NAVAL WAR COLLEGE

Newport, RI

Joint Military Operations

CENTERS OF GRAVITY AND THE WAR IN KOSOVO

by

Mark A. Milley, Lieutenant Colonel, USA
Seminar I/ COL Spain, COL Coe

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

Signature:  
Mark A. Milley

16 May 2000
Centers of Gravity and the War In Kosovo

The concept of centers of gravity is germane to any discussion of warfare. Despite the current glut of literature on the "Revolution in Military Affairs" in which many postulate the very nature of war is changing, it is wise for professional soldiers to take a deep breath and not throw the baby out with the bathwater. Even in this age of networked warfare, precision strike munitions and real time intelligence, Clausewitz's discussions of centers of gravity still provide fundamental insight into the conduct of war. This paper analyzes the conduct of Operation ALLIED FORCE, the NATO military operations in Kosovo from 24 March 1999 through 10 June 1999, from the perspective of the strategic and operational centers of gravity and develops lessons learned. The discussion begins with a short summary of the theoretical and doctrinal aspects of centers of gravity followed by a review of the ends-ways and means calculus as articulated by the principal NATO strategic level leaders. The analysis focus is in four areas: the results of the operation, political ambiguity, identifying and attacking the centers of gravity, and the effects of the enemy. The paper concludes with seven timeless lessons once again re-learned.
ABSTRACT

The concept of centers of gravity is germane to any discussion of warfare. Despite the current glut of literature on the “Revolution in Military Affairs” in which many postulate the very nature of war is changing, it is wise for professional soldiers to take a deep breath and not throw the baby out with the bathwater. Even in this age of networked warfare, precision strike munitions and real time intelligence, Clausewitz’s discussions of centers of gravity still provide fundamental insight into the conduct of war. This paper analyzes the conduct of Operation ALLIED FORCE, the NATO military operations in Kosovo from 24 March 1999 through 10 June 1999, from perspective of the strategic and operational centers of gravity and develops lessons learned. The discussion begins with a short summary of the theoretical and doctrinal aspects of centers of gravity followed by a review of the ends-ways and means calculus as articulated by the principal NATO strategic level leaders. The analysis focus is in four areas, the results of the operation, political ambiguity, identifying and attacking the centers of gravity, and the effects of the enemy. The paper concludes with seven timeless lessons once again re-learned.

This is an unclassified paper which used official documents including after action reviews, doctrinal manuals, press releases, and congressional testimony along with a variety of books, articles in various professional journals, press reports and video accounts of the war in Kosovo to form the basis of research. The research is coupled with the author’s own experience in Bosnia, Haiti, Panama, and Colombia to provide valid and relevant lessons learned that directly apply to U.S. joint military operations today.
TABLE OF CONTENTS

Abstract................................................................. i
Introduction............................................................. 1
Theory-Doctrine....................................................... 1
Ends: The Strategic Interests, Purpose, Goals, and Objectives........ 3
Ways: The Centers of Gravity and Methods of Attack.................. 6
Means: Air Power Alone............................................... 8
Analysis................................................................. 9
   Mixed Results: A Matter of Perspective......................... 9
   Strategic Political Ambiguity.................................... 14
   Identifying and Attacking the Centers of Gravity............. 16
   The Enemy........................................................ 20
Lessons Re-Learned.................................................. 22
Conclusion........................................................... 23

Endnotes

Bibliography
INTRODUCTION

The concept of centers of gravity is germane to any discussion of warfare. Despite the current glut of literature on the “Revolution in Military Affairs” in which many postulate the very nature of war is changing, it is wise for professional soldiers to take a deep breath and not throw the baby out with the bathwater. Even in this age of networked warfare, precision strike munitions and real time intelligence, Clausewitz’s discussions of centers of gravity still provide fundamental insight into the conduct of war. This paper analyzes the conduct of Operation ALLIED FORCE, the NATO military operations in Kosovo from 24 March 1999 through 10 June 1999, from the perspective of the strategic and operational centers of gravity and develops lessons learned. The discussion begins with a short summary of the theoretical and doctrinal aspects of centers of gravity followed by a review of the ends-ways and means calculus as articulated by the principal NATO strategic level leaders. The analysis focus is in four areas: the results of the operation, political ambiguity, identifying and attacking the centers of gravity, and the effects of the enemy. The paper concludes with seven timeless lessons once again re-learned.

THEORY-DICTRINE

Several theorists heavily influence the American military. Jomini was the most influential from the Civil War through the mid 1970s and continues today, although subordinate to Sun Tzu and Clausewitz. Numerous “fortune cookie” quotes of Sun Tzu appear throughout military manuals and they are frequently seen on many briefing slides as if to add an air of intellectualism to the briefer. But arguably the most influential is Clausewitz. All of these theorists, if properly understood, only provide food for critical thinking instead of prescription for actual action. ¹

However, Clausewitz’s concept of centers of gravity provides what appear to be a definite “how to win” formula and the U.S. military at all levels and across all services has fallen into the trap. Clausewitz defines the enemy center of gravity as “... the hub of all power and movement, on which everything depends. That is the point against which all our energies should be directed,” he says. ²
The American military has taken Clausewitz’s definition and literally pasted it into various keystone doctrinal manuals that govern our current methods of operations. The result is that the enemy’s center(s) of gravity has become an obsession in both planning and execution— in a sense, it is the Holy Grail of operations— identifying it and destroying it guarantee victory. But, like the Holy Grail, it is often elusive and when found it is often unassailable.

The service with the most developed written doctrine is the U.S Army. FM 100-5, *Operations*, is the Army’s keystone doctrinal manual. Despite our decisive victory in WWII, the 1941 version, that which should have governed the campaigns of Europe and the Pacific, had no mention of the term “centers of gravity”. It was perhaps just as well since many U.S. generals of WWII did not follow any particular operational (vice tactical) doctrine anyway. GEN Bruce Clarke later quipped:

“I never had anything to do with writing FM 100-5; nor can I recall reading it while in my commands... I’ve never seen it referred to in division, corps, army, and army group headquarters in my commands...I never heard mention of FM 100-5 when I commanded troops in two wars.”

The 1976 edition of FM 100-5, which advanced the “active defense” doctrine, also has no mention of centers of gravity. Surprisingly, the 1982 version, which initiated the transition to Air-Land Battle, also did not have any mention, although the authors were well versed in Clausewitz, and most other theorists of war. It is not until the 1993 edition of FM 100-5 that we find an explicit definition of centers of gravity in the Army doctrine and it is specifically developed as an “operational” concept vice strategic or tactical. FM 100-5 (1993) defines the center of gravity almost quoting Clausewitz:

...the hub of all power and movement upon which everything depends...It is that characteristic, capability, or location from which the enemy and friendly forces derive their freedom of action, physical strength, or will to fight. Several traditional examples of a potential center of gravity include the enemy army, the enemy’s battle command structure, public opinion, national will, and an alliance or coalition structure... The essence of operational art lies in being able to mass effects against the enemy’s main source of power- his center of gravity, which he seeks to protect... however the center of gravity may not be discernible...

All supporting war fighting manuals within the U.S. Army today discuss centers of gravity to some degree and do not vary significantly in substance from the above definition. Also, the various manuals
of the USMC, USAF, and USN all provide a similar definition, however, with the exception of the Marines, the usage of the term is less well understood.\textsuperscript{7}

At the strategic level, the concept is equally emphasized throughout the family of Joint Manuals. The capstone joint manual, Joint Pub 1 (1991) similarly defines the center of gravity and clearly states that we should make it our focus of attack. Joint Pub 1 describes center of gravity as: “...that characteristic, capability, or locality from which a military force, nation, or alliance derives its freedom of action, physical strength, or will to fight...”\textsuperscript{8} It further directs that “Joint campaigns orient on the enemy’s strategic and operational center of gravity...”\textsuperscript{9} and conduct “direct attack on the enemy’s strategic centers or gravity (by air, missile, special operations, and other deep-ranging capabilities)...”\textsuperscript{10}

Thus, the U.S. military has correctly incorporated Clausewitz’s base definition of center of gravity in his famous “hub of all power” quote and we have correctly assigned it a high degree of importance.\textsuperscript{11}

\textbf{ENDS: The Strategic Interests, Purpose, Goals and Objectives}

The public discussion of the national and alliance strategic interests, political purpose, objectives, and endstates specific to Kosovo began in the Bush administration and was often talked about throughout the crisis in Bosnia. However, the Clinton administration and NATO began to discuss the subject with some sense of urgency beginning in the fall of 1998 following increasing violence on the part of both Serb security forces and the Kosovo Liberation Army (KLA-UCK). In December 1998 the North Atlantic Council (NAC) issued its Activation Order (ACTORD) to SACEUR to prepare to initiate an air operation in support of ongoing diplomacy. In its public statement the NAC indicated its objective: “…both Belgrade and the armed Kosovar elements have failed to comply fully with the requirements set out in UN security council resolutions....we call upon the armed Kosovar elements to cease and desist from provocative actions and we call upon the Federal Republic of Yugoslavia (FRY) and Serbian authorities to reduce the number and visibility of Ministry of Internal Affairs (MUP) special police in Kosovo and abstain from intimidating behavior...”\textsuperscript{12}
Following an escalation of violence in Kosovo in January between Serb security forces and the KLA the western powers convened peace talks at Rambouillet France. The negotiators met in two contentious sessions from 6-23 February and again 15-18 March. These talks are the subject of much controversy and the full 82-page document with all unclassified and classified annexes has never been made public\textsuperscript{13}. Nevertheless, from various press accounts and government statements the key points with relevance to our discussion seem clear. The key NATO proposals were:

- Democratic self government for Kosovo which included free elections of a President, an assembly, passing its own laws without Serbian review, establishing its own constitution, imposing its own taxes in the same manner as a Republic
- A NATO international peacekeeping force throughout Kosovo and the Federal Republic of Yugoslavia.
- Withdrawal of all Serbian Army forces except liaison officers
- Partial withdrawal of Serbian police forces
- Demilitarized KLA
- A three year interim period followed by a referendum in Kosovo on independence
- Respect for the territorial integrity and sovereignty of the FRY\textsuperscript{14}

Five days later, on the very eve of war, President Clinton in a speech to the American Federation of State Employees said "If President Milosevic is not willing to make peace then we are willing to limit his ability to make war on the Kosovars.")\textsuperscript{15} Other than general comments about peace, there was no public statement about specific Rambouillet demands but degrading his forces, although, not mentioned at Rambouillet, became an added objective. The following day NATO initiated combat operations and the President addressed the nation from the Oval office and sent a confirmatory letter to Congress. In his speech President Clinton explained the U.S. had vital strategic and humanitarian interests involved as a stable, democratic and undivided Europe, prevention of a wider conflict, and protection of innocents from slaughter. He said:

We act to prevent a wider war, to defuse a powder keg at the heart of Europe that has exploded twice before in this century with catastrophic results...President Milosevic ...has chosen aggression over peace...we have three objectives...to demonstrate the seriousness of NATO's opposition to aggression...deter Milosevic from continuing and escalating his attacks on the helpless civilians by imposing a price for those attacks and if necessary to damage Serbia capacity to wage war against Kosovo in the future by seriously diminishing its military capabilities...if our country is going to be prosperous and secure, we need a Europe that is safe, secure, free, united...What if someone had stood up to Hitler earlier...How may people's lives might have been saved...stand up to brutality and the killing of innocent people...intervening is morally right and in the vital interest of the United States...[additionally] I don't intend to put our troops in Kosovo to fight a war.\textsuperscript{16} (emphasis added)
A week into the war President Clinton was obviously frustrated with explaining the interests and aims of the war. In response to one reporter’s question about the mission and objectives he stated: “Everyone is trying to get their hands around a very complex problem”\textsuperscript{17} obviously indicating that Clausewitz’s dictum of thinking through the issues with a degree of rigor ahead of launching bullets had been ignored. Yet we continued to muddle in articulating our aims. On 3 April, the President stated “Our goal is to exact a very high price for Milosevic’s policy of repression and to seriously diminish his capacity to maintain that policy…”\textsuperscript{18} Again, no mention of the key points from Rambouillet but rather the aim now was purely punitive. A week later, on 10 April, now D+17, the President provided slightly more clarity when he said: “President Milosevic must withdraw from Kosovo his military police and paramilitary forces…he must permit deployment of an international security force…he must allow the unconditional return of all refugees…he must take these essential steps as we move toward self-government…”\textsuperscript{19}

On the other side of the Atlantic, vague and sometimes contradictory language at the strategic level was also prevalent in the first weeks of the war. NATO Secretary General Javier Solana issued a statement on 24 March, which read in part

...international community demands: the acceptance of the interim political settlement at Rambouillet; full observance of limits on the Serb Army and the special police forces, agreed on 25 October; an end to the excessive and disproportionate use of force in Kosovo...NATO will take whatever measures are necessary to avert a humanitarian catastrophe. Military action will ...be directed towards disrupting the violent attacks committed by the Serb army and special police forces, and weakening their ability to cause further humanitarian catastrophes. It remains open to the Yugoslav government chief to show at any time that he’s ready to meet the demands of the international community… Our Objectives is to prevent more human suffering, more repression, more violence against the civilian population of Kosovo...prevent instability from spreading...inaction brings greater dangers…Let me be very clear, NATO is not waging war against Yugoslavia…”\textsuperscript{20} (emphasis added)

The next day Secretary Solana attempted to clarify since the Rambouillet terms were not public: “Let me reiterate ...our objectives: to halt the violence and to stop further humanitarian catastrophe”\textsuperscript{21} After bombing for a week Solana again tried to clarify and said during 1 April press conference:
...NATO’s political goals...first and foremost, we must stop the killing in Kosovo...secondly we must put an end to the appalling humanitarian situation that is now unfolding in Kosovo and create conditions for the refugees to be able to return...third, we must create the conditions for a political solution to the crisis in Kosovo based on the Rambouillet agreement.  

NATO’s political objectives began to be more coherently articulated in the third week of the war with a Press release on 12 April 1999 finally followed by a public affirmation of the 19 heads of the NATO states at the 50th Anniversary of NATO in Washington D.C. on 23 April 1999- one month after the initiation of hostilities. At this point NATO articulated five relatively clear war aims:

1. A verifiable stop to all military actions and the immediate ending of violence and repression.
2. The withdrawal from Kosovo of the Serbian military, police and paramilitary forces.
3. The stationing in Kosovo of an international military presence.
4. The unconditional and safe return of all refugees and displaced persons and unhindered access to them by humanitarian aid organizations.
5. The establishment of a political framework agreement for Kosovo on the basis of Rambouillet.

WAYS: The Centers of Gravity and Methods of Attack

NATO’s planners had to decide on how and with what to achieve the above stated political objectives in all of their various forms. In order to develop a coherent campaign design they had to first come to grips with the issues of the strategic and operational centers of gravity. A heated debate raged within NATO headquarters before and during the conduct of operations over this issue. Although many people were involved, the debate is best illustrated by the thoughts of General Clark, the SACEUR, and LTG Short, the Air Component Commander with primary responsibility for planning and executing.

In a press conference the day after the war began, GEN Clark articulated his mission:

...the military mission is to attack Yugoslav military and security forces and associated facilities with sufficient effect to degrade its capacity to continue repression of the civilian population and to deter its further military actions against his own people. We aim to put his military and security force at risk. We are going to systematically and progressively attack, disrupt degrade, devastate and ultimately destroy these forces...unless Milosevic complies... (emphasis added)

The SACEUR seems to indicate that the enemy center of gravity is the fielded forces of the FRY and the military purpose is to “deter, disrupt, degrade, devastate and destroy”. He indicates his method will be “systematic and progressive attack” which means he has chosen attrition instead of maneuver.
Within weeks of the end of bombing, GEN Clark is quoted in NATO Magazine stating “Serb forces were the top priority” indicating that even after the war he considered the fielded forces the strategic center of gravity where he would concentrate his efforts.\textsuperscript{25} However, in later post-war testimony to Congress, Clark indicates he held a broader view of the center of gravity. Clark identified two enemy centers of gravity: a “tactical” center of gravity as the Serb 3\textsuperscript{rd} Corps and a “strategic” center of gravity as Milosevic. Clark noted: “I think you have to go on both axes. I think you have to go after the tactical center of gravity and you have to go after the strategic center of gravity”.\textsuperscript{26} Also in post-war testimony, GEN Clark stated that he pushed for permission to “go downtown” and directly attack the Milosevic regime and its public support as early the second day of the war but he was not successful in convincing the allied political leaders of the need. Finally, GEN Clark frequently referred to protecting the cohesion of the Alliance as a mission essential task suggesting he thought it was the friendly strategic center of gravity, although he did not refer to it as such.\textsuperscript{27}

In the same October 1999 Senate Armed Services Committee hearing, we hear a much more emphatic point of view expressed by LTG Short responding to Senator Warner. After several questions where LTG Short avoided a clear-cut statement in contradiction to his boss, who was sitting right next to him, he finally replied “Sir, I would have gone for the head of the snake on the first night. I would have turned the lights out the first night, Milosevic and his cronies would have waked up the first morning asking what the hell was going on”.\textsuperscript{28} LTG Short further stated that he clearly believed the Serb center of gravity was Milosevic and it was there that we should direct the mass of our effort if we were to achieve success in the least amount of time. “I believe the way to stop ethnic cleansing was to go at the heart of the leadership and put a dagger in that heart as rapidly and decisively as possible.”\textsuperscript{29}

LTG Short implied but did not state openly that SACEUR had misidentified the enemy center of gravity as the Serb army in Kosovo. In a post war article in Air Force Magazine, LTG is quoted as saying “SACEUR’s number one priority, which he expressed to me every day on the video teleconference session, was the fielded forces in Kosovo. And we understood that and followed the
direction of SACEUR.” In the same article he later states “I never felt that the Serb 3rd Army in Kosovo was a center of gravity”.30

SACEUR and LTG Short also disagreed on the method of attack. SACEUR advocated an operation of steadily increasing pressure and intensity over time initially with indirect attacks on the fielded forces and Belgrade. LTG Short advocated a massive and decisive application of overwhelming power from the outset directly aimed solely at the strategic center of gravity in Belgrade. Not surprisingly, given the duty positions, the resulting campaign plan reflected GEN Clark’s thoughts.

The campaign plan encompassed three escalating phases: Phase-I purpose was to set and maintain conditions for the follow-on phases and the target sets included the leadership and sustainment facilities of the fielded forces and the integrated air-defense network in both Kosovo and the FRY. If Milosevic did not capitulate during Phase I then NATO would climb the ladder of escalation to Phase II which was titled “Isolate Military Forces” and included the following targets sets: Road and Bridge Networks, Petroleum refineries-storage and distribution, and command, control and communications. Again, if Milosevic failed to give in to NATO demands then Phase III, labeled “Decimate”, would be launched and it included industry, power and the forces in the field.31

**MEANS: Air Power Alone**

The military means available to NATO for execution was primarily air and missile power provided by the allied Air and Naval forces, predominantly (more than 80%) provided by the U.S. As indicated above, allied ground forces were taken off the table at the outset except as a follow-on peacekeeping force under permissive conditions. The extent that allied special operations forces were employed on the ground in Kosovo, the FRY or in support of the KLA is not publicly known however it can be reasonably assumed they were used in all three areas for training, reconnaissance, target acquisition, and psychological operations. Additionally, the extent of offensive information operations (IO) is not known32. The diplomatic and economic elements of power continued to be applied after the initiation of hostilities by working with the Russian and Finn diplomats, freezing financial assets abroad, denying travel outside of Serbia to Milosevic, members of his family and key senior officials,
and attempting to tighten the economic sanctions and embargo. However, most of these economic and diplomatic measures did not get initiated until well into the conduct of military operations. NATO initiated combat operations with approximately 300 aircraft of all types and gradually increased those to over 1000 by 10 June 1999. NATO started in March with 214 strike aircraft and ended 78 days later with 535 strike aircraft. Additionally, NATO had deployed three carriers (1 each U.S., UK, and French) two submarines and 26 other combat ships. An Apache helicopter task force was deployed but not committed to combat operations. Approximately 50,000 ground troops were committed throughout the region concentrated in Macedonia and Albania but not committed into Kosovo until 12 June 1999—two days after the bombing halt. The KLA had some unknown number of fighters variously estimated at about 15-20,000.33

**ANALYSIS**

*Mixed Results: A Matter of Perspective*

In the post-war attempt at getting out ahead of the historians the various NATO leaders on both sides of the Atlantic have sounded the now remarkably consistent refrain of “victory” and the now equally consistent “war winning” objectives of “Serbs out, killing stopped, and NATO in”34 NATO should be allowed its due since the Serb security forces are in fact out of Kosovo, the mass slaughter of civilians has in fact stopped and a NATO led peacekeeping force is in fact on the ground conducting current operations. Nevertheless, as professionals, we need to be a bit more objective in our assessment if we are to learn anything from this war and the post-war sound bites do not accurately reflect the stated strategic political objectives. Some indication of relative success or failure based on the political objectives and the measures of effectiveness that NATO employed during the war must be used if we are to be honest with ourselves.

President Clinton’s laid out the initial set of war aims in his speech on 24 March 1999, outlined above. In short, they were: demonstrate seriousness, deter the continuation or escalation of violence, and punish Serbia by seriously diminishing its security forces. That Milosevic did not yield to NATO demands for 78 days of consistent bombing is prima facie evidence that he did not take NATO
threats seriously before or during the war. While “ethnic cleansing” had been going on prior to 24 March, it is irrefutably clear that the number of Kosovar Albanians killed and expelled radically increased after NATO began bombing. No doubt that this may have eventually happened without NATO bombing but it is clear that we did not “deter” the Serbs from “continuing or escalating” their ethnic cleansing operations. Lastly, despite the various battle damage assessment reports during the war it is becoming increasing clear that we did a very limited amount of damage to the Serb security forces in Kosovo or in Serbia. If NATO’s own post war figures are to be accepted then we essentially destroyed the Serbian fixed wing air-force but hardly damaged their rotary wing aircraft. We significantly attrited their air defense command and control capability but barely killed any SA6 or low altitude MANPADS. When the war ended, Serbia still had a functional IAD system capable of denying NATO use of the low to mid altitude air space. Finally, although we destroyed a large part of their industrial base, particularly POL, and we destroyed allot of fixed military facilities, we did very little damage to their ground forces destroying only 7% of Serbian tanks, 17% of their armored personnel carriers and 9% of their artillery and mortar systems. The words “punish” and “seriously diminish” are relative terms but the amount of damage done to the Serbian security forces, while not insignificant, did not substantially prevent Serbian forces from conducting operations with the exception of fixed wing air or the massing of armor and mechanized forces. Neither fixed wing aircraft nor heavy forces were relevant to the conduct of Serbian counterinsurgency operations against the KLA or ethnic cleansing operations against the civilian population. Throughout the war and post-war the Serbian security forces retained the capability to defend, reinforce, attack, withdraw, or delay. In sum, we clearly failed to achieve the three purposes of the war as articulated by President Clinton at the outset and if people were looking for a sound-bite then “we lost” might fit the bill.

If, on the other hand, we use the NATO unified objectives of mid-April, which were largely extrapolated from the secret Rambouillet accords, then it can be fairly said that NATO partially achieved many if the stated objectives. First- did NATO achieve a verifiable stop to all military actions and an immediate ending of violence and repression? Clearly the large scale ethnic cleansing by the
Serbs against the Albanians has ceased however it is also clear the violence has shifted to a lower form of intensity as the Albanians are conducting a systematic reverse form of ethnic cleansing. Therefore it is reasonable to say that the violence has not “stopped”, it has just taken new form. Lastly, it is obvious that 78 days would not exactly qualify as “immediate”.

Second- did all Serbian military, police and paramilitary forces withdraw? Yes for the military and police and this constitutes NATO’s major achievement. However, the paramilitary component is more problematic as there have been numerous reports of infiltrations by Serbian paramilitary forces back into the Serb enclaves remaining in Kosovo. Additionally, and unfortunately, the Serbian military and police withdrew in good order with the bulk of its equipment. It was an Army that withdrew in defiance, not in defeat and it is quite capable of fighting another day.

Third- did a NATO led international military presence move into Kosovo? Obviously yes and again constitutes a significant NATO achievement. But that force is not as large as it was supposed to be, did not constitute the required amount of police and civil affairs type forces for the post-hostilities phase of operations and it may be there for many years to come since the nation building tasks are progressing at glacial speed. For sure they got in, the real criteria are will they come out within three years which is the stated time frame for a referendum in Kosovo indicated in the Rambouillet accords.

Fourth- were all the refugees and displaced persons provided unconditional safe return and unhindered access by humanitarian organizations? For sure the Albanian Kosovar refugees have returned and they are significantly safer today then they were prior to the war. However, the word “all” includes Gypsies, Serbs, Muslim Slavs and many other groups. Since the bombing halt, all of these groups have been under threat and a significant number have been subject to a form of “reverse” ethnic cleansing. KFOR is trying to prevent these attacks but it is clear they are having only limited success.

Fifth- has an established political framework based on Rambouillet been established? Let us just say this is a work in progress but right now there is no such framework agreed to by all the parties to the conflict nor will there be because the vital interests of the Kosovar Albanians and the Serbs are mutually exclusive. The goal of a multiethnic autonomous state with Kosovo as a part of the FRY is
pure utopia based on western values and culture that has no basis in present or historical reality. As Henry Kissinger noted: "...it is an insoluble problem". 39

Thus, although not an outright failure looked at from the standpoint of the mid-April NATO objectives, we can certainly see the success of the war is not clear-cut. While we certainly did not lose, neither did we "win". If, however, we turn to the NATO measures of effectiveness, the picture gets much brighter, but no less blurry.

Early in the operation, GEN Clark established a set of what he called "measures of merit" which provided a set of criteria for success or failure. He referenced them several times during the war in testimony and during press briefings but they were often overlooked by those listening. In a post-war article in Parameters he listed them as:

- Avoid losses
- Impact Serb forces in Kosovo (and associated targets throughout the Federal Republic of Yugoslavia)
- Minimize Collateral Damage
- Maintain Alliance cohesion 40

During congressional testimony in October 1999, GEN Clark presented a slightly different set of MOE. There he stated them as "...avoiding the losses of aircraft...maximizing the military impact and political impact of the strikes against centers of gravity both tactical and strategic, working to avoid collateral damage...and maintaining alliance cohesion." 41 (emphasis added).

LTG Short clearly acknowledged that some version of SACEUR’s MOE were in effect during the war. He said they were: "First, protect NATO forces in the theater, including those in Bosnia as well as in Albania and Macedonia. The second was that the coalition holds together. Finally, clearly it was a goal for us not to lose any airplanes or any pilots". He went on to indicate these were briefed daily in the VTC with SACEUR and he called them "...essentially measures of success." 42 Noticeably absent from LTG Short's version of the MOE is the focus on Serb forces in Kosovo and minimizing collateral damage.
Using these MOE in their various forms presents a much more positive outcome for the alliance. If losses are used to evaluate success (either aircraft, allied lives, or any other asset), then Operation ALLIED FORCE is the most successful military campaign in the history of warfare. No combat casualties and only a few aircraft downed along with half a dozen or so UAVs is a truly remarkable achievement that has never occurred before. The result from this perspective is a no cost war.

Impacting Serb forces militarily was addressed above and we know it was minimal. Politically, however the increase in attacks against Serb forces in late May and early June combined with the growing capability of the KLA and the increasing likelihood of a NATO ground operation with numerous “leaks” to the press in conjunction with strategic attacks in the vicinity of Belgrade clearly had political impact and provided the necessary conditions for the Russian and Finnish delegations to gain Milosevic’s acceptance of NATO’s demands. However, this synergy of various forms of power was not initiated until late in the war.

Despite outrages by the press and propaganda by Serbia, collateral damage was in fact minimized more than in any previous conflict. GEN Clark noted in a post-war press conference that only 1/10\(^6\) of one percent of the munitions expended caused collateral damage\(^{43}\). This figure has since come under some challenge but no can realistically argue that NATO did not do all that was humaely possible to avoid collateral damage. There is no question that NATO achieved remarkable success in this area despite some tragic, but inevitable, mistakes.

Finally, GEN Clark was correct to identify the alliance cohesion as the friendly center of gravity. To be sure, the 19 member nations “war by committee” proved an incredibly frustrating burden on the operators. It was inefficient, slow, cumbersome and it operated by the least common denominator of consensus.\(^{44}\) Nevertheless, no operation could have been executed without the consent of NATO- it is that simple- and if the alliance fell apart then the war would have been lost and the western world would have had a major strategic catastrophe that we would not be able to recover from in our lifetime. On many occasions the alliance bent but it never broke and that is a significant success.
Why all the mixed results? There are several reasons but the most important is the failure to identify and then directly attack with overwhelming force the enemy’s center of gravity. This failure resulted from three fundamental factors. First, poor political strategic guidance for the objectives and type of war (or non-war) we were engaged in. Second, a fundamental misunderstanding on what constitutes a center of gravity and the extraordinary restraints placed upon the military forces in order to protect the friendly center of gravity- the alliance coalition. Third- the effects of weather, terrain and enemy actions.

Strategic Political Ambiguity

First, the strategic guidance to the military commanders, at least that which is publicly available, was unclear and ambiguous in terms of the type of action we were engaged in and the political objectives to be achieved. Was operation ALLIED FORCE a war or was it an exercise in diplomatic coercion and signaling. At the strategic level it clearly started as an effort to get Milošević to sign the Rambouillet accords. It was widely believed that a few cruise missiles executed during Phase-I would cause him to give in. Words like “signaling”, “message”, “price” and “demonstrate resolve” were used frequently prior to and during the first weeks of the conflict. These are all the words of negotiators and diplomats. However, we were victims of “mirror imaging”, “script writing”, and “fighting the last war”.

The rational calculus of a brutal dictator is simply not the same as a leader from Berlin, London, or Washington D.C. What matters to all politicians is power- that is the essence of politics- and what matters to dictators, who are also politicians, is absolute power. Thus, verbal signaling is an exercise in futility with dictators unless they are already willing to accept that which is being signaled. Kosovo independence, and that is what Rambouillet essentially says, directly threatens Milošević’s hold on power. Thus, no amount of signaling or other diplomatic maneuvers were going to cause him to accept the terms of Rambouillet. They were fundamentally contrary to his vital interests. Because of Serbian culture and history he was able to engage the passions of his own people to accept that it was also in their vital interest to fight for Kosovo. To achieve Rambouillet’s ends by mere signals was a
Western strategy of self-delusion and when Milosevic did not change course after Phase-I NATO’s strategic “script” had to be changed.

Part of the problem was also the classic case of “fighting the last war” or better put, the “last negotiation”, which in this case was the 1995 three day NATO bombing of Serb forces that led to the Dayton accords. In that case, Milosevic did not have vital interests at stake. He cared little for the Bosnian Serbs and bits of Bosnian or Croatian territory were not critical. Additionally, the bombing was conducted in conjunction with a major land operation by Croatian forces, a point often overlooked in the west but not in Belgrade.

After the first week or so of bombing, it was clear that the NATO leaders were beginning to panic when they realized they were not signaling but were engaged in a war and one they could hardly afford to lose. Despite the fiction and denials of the “non-war” statements, Operation ALLIED FORCE was a war from a definitional, legal, moral, tactical, operational, and public point of view. War by definition is the application of military force to compel another state actor or non-state actor to do your will. Legally attacking a sovereign state, forcing his military out of one of its provinces and effectively detaching it and then occupying it for an undetermined length of time certainly qualifies as a war in international law. Bosnia was not legally a part of the FRY since it had already declared independence, had been internationally recognized as a sovereign state, and had requested assistance. Additionally, Bosnia had historically never been a part of Serbia. Kosovo was none of those- it was not independent, had no internationally recognized government, Belgrade had not requested to be attacked, and historically had always been a province of Serbia. Morally, if Milosevic was really like Hitler then war was called for and the case should have been made. Additionally, from a moral view, 38,000 sorties of Allied aircraft dropping 23,000 munitions over the course of 78 days seems to cross the common sense threshold from “coercive diplomacy” to “war”. At the tactical and operational levels the military personnel involved all clearly understood they were “at war” and frequently objected to and resented the terms like “signal” etc. All of the tactics, techniques, and procedures conducted by the operators were all wartime functions and tasks. Lastly, the press and the public in the various NATO countries
fully understood we were at war with Yugoslavia and that it was not just an exercise in diplomatic signaling. ALLIED FORCE was a war, a limited war to achieve specific aims with limited means to be sure, but a war nonetheless.

It is only at the strategic-political level that there was confusion about what ALLIED FORCE was and was not. In part this had to do with mirror imaging mentioned above but it also, ironically, reflected the nature of the political leaders in the various countries and their personal backgrounds from the anti-war movements of the 1960’s. The story of President Clinton is well known but the Green party was in power in the Germany, Labor in Britain and various other “progressive” coalitions in almost all of the 19-member states- each carrying heavy “anti-war” baggage. Additionally, public sensitivity to “war” and its associated costs are high in the U.S. unless there is a clear and present danger but they are higher still in Western Europe as a result of tremendous suffering from two World Wars that remains in living memory. Finally, there is the U.S. War Powers Act and the administration was explicitly trying to avoid the use of the word “war” in order to avoid open confrontation with the U.S. Congress while at the same time risking the political backlash of a potential ground war just a year prior to a Presidential election. 45

Identifying and attacking the Centers of Gravity

Second, for all of the reasons cited above, Operation ALLIED FORCE was a war but not recognized as such at the strategic-political levels on both sides of the Atlantic which in turn created confusion and imposed constraints at the military strategic and operational levels resulting in fundamentally incoherent military planning and execution. What were the enemy’s strategic and operational centers of gravity? The obvious answer is Milosevic and that is what was echoed over and over again by nearly everyone on the allied side, both civilian and military. However, Milosevic, like any individual, dictator or not, was not the strategic center of gravity.

If Hitler had died in the July 1944 attempted coup but the coup members had not overthrown the Nazi party then it is highly unlikely that WWII would have been concluded in the summer of 1944. Goebels, Goring, Himmler and many others were quite cable of carrying on the Nazi cause to the bitter
end. Similarly, Soviet Russia did not end with the death of Stalin, Vietnam did not end its war when Ho Chi Minh died, Communist China is still around despite Mao’s passing, and North Korea did not implode with the death of Kim Il-Sung. Nazi Germany and the German people only changed when the Nazi party was systematically excised from post war Germany and the country was completely occupied and dismembered by the Allies. It was the elimination of the Nazi party and the occupation of the Germany that was required to permanently change the political landscape.

Likewise, in the Balkans, the Serb critical strategic strength was not Milosevic as an individual but rather the nature of his dictatorial regime and the cohesion of the Serbian people based on history, culture, and perceived victimization. The regime will not change if Milosevic suddenly dies—someone else with equal brutality will quickly fill his shoes. If there is to be a durable peace in the Balkans, which is the stated end-state of NATO and the U.S. policy, then the entire regime must be attacked and eliminated and the people must change their ideology. If these are the two Serbian centers of gravity then they are vulnerable to only two forms of direct attack. First is a large scale land operation involving the destruction of the FRY security forces, elimination of all the members of the regime by capture or death and subsequent war crimes trials, and occupation of the country. For NATO this obviously requires a war with unlimited aims, although it would only require limited means. The cost of such a war would obviously be high and the alliance rightly rejected it as a course of action.  

NATO cannot execute the second method of direct attack. It is a revolution from within Yugoslavia that completely overthrows the regime and changes the nature of the society. A “coup” will not do—a democratic revolution is required. The extent to which NATO is supporting potential opponents to the regime is unknown but it can be assumed that some form of this course of action is currently ongoing but again it is not in NATO’s power to actually do it, that must come from the Yugoslav people. However, dictators tend to be highly resilient to revolution from within depending on the willingness to use force and Milosevic is obviously highly willing to use whatever force is required to maintain power. In sum, despite our joint doctrine a direct attack on the strategic center of gravity
was neither feasible nor acceptable. Additionally, strategic bombing was and will continue to be unable to achieve decisive results if the aim is unlimited.

However, if the war has limited aims, as did ALLIED FORCE, then bombing the strategic center of gravity can produce strategic results if it is used in an overwhelming manner in combination with the real possibility of a large land operation that will destroy the regime and against a diplomatically isolated enemy. During ALLIED FORCE we approached the military condition of overwhelming air power from about mid-May on. Additionally, increased public discussion of the need for a ground war among the press, the public and most importantly the key political and military leaders of the U.S., UK, France and Germany was presenting a very credible possibility. There was also an existing ground threat with the KLA that was growing as they received not so secret direct support from the Allies to include, weapons, training, and active close air-support. Finally, the negotiations with Russian and Finnish diplomats were pivotal in early June and cutoff all support to Serbia from its traditional protector. Thus, in a war of limited aims, attacking the strategic center of gravity with firepower alone is insufficient. The “destruction” of the regime must be a real possibility and this can only be accomplished by the synergistic effect of all forms of power concentrated in time. Blowing up POL and power plants is not the same as “destroying” the regime- during ALLIED FORCE we tended to confuse tactical success with strategic political effect.

We experienced similar confusion in identifying the operational center of gravity. GEN Clark, at least initially, clearly thought the Serb forces in Kosovo were the “strategic” center of gravity. He eventually concluded they were the “tactical” center of gravity. They were neither. The operational center of gravity was the Serb forces to be sure but more specifically it was the Serb Police (MUP) and their para-military auxiliaries and not the Yugoslav Army (VJ). This may seem like a minor point but in fact it had significant operational impact. The overriding political rationale to the entire operation was to stop the killing and deter further escalation. That it actually increased during (not before) our operations is prima facie evidence that we were unsuccessful in directly or indirectly attacking the operational center of gravity. The MUP is a light infantry force at best which operates in small-
dispersed units and is not reliant on sophisticated logistics nor heavy equipment nor fixed command and control facilities. If the MUP, and not the VJ, was the operational center of gravity, then attacking C2 nodes, POL facilities, roads and bridges or even the tanks of the VJ will show no effect on the conduct of their operations and in fact it did not. Nevertheless, the SACEUR’s campaign plan was built around the isolation, attrition and eventual destruction of the military forces in Kosovo, specifically the VJ, and tracking the battle damage to tanks and other pieces of equipment became an obsession. As noted above, the effect on the VJ was extremely limited, and on the MUP it was virtually non-existent.

Even if we had correctly identified the MUP as the operational center of gravity then it is unlikely we could have directly or indirectly attacked them with any success with the sole use of air power. Achieving decisive results against any ground troops is a difficult proposition for air-power not in combination with a friendly land force, but it is impossible against a light infantry type force that is dispersed as a normal method of operations. Nevertheless, a significant effort had to be made to attack the forces in Kosovo, VJ or MUP, in order to send a \textit{signal to ourselves} that we were at least trying to achieve the primary political objective of the war. The means were simply not available to effectively attack the operational center of gravity; hence the task was futile from the outset.

Finally there is the issue of various constraints imposed on the use of force during the war. All wars have political restraints imposed on the combatants for a wide variety of reasons. In this case, the constraints were imposed in order to protect the friendly center of gravity. In this regard the SACEUR was correct in identifying the center of gravity and developing measures of effectiveness to support it. The most significant political constraint imposed was the refusal to even initially consider the use of ground forces for fear of undoing the Alliance and the probable high cost in casualties. Casualties to air crews was also politically sensitive and that drove the need to conduct operations from 15,000 feet which obviously had further negative impact on our ability to attack the operational center of gravity. The last significant imposed constraint was concern for collateral damage. Again, excessive collateral damage would cause the Alliance to unravel which in turn would mean a NATO defeat so the restraints on air-power were fully justified. Whether or not the Alliance members should have overriding
concerns about collateral damage and friendly casualties during the conduct of a war, even a limited war, is a different question that is better answered by a priest. However, in combination-no ground force, fear of casualties and collateral damage-worked against the use of a rapid overwhelming attack against either the strategic or operational centers of gravity and led to the gradual, almost calibrated use of force which in turn served to prolong the war and probably ended up causing more suffering among the population we were supposedly trying to save.

The Enemy

If the centers of gravity are correctly identified, which they were not in Kosovo, and if there was the political will and means to directly attack them, which there was not initially, then they still have to be vulnerable to attack. On this point the enemy gets a vote and the Serbian centers of gravity were far less vulnerable to air attack than we may have thought prior to execution.

The Serb strategic center of gravity was eventually successfully attacked by the combination of air power, threat of ground power, and the skillful use of diplomatic and economic power as indicated above. Nevertheless, the Serbs successfully countered these efforts for eleven weeks. Failing to attack the fixed strategic infrastructures was self-imposed but even when we did it still took time to achieve effect. The Serbian war plans under Tito had always expected an overwhelming attack from the Soviet Union and the strategic infrastructure was built to survive such an attack. Redundant and hardened C2 facilities existed throughout the country for example. In short, Yugoslavia's defense network was built to take punishment.

Diplomatically, the Serbs were also successful at gaining limited international support from other Slavic nations, especially from Russia. Additionally, China diplomatically supported Serbia in part due to the attack on its embassy but also for much larger strategic aims. The allies were successful in regaining the diplomatic initiative but outcome was anything but certain. Lastly, Serbia waged a partially effective information operations campaign domestically and internationally with the use of propaganda to maintain population control and maximize the effect of collateral damage strikes.
The operational center of gravity however was never successfully attacked. Unlike simulation exercises, real war involves real terrain and weather and a real thinking enemy who wants to win and is willing to punch back. The weather during ALLIED FORCE significantly reduced the number of strike sorties employed. In 39 of the 78 days of war at least 50% of the strike packages were canceled due to weather.\(^48\) In addition the terrain provided a high degree of cover and concealment to ground forces from air attack. Serbian use of “hugging” tactics, in this case co-locating with civilians when exposed or hiding in civilian facilities made it especially difficult to first identify and then attack them from the air. Such tactics have often been used in past wars to counter the effects of overwhelming U.S. firepower. German, Japanese, North Korean, Chinese and Vietnamese troops rapidly closed with U.S frontline troops to deny us effective close air support and field artillery fires. These “hugging” tactics were employed as a matter of routine and generally achieved excellent results. The Serbs did the same, albeit with civilians, but achieved no less favorable results.

Also, not unlike other wars, the weaker side rightly chose to disperse and conceal the force while at the same time offered seemingly lucrative dummy targets for attack. The exact number of dummy targets we struck is a topic of some controversy but given the level of known and suspected BDA versus the Serbian order of battle in Kosovo, the number of smart bombs hitting dumb targets must have been substantial. Finally, the Serbs chose to withhold firing a significant number of their ADA weapons systems, which in turn held our air force at risk in the low and mid altitude range. This risk may have been minimal, but it was a risk we were unwilling to take and therefore the Serbs successfully executed air-space denial.

In sum, the Serbs did a credible job in force protection and exploiting the advantages of terrain and weather thereby denying NATO the ability to identify and successfully attack the operational center of gravity. As George Pickett reportedly said after the U.S. Civil War when queried about who was to blame for the Confederate loss—“I thought the damn Yankees had something to do with it.” Although, political ambiguity, NATO operational design, and self imposed restraints degraded allied effectiveness
Serbian forces themselves played a major role in protracting the war and NATO's limited success in military results.

LESSONS Re-LEARNEd

There are hundreds of lessons to be learned from a study of the war in Kosovo. Many are genuinely new lessons, especially those concerning various weapons systems. However, the salient lessons at the strategic and operational level cited below are not new—in fact they are quite old. Nevertheless, they bear repeating since a lesson is not learned unless it is put into practice and a cursory reading of the daily newspaper indicates we do not practice well.

1. Coercive diplomacy and war are not the same thing. Both require a different framework to plan and execute. It is important to know which one you are trying to do prior to doing it.

2. Political ambiguity may be the right method for coercive diplomacy or diplomatic negotiations but it is unsatisfactory as guidance to the public in order to build consensus or to the military for the development of a coherent campaign plan and successful and rapid execution for the conduct of war. Words are weapons to unhinge the opponent but they also can unhinge ourselves.

3. Identifying and attacking the enemy's center of gravity is not easy. The military must begin with better understanding of what it is and simply quoting the "hub of all power" is insufficient. It must first come from clearly articulated political strategic objectives. If these are not present before the initiation of combat operations then the military commanders faces an exceedingly
difficult task. Attempting to do it on the fly during active operations can be done but it leads to confusion, incoherence in execution, and mixed results. It also requires a more sophisticated understanding of the enemy than we demonstrated in ALLIED FORCE. Simply saying enemy leadership or its army is insufficient to attain decisive results.

4. Identifying the centers of gravity is not the same thing as attacking them. Attacking them requires that they are vulnerable and you have both means plus will. If anyone of these criteria are missing then don’t even try- it will not work and it is an unnecessary risk of life which indicates a morally bankrupt strategy.

5. To achieve decisive results all the elements of power must be applied in a synchronized manner to achieve a synergy that is greater than the sum of the individual parts.

6. Military force is usually, but not always, best applied in a rapid and overwhelming manner in order to psychologically disrupt the coherence of the enemy’s defense.

7. In real war the enemy gets a vote and the punching bag punches back. It is that which distinguishes real war from war on paper to paraphrase Clausewitz. Underestimating or misunderstanding the enemy is always a recipe for failure.

CONCLUSION

Of course, none of these are new. Was the center of gravity Washington and the Continental Army or was it Philadelphia, Boston, New York, the Hudson River or Adams, Hancock, Jefferson or the will of the colonial elites? Was it Richmond or Lee’s Army of Northern Virginia? Was it Moscow, Stalingrad, or Leningrad? The German Army or Hitler or the Nazi party? The Viet Cong
infrastructure, the North Vietnamese Army, the Cambodian Sanctuaries, Hanoi, or the ever elusive “hearts and minds”? The Republican Guards or Saddam Hussein? Was it the VII Corps or the friendly coalition or U.S. sensitivity to casualties? Was it any of these or perhaps all of these? In almost any war the debate over the enemy (and friendly) centers of gravity rages and the resulting decisions are critical to the war’s conduct and its eventual outcome. Kosovo was no different despite significant advances in technology.

Although I critically analyze NATO’s conduct of the war in Kosovo, none of it is meant to take anything away from the fact that the fundamental allied objectives of the war were achieved for a variety of reasons noted above. Although the final chapter on ALLIED FORCE is yet to be written, the most important factor contributing to the outcome was the unbelievable skill and capability of the United States Air Force. That should be a source of great pride to all of us. Yet, as Wellington reportedly said after Waterloo, “It was damn close run thing” and we must not forget that Milosevic, his regime, and his army are still intact biding their time for another go at it.
1 Weigley, Russell F. The American Way of War (Indiana University Press, Bloomington, 1973), see Chapter 5,6 and 10 for the various theoretical influences on American military strategy.

2 Clausewitz, On War, (Princeton Univ, 1976), Book 8, Chapter 4 (8:4), p. 595-596.

3 Quoted from author’s Briefing Slides to 1993 edition of FM 100-5.

4 FM100-5 (1976). FM 100-5 (1982). LTC Halder (later LTG) and LTC Was de Czege (later BG) authored the 1982 version and were well known students of a wide variety of warfare theorists. The 1982 version of 100-5 is clearly informed by Clausewitz (any many others) but does not specify Center of Gravity.

5 FM 100-5 (1993) p. 6-7. The manual also discusses other operational concepts of campaign design: lines of operations; decisive points; culmination. All of these are lifted almost verbatim from Clausewitz and to a lesser degree Jomini. All are considered “tools” for assisting the planner in developing a concept of operation for the “campaign” at the operational level of war.

6 FM100-5 (1993) p. 6-7

7 Vego, Milan, Center of Gravity, Military Review, March –April 2000, p 23-29. Also see Strange, Joe, Dr. Centers of Gravity and Critical Vulnerabilities, Perspectives on Warfighting, Number Four, Second Edition (Marine Corps University, Quantico VA, 1996)


9 Ibid, p.46

10 Ibid, p.56

11 Clausewitz, Jomini and Sun Tzu all discuss the concept of centers of gravity although Sun Tzu does not use the term since he pre-dates Newton. All three discuss the concept in great depth and the nuances and subtleness of their discussion is absent from the U.S. doctrine. Because Clausewitz is particularly hard to read most military officers simply understand the concept as the “hub of all power” but this is a very limited understanding of Clausewitz’s penetrating insights.


13 There is some controversy surrounding the Rambouillet negotiations about the Allies, specifically the U.S. deliberately sabotaging the agenda by presenting knowingly unacceptable terms to the Serbia in the form of an ultimatum with the intent of using the failed talks as a pretext for military action. See comments by Ivo Daalder, former U.S. National Security Council staffer, 1995-1997 in PBS Video, Frontline, the War in Europe, Part I.


15 Opic, Defense Link Information service, 24 March 1999, p.2


17 New York Times, 3 April 1999, p.1

18 Ibid, 4 April 1999, p1.

19 Opic Defense Link and Federal News Service, President Clinton Remarks, 10 April 1999, p2.


22 Ibid, 1 April.

23 Ibid, 23 April 1999.


27 Ibid
31 Cordesman, Anthony, The Lessons and Non-Lessons of the Air and Missile Campaign in Kosovo, Parts I and II, (CSIS, 22 September 1999), p. 17, and Figure 1.
32 Bieber, Florian, Cyberwar or Sideshow, the Internet and the Balkan Wars, Current History, March 2000.
33 Ibid p. 13-14, and Figure 2.
34 In post-war accounts I counted 36 uses of the phrase “NATO won” and 14 usages of the word “war” by senior officials including President Clinton, Secretary Solana, Secretary Albright, Secretary Cohen, GEN Shelton, GEN Clark, LTG Short, Ambassador Holbrooke and many others in a voluminous amount of celebratory newspaper and magazine articles, Sunday morning talk show transcripts, and congressional testimony. The consistency it truly impressive.
36 It is not my purpose here to enter the debate of battle damage assessment and bean counting. Numbers are incredibly difficult to get accurate in war or training and they tend to be useful only as a general indicator or success or problem areas and not as an absolute. Nevertheless, there appears to have been a considerable amount of exaggeration during the war and the controversy continues to date.
38 Tenet, George, CIA Director, Congressional Testimony, 22 March 2000.
39 Op cit CIS, Congressional Testimony, Dr Henry Kissinger, 10 March, p. 7.
42 Op cit Air Force Magazine, p. 3.
43 Op cit, NATO Press Briefing, 16 September 1999.
44 Sweeney, Pat, COL, Lecture, Lessons Learned from Kosovo, Newport RI, 8 May 2000.
45 Albright, Madeleine, Secretary of State, Congressional Testimony, 21 April 1999.
46 There are a lot of critics who casually note that a ground war should have been employed but none of them had the responsibility to plan or execute such an operation. Anyone who seriously conducts an estimate of the situation of a ground war in Kosovo or a larger one in the PRC quickly realizes it is an extremely high cost and high-risk affair. Clausewitz’s dictum about the “value of the object” was obviously adhered to by the responsible authorities. However, planning and positioning a force to conduct such an operation should have been done as a viable Plan B in the event of failure and it would have sent a powerful message if signaling was the original intent.
47 The most successful air operation against ground forces occurred in late May when a B52 strike destroyed at least a VJ battalion attacking a KLA defensive position along the most likely Allied main axis of ground attack, (Various sources).
48 Op cit, Cordesman, p. 22.
Bibliography

Books:
Campbell, Greg. The Road to Kosovo: A Balkan Diary. (Boulder CO, Westview Press, 1999)
Clausewitz, On War. (Princeton University, Princeton NJ, 1976)
Strange, Joe, Dr. Perspectives on Warfighting Number Four, Second Edition: Centers of Gravity and Critical Vulnerabilities. (Marine Corps University, Quantico, VA, 1996)
Vego, On Operational Art (Naval War College Issue, Draft)

Periodicals:
Air Force Magazine, Summer 1999, “Short’s View of the Air Campaign” by John A. Tirpak
Army Magazine

US Army in Kosovo, Series of articles (Sep 1999)

Kroesen, Fredrick J. GEN. “We Won?” (November 1999)

Current History, March 2000, Vol 99, No 635
Bieber, Florian, Cyberwar or Sideshow? The internet and the Balkan Wars
Gordy, Eric D. Why Milosevic Still?
Cohen, Leonard J. Kosovo: “Nobody’s Country”
Lyon, James M. Will Bosnia Survive Dayton?

Early Bird, http://ebird.dtic.mil Selected Articles
Foreign Affairs

Rohde, David, Kosovo Seething, (May-June 2000) p. 65-79

http://www.isn.ethz.ch/iiss

Military Review
Vego, Milan, Center of Gravity (March –April 2000)

New York Times, Selected Articles

Parameters:
Record, Jeffrey, Operation Allied Force: Yet Another Wake-up Call for the Army? (Winter, 1999-2000)
Thomas, Timothy L. Kosovo and the Current Myth of Information Superiority, (Spring 2000)
Tokar, John A. Vietnam, the Cold War and Kosovo: Irony and Confusion over Foreign Policy (Spring 2000)

Time Magazine, Selected Articles

Washington Post, Selected Articles

Published Papers:


McCracken, Matthew T. Understanding Operational Fires and Interdiction, Naval War College, Newport, RI, June 1993.


Institute of Land Warfare Papers, Association of the US Army.

**Official Documents:**

*Congressional Testimony*
- Secretary of Defense William S. Cohen, 15 April 1999
- Secretary of State Madeleine Albright, 21 April 1999
- Dr Henry Kissinger, 10 March 1999
- Ambassador Jeanne Kirkpatrick, 10 March 1999
- General Henry Shelton, 15 April 1999
- LTG Michael Short, 21 October 1999
- Admiral James Ellis, 21 October 1999
- George Tenet, Director CIA, 22 March 2000

*FM 100-5* (1941, 1976, 1982, 1993)

*Joint Pub 1* (1991)

*Joint Pub 3-0* (1 February 1995)

*NATO Press Releases*

*Report to Congress, Kosovo/Operation ALLIED FORCE After-Action Report* (Department of Defense, 31 January)

**Lectures**

- Sweeney, Pat, COL, U.S. Army, *Lessons Learned from Kosovo: A NATO Planner’s Perspective* (Naval War College Lunchtime Lecture Series, Newport RI, 8 May 2000)

**Video**

*Frontline, War in Europe, Parts I and II* (PBS, 1999)