited military air operation and that they had no intention of employing ground forces.\(^5^3\) These statements show the failure of U.S. and NATO political and military leadership to match strategic objectives with a selected military course of action.

Aerial coercion has never been used to prevent ethnic cleansing, yet the last two strategic objectives are aimed squarely at preventing just such an activity in both the present and future. The three previously cited cases reveal that rapid, overwhelming, and unrestricted airpower can be used to varying degrees of success to coerce limited concessions.

\(^5^3\) Ibid.
Regrettably for NATO, the selection of aerial coercion in Kosovo as the course of action is incompatible with the strategic objectives. NATO would need months to destroy Serbia’s military from the air but Serbia needs only a few weeks to cleanse Kosovo. By the end of the fifth week of the operation there were 7,000 more Serbian forces operating in Kosovo than at the outset. Instead of halting Serb aggression, Milosevic stepped up his ground offensive and forced more than one million Kosovars to flee their country. The United States and NATO proclaim that they have achieved the first objective, but Serbian leadership has undoubtedly interpreted the aerial coercion operation as a sign of U.S. and NATO weakness.

At the operational level, Allied Force planners also failed to adequately identify Serbia’s operational center of gravity. NATO aircraft flew nearly 10,000 sorties in the first four weeks of the operation and fired hundreds of cruise missiles at targets throughout Serbia and Kosovo. NATO forces destroyed or damaged 16 early warning radar sites, 30 percent of missile guidance radar sites, 15 percent of mobile SAMs, 50 percent of the fighter force, and a major portion of the oil production facilities, or approximately 185 out the 2,000 targets. Despite these numbers, the failure to degrade or destroy the fielded forces in Kosovo—the troops performing the ethnic cleansing for Milosevic and his operational center of gravity—is the root cause of the failure to achieve NATO’s strategic objectives.

NATO’s inability to attack and destroy fielded forces in Kosovo has been due primarily to poor springtime weather conditions and mountainous terrain, as well as the need to stay

above 15,000 feet to avoid anti-aircraft fire and portable shoulder-fired SAMs. Milosevic, unlike the North Vietnamese and Iraqis, has wisely chosen extreme discrimination in exposing his air defense systems and anti-aircraft weaponry to attacks from the air. It remains an effective deterrent to lethal low-level NATO strikes. Moreover, NATO stated that they have a higher probability of success against large, fixed targets than against mobile targets like the forces in Kosovo. Serbian officials further countered this claim by mixing military targets with the civilian population to increase the chances that NATO could cause collateral damage.\textsuperscript{58}

Finally, airpower has been applied \textit{gradually} in Allied Force. NATO did not start Allied Force as an overwhelming aerial coercion operation. Attacks began with a total of 400 aircraft, an insufficient force to cause major degradation of Serbia’s strategic center of gravity: the will of its leadership. NATO made a slow start, particularly through a lack of mass and shock force in the initial waves of bombing.\textsuperscript{59}

It appears that the U.S. military normally learns from past successes and ignores failures, but in Kosovo we appear to have ignored lessons from both.

\section*{CONCLUSION}

Aerial coercion is emerging, perhaps too hastily, as the political weapon of choice in limited conflicts for both the United States and NATO. The application of this concept achieved varying degrees of success in Vietnam in 1972, Bosnia in 1995, and Iraq in 1998. These operations revealed and confirmed some fundamental lessons of operational art.

\textsuperscript{57} Paul Mann, “Belgrade Called Victor in War’s First Phase,” \textit{Aviation Week and Space Technology}, 26 April 1999, 28-29.
\textsuperscript{58} Ibid., 30.
\textsuperscript{59} Ibid., 28.
First, operational leaders must ensure that airpower alone, if tasked, is likely to achieve the strategic objectives. They must also weigh the risks of failure. Allied Force is an example of an imbalance between ends and military means. Second, for aerial coercion to succeed, operational planners must use overwhelming force to directly attack the heart of the enemy—his operational and strategic centers of gravity. The failure of airpower to quickly destroy fielded forces in Kosovo allowed the enemy to accelerate ethnic cleansing. Third, despite the increase in precision technology, weather and terrain still hamper the employment of airpower. This has been a major factor in the inability of Allied Force aircraft to attack Serbia’s fielded forces. Finally, airpower must be employed rapidly, relentlessly, and without warning. Allied Force started as a “gradual escalation” aerial coercion operation, limiting paralytic effects and any possible influence on Serb leadership.

This paper highlighted important lessons for Joint Force Commanders tasked to plan and implement aerial coercion operations. There may be more to come. Operation Allied Force must be studied and analyzed as it evolves, but this analysis asserts that strategic and operational leaders failed to apply the lessons of past aerial coercion operations. History may ultimately judge Operation Allied Force in a different light, but the misapplication of operational art in Kosovo has thus far only led to the acceleration of a humanitarian catastrophe.
BIBLIOGRAPHY

Books


**Articles**


______. “NATO Air Strikes Target Serbian Infrastructure.” *Aviation Week and Space Technology,* 18 September 1995, 22-23.


Fracker, Martin L. “Psychological Effects of Aerial Bombardment.” Airpower Journal, Fall 1992, 56-68.


**Internet**


CD-ROM