

(U) Operation ALLIED FORCE



(U) Air Force Materiel Command

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One of the most successful campaigns in the history of air power was Operation Allied Force (OAF). In its immediate aftermath, on 6 June 1999, the preeminent military historian, John Keegan, in an editorial in the *Daily Telegraph*, wrote:

There are certain dates in the history of warfare that mark real turning points. November 20, 1917 is one, when at Cambrai the tank showed that the traditional dominance of infantry, cavalry and artillery on the battlefield had been overthrown. November 11, 1940 is another, when the sinking of the Italian fleet at Toranto demonstrated that the aircraft carrier and its aircraft had abolished the age-old supremacy of the battleship. Now there is a new turning point to fix on the calendar: June 3, 1999, when the capitulation of President Milosevic proved that war can be won by air power alone.¹

How much truth is in such a claim? Was the allied victory in the dissident former Yugoslav Republic province of Kosovo a victory for air power alone? Was it a victory at all? To be sure, the only NATO/United Nations (UN) forces brought to bear over the nearly four months of OAF were military aircraft. Not until after Serbian armed ground forces had withdrawn were NATO ground forces introduced as garrison peace keeping troops. On the surface, anyway, it was and is hard to disagree with Keegan.

In many ways it seems that OAF was the culmination of the aerospace technological revolution (ATR) which began during the Persian Gulf War, and which was interrupted by a brief and, some have argued, unnecessary ground conflict. The possibility of such a victory had been strongly suggested in Bosnia when NATO air power had forced a peace settlement among the warring parties, but it had been such a small display few felt it significant. Of course, the air campaign was also complemented by a Croatian ground offensive which was not all together tied to OAF.²

It was only 82 years prior that British Air Marshall Hugh Trenchard formed the first independent air force and, as Keegan reminds us, this was done, “. . . on the expectations that aircraft had ceased to be mere auxiliaries to armies and navies and could achieve, henceforth,

¹ John Keegan, “Please Mr. Blair never take such a risk again,” *The Daily Telegraph* (London), [hereafter “Please Mr. Blair”].

² For more on the MTR during the Gulf War, see Richard P. Hallion, *Storm Over Iraq: Air Power and the Gulf War* (Washington, D.C.: Smithsonian Institution Press, 1992).

decisive results on their own.” Certainly, Giulio Douhet and Billy Mitchell also advocated such notions. According to Keegan, “That became the creed of the new Royal Air Force [in 1918], as it was to become that of the eventually much more powerful United States Army Air Forces.” To this end, says Keegan, “The idea of ‘victory through air power’ was to be held by both as an article of faith, a true doctrine in that believers clung to it in the face of all contrary material evidence.”³

Even though the post-World War II U.S. Strategic Bombing Survey (USSBS) cast doubt on the decisive role of air power in Europe and ultimately the Pacific, those who helped form the new U.S. Air Force held to the theories of their founding fathers, albeit with modifications and often in moderation. The frustrations of Korea and Vietnam only made air power proponents work harder to upgrade their weapon systems and reform their forces and policies. The Gulf victory gave them reason to believe they were on the right track. For many, Kosovo had meant a realization of the dream. Perhaps the goal was not victory alone, for that is not really what most of the air power proponents meant, but rather that someday air power “alone” would form the tip of the spear. However, it is a case that requires some explanation—the outcome of a combination of political and military factors.

The Background of the Conflict

It is impossible to fully evaluate the reality of the Kosovo victory or its impact on the future of air power theory, doctrine, or operations without first recalling the history of Kosovo and the conflict that left it a devastated relic of this post-Cold War struggle. Most of the people living in modern Kosovo are ethnic Albanians. Current problems harken back to the Battle of Kosovo Polje in 1389, when a Christian army of Serbs, Hungarians, Bosnians, Poles, Albanians, and Vlachs was defeated by Ottoman Turkish forces led by Sultan Murad I. This battle has since become a patriotic event in Serbian history, and as one Serbian proverb declared, “Wherever Serbian blood has been shed, there lies Serbia.”⁴

³ Keegan, “Please Mr. Blair.”

⁴ Jim Garamone, “Behind the Crisis in Kosovo,” *American Forces Information Service News Articles* (AFISNA) (Defense Link, DoD, 17 Jun 98), http://www.defenselink.mil/news/Jul1998/n07071998_9807074.html, [hereafter “Behind the Crisis”]; Ministry of Defense (MOD) United Kingdom, “Historical Background,” *Kosovo An Account of the Crisis*, 14 Dec 99, <http://www.mod.uk/news/kosovo/account/historical.htm>, [hereafter “Background”]. One of the few completed articles on Kosovo available at the time this piece was written was by Benjamin S. Lambeth and entitled “NATO’s Air War for Kosovo.” Unfortunately, this truly revealing and thoughtful piece was still in draft form and not for reprint. Nonetheless, it was to be a chapter in a longer book on the Transformation of American Air

After the Turkish occupation, the only remnant of Serbian culture in the Kosovo region was the Orthodox Church and numerous monasteries, many of which still exist today. Between 1804 and 1878, Serbian forces, often supported by Russia, finally regained Serbian independence. In 1913, after the Balkan Wars, Kosovo once again became part of Serbia even though 90 percent of Kosovars were, and are, ethnic Albanians, speak Albanian, and are Muslim. Most of the remaining Kosovars are Orthodox Christians, ethnic Serbs and speak Serbo- Croatian.

After World War I, Serbia became part of Yugoslavia. This consolidation continued after World War II following the creation of the Communist regime of Joseph Broz Tito in 1948. Until the late 1960s, Albanian Kosovars suffered from repressive government policies. However, Tito moderated these policies in 1968 and again in 1974, when the new Yugoslav constitution made Kosovo an autonomous province within Serbia. However, in the 1980s, the death of Tito, the growth of Serbian nationalism, and the dissolution of Yugoslavia eventually altered this relationship.⁵

Slobodan Milosevic and the Kosovar Liberation Army

In the spring of 1987, Slobodan Milosevic, a lesser known protégé of Marxist Serbian President Isan Stambolic, was swept to the forefront of Serbian politics on an enormous wave of often violent pro-nationalist Serbian anti-government protests. By the fall, Milosevic had led the overthrow of Stambolic and, by 1989, he had become President of Serbia. Milosevic wanted to control a Serb-dominated Yugoslavian state, but this dream soon began to crumble as Communism waned in Eastern Europe. In spite of his support of violent excesses in Bosnia and Croatia, the dream of a unified Yugoslavia ended with the creation of new states like



Figure 1: Serbian dictator Slobodan Milosevic

Power to be published by Cornell University Press sometime in 2000. We recommend that when published the reader consider obtaining and reading Lambeth's larger work. While the authors could not directly quote the draft, for professional reasons, the influence of this piece will be apparent. Moreover, many of the same sources have been examined in the process of research.

⁵ Garamone, "Behind the Crisis;" MOD, UK, "Background."

Croatia. Instead, all Milosevic gained was the nickname, "The Butcher of the Balkans." In 1995, he was forced to accept a NATO settlement to the ethnic conflicts in Bosnia. But despite this concession, and massive protests in 1996, Milosevic was still powerful enough to set aside elections which his political opposition won.⁶

Milosevic revoked Kosovo's autonomy soon after his ascension to power, causing the region to erupt in protest. In 1989, following the initial revocation of autonomy, violent protests were put down at the cost of 20 dead. The following year, Milosevic sent Yugoslav troops to impose control and formally dissolve the Kosovar's government. By 1992, Kosovar separatists had proclaimed a republic and elected Ibrahim Rugova president. Rugova, an advocate of peaceful methods to gain independence, soon received recognition from Albania. However, continued repression by Serbian forces, led other Kosovar Albanians to form the Kosovar Liberation Army (KLA) in 1996. KLA bombings and the death of two Serbian policemen in the village of Prekaz on 28 February 1998, led to retaliation by Serbian police in which 20 ethnic Albanians were killed. On 5 March, KLA and Yugoslav forces clashed again in Prekaz and reports indicated Serb police massacred more than 50 Albanian Kosovars. Two weeks later, Kosovo voted for a new president and parliament but Serbian authorities denounced the elections, calling them illegal. Incidents like these would lead to Serbian-sponsored "ethnic cleansing," or the murder of thousands of civilians, and the displacement of hundreds of thousands more.⁷

In April, both the Serbian Parliament and the Serbian people (in a referendum) voted against outside mediation of the situation. In response, NATO and the U.S. imposed severe economic sanctions on Serbia. In July, following failed talks between President Milosevic and

⁶ ABC News, "News makers, Slobodan Milosevic," *ABC.Com*, 15 Dec 99, <http://www.abcnews.go.com/reference/bios/milosevic.htm>, [hereafter "Milosevic"]; NATO, "Kosovo Crisis, Historical Overview, NATO's role in relation to the conflict in Kosovo," 15 Jul 99, <http://www.nato.int/kosovo/history.htm>, [hereafter "NATO's role"]; "The Kosovo File: Who's Who," *Time Magazine* 15 December 1999, <http://www.pathfinder.com/time/daily/special/kosovo/who.html>, [hereafter "Kosovo File"].

⁷ ABC News, "Milosevic;" NATO, "NATO's role;" Associated Press (AP), "Crisis in Kosovo, Key events in Kosovo conflict," *USA Today*, 25 Mar 99, <http://www.usatoday.com/news/index/kosovo/koso002.htm>, [hereafter "Kosovo conflict"]; Reuters, "Kosovo: A Bitter Struggle in a Land of Strife, Chronology of the Crisis in Kosovo," *The New York Times* (NYT), 24 Mar 99, http://www.nytimes.com/learning/general/featured_articles/990324A.wednesday.html, [hereafter "Land of Strife"]; UK, MOD, "Kosovo An Account of the Crisis: The Crisis Unfolds," 14 Dec 99, <http://www.mod.uk/news/kosovo/account/crisis.htm>, [hereafter "Crisis Unfolds"]; AP, "Kosovo conflict;" Reuters, "Land of Strife;" NATO, "NATO's role;" UK, MOD, "Crisis Unfolds".

Rugova, the reelected Kosovar president administered the oath of office to the new Kosovo parliament. This led to a major crackdown by Serbian police and Serbian armed forces. By 16 August, they announced the capture of the last major Kosovar rebel stronghold in the mountain town of Junik.

In September, the discovery of more mass graves of ethnic Albanians, and continued fighting, led the U.N. to call for an immediate cease-fire. On the 24th, NATO representatives issued an ultimatum to President Milosevic to end the conflict or face air strikes against military targets. During October, following the withdrawal of U.S. and British nationals and further threats of NATO air strikes, the combatants reached a cease-fire. The agreement attempted to avert a humanitarian crisis during the impending winter by allowing more than 300,000 displaced Kosovars to find shelter and receive aid. While this settlement seemed to solve the immediate problem, the following January proved nothing had changed. The discovery of more massacres and the KLA capture of Yugoslav police marked further increases in violence.⁸

On 29 January 1999, the six-nation Contact Group (major NATO/UN powers) called for a peace conference between the parties to be held in Rambouillet, near Paris. In spite of constant threats of air strikes against Serbia and an apparent tentative settlement, on 23 February, peace talks remained deadlocked over Milosevic's flat refusal to allow international peacekeepers in Kosovo and the KLA's understandable reluctance to disarm. Even as talks resumed on 15 March, the Serbian military deployed units into Kosovo in preparation for a final assault which would reclaim the entire province.⁹

On 18 March, Kosovar Albanian representatives signed the international peace agreement in Paris. Yugoslav representatives boycotted the meeting as did the Russians. The next day the Contact Group adjourned the talks. On the 22nd, U.S. envoy, Richard Holbrooke, traveled to Belgrade for one last desperate effort to convince President Milosevic to reconsider his position. The next day, with hundreds of international monitors leaving Kosovo, the Serbian

⁸ AP, "Kosovo conflict"; Reuters, "Land of Strife"; NATO, "NATO's role"; UK, MOD, "Crisis Unfolds"; NATO, "NATO's role"; UK, MOD, "Crisis Unfolds"; Reuters, "Land of Strife"; UK, MOD, "Kosovo, News, Background Resources," 7 Oct 99, <http://www.mod.uk/news/kosovo/>, [hereafter Kosovo News].

⁹ NATO, "NATO's role"; UK, MOD, "Crisis Unfolds"; Reuters, "Land of Strife".

Parliament refused to recognize Kosovo's autonomy as agreed to in the peace accords. With no apparent alternative, at 1900 hours, Greenwich Mean Time (GMT) on 24 March 1999, NATO forces initiated air attacks over the Federal Republic of Yugoslavia (FRY).¹⁰

Over the next three and one-half months, these operations would escalate to increasingly higher levels, and would introduce new weapons and aircraft never before used in combat. Critics denounced the plan as dangerous and inhumane to civilians, risky policy, hazardous to the survival of NATO, foolhardy without ground support, and/or simply not what the crisis required. Despite these doubts, Slobodan Milosevic had capitulated by June and withdrawn all Serbian forces, Kosovo was occupied by NATO/UN peacekeeping forces, and the process of rebuilding the broken land had begun. By most interpretations, air power was a decisive factor. Others have asserted it was the sole decisive factor. But, clearly the inaction of the Russian government, the apparent solidarity of the NATO Alliance, and perhaps even the growing appearance that there might ultimately be a ground invasion all may well have affected the decision process in Serbia.¹¹

The Air War 24 March-20 June 1999

Planning the War

Original plans, drawn up by U.S. planners and agreed to by the NATO allies, called for a three-phased attack, without support of ground forces. Phase I was aimed at enemy air defense systems with initial suppression of enemy air defenses (SEAD) sorties against enemy command centers in Kosovo. The second phase targeted military targets below the 44th parallel south of Belgrade. The final phase committed NATO aircraft to attacks against military targets in and around Belgrade. All of these efforts, NATO hoped, would force an end to Serbian abuses of the

¹⁰ NATO, "NATO's role"; Reuters, "Land of Strife"; UK, MOD, "Kosovo News".

¹¹ William S. Cohen, Speech, "Lessons Learned from Kosovo," International Institute for Strategic Studies in Coronado, California (9 September 1999): p. 10. Available online at <http://www.nyu.edu/globalbeat/nato/cohen091099.html>.

Kosovar population and lead to the withdrawal of FRY forces from Kosovo. The ultimate goal of all the allies was to restore peace to the war-torn province and guarantee Kosovan autonomy.¹²

Even as more than 200 U.S. and 200 additional NATO allied aircraft prepared to strike Yugoslav military targets, including the 40,000 army and police personnel in and around Kosovo, U.S. President William Jefferson Clinton declared that, "In dealing with aggressors in the Balkans hesitation is a license to kill. But action and resolve can stop armies and save lives." The President also warned that Serb air defenses were formidable and would put U.S. and NATO pilots "in harm's way." But he warned if NATO did not act that the conflict could spread, and thousands would die. He declared that if the Allies in World War II had stood up to Nazi Germany sooner thousands, maybe millions, of lives might have been spared.¹³

Indeed, the Serbian Integrated Air Defense System (IADS) was no laughing matter. Their surface-to-air missiles (SAMS) and interconnected radar-directing systems were placed carefully in a mountainous area full of hidden and connected valleys with low-lying clouds and constant fog. Unlike the vast flat and open expanses of the Persian Gulf Theater of Operations, Serbia and Kosovo were just under 40,000 square miles or 100,000 square kilometers. Serbia is similar in shape and slightly larger than the state of Maine, while Kosovo was roughly the size of a large U.S. city and its suburbs.¹⁴

The FRY's "substantial and redundant" IADS included 50-60 SAM battery sites each with dozens of Russian-made radar-guided SA-2s, SA-3s, and mobile SA-6s. In addition, they possessed about 2,000 mostly-mobile anti-aircraft artillery (AAA) guns and "a range of shoulder-fired missiles for lower altitude planes." Finally, they had 240 combat aircraft of which only about

¹² Robert W. Apple, "Conflict In the Balkans: News Analysis; With Decision to Attack, A Fresh Set of U.S. Goals," *NYT*, 25 Mar 99, [hereafter A Fresh Set of U.S. Goals].

¹³ Linda D. Kozaryn, "Clinton Says NATO Must Act in Kosovo," AFISNA (Defense Link, DoD, 22 Mar 99), http://www.defenselink.mil/news/Mar1999/n03221999_9903222.html ; Jim Garamone, "Clinton Makes Case for Kosovo Intervention," AFISNA (Defense Link, DoD, 24 Mar 99), http://www.defenselink.mil/news/Mar1999/n03241999_9903243.html .

¹⁴ Central Intelligence Agency (CIA), *The World Fact Book, 1999* (New York: Brassey's, Inc., 1999), Serbia-Montenegro, CSS Internet News, <http://www.odcigov/cia/publications/factbook/Sr.html#geo> ; Linda D. Kozaryn, "U.S., NATO Pilots Face Air Defense Threat," AFISNA (Defense Link, DoD, 24 Mar 99), http://www.defenselink.mil/news/Mar1999/n03241999_9903241.html , [hereafter Air Defense Threat].

80 were of much operational consequence. These included 15 medium MiG-29s and 60 MiG-21s. Most of the IADS assets were at least 15 years old; however, the FRY operators had trained to combat U.S. tactics for over 40 years. Moreover, they were better trained and had more equipment than NATO enemies had had during the 1995 bombings in Bosnia, and they concentrated their defenses better than the Iraqis had in 1991.¹⁵

Pentagon spokesman Kenneth Bacon warned that Yugoslav terrain presented new challenges since it was easier to hide air defense assets. However, he noted that it was also harder to redeploy such assets. He concluded, “Yugoslav air defense forces are well trained, and well equipped . . .” However, he reassured the public that if any NATO pilots were downed, specially trained rescue teams would attempt to rescue the pilots just like they had rescued Captain Scott O’Grady during the Bosnian air campaign.¹⁶

Allied planners respected the potential lethality of FRY IADS enough to predict the loss of ten aircraft during initial strikes. Most ominous, however, was how much the entire plan’s goal was reminiscent of Vietnam. Instead of the all-out, hell-for-leather series of well-coordinated attacks aimed at key military and infrastructure targets from the conflict with Iraq, the implied goal was to cause enough pain and suffering to convince President Milosevic to withdraw his forces and return to negotiations—almost the same kind of strategy as Lyndon Johnson’s increasing of the “quotient of pain” on North Vietnam. However, most western leaders believed that it would be a quick victory. Some even believed that the mere initial show of force would compel Milosevic to acquiesce. The boldness of this posture was best displayed by the fact that the attacks were openly announced many hours before the first strikes. After all,



Figure 2: F-15Es like these flew significant missions during OAF

¹⁵ Kozaryn, “Air Defense Threat,” p. 1; John A. Tirpak, “The First Six Weeks,” *Air Force Magazine (AFM)* (June 1999) Vol. 82, No. 6, pp. 27-29, [hereafter Six Weeks]; Guy Aceto, “Air Power in Allied Force,” *Ibid.*, pp. 39-46.

¹⁶ Kozaryn, “Air Defense Threat,” p. 1.

reasoned some NATO planners, it would take at least 24 hours to prepare the Tomahawk land-attack missiles to strike the 60 designated targets.¹⁷

The Attack Begins

At about 2:00 p.m., Eastern Standard Time (EST), NATO area commander U.S. Army General Wesley Clark informed NATO Secretary-General Javier Solana that Operation Allied Force had commenced. Soon, reports came rolling in from various news sources in the region of massive explosions and blinding flames of light.¹⁸ At the same time, President Clinton announced that the campaign had three goals: “to demonstrate NATO’s opposition to aggression and its support for peace; to impose a price on Milosevic if he continues or escalates attacks on helpless civilians; and to diminish his military ability to wage war in Kosovo in the future.”¹⁹

With eleven NATO members participating, the first strikes came from four U.S. ships, two U.S. submarines, one British submarine, and six B-52s (Buffs). The ships fired Tomahawk Land Attack (Cruise) Missiles (TLAMs) while the Buffs launched AN/AGM-86C conventional air-launched cruise missiles (CALCMs) at military utility and communication grids. These were followed by continuous night attacks from NATO fighter-bombers against FRY air-defenses, specifically surface-to-air missile sites, radar and military communications targets in Kosovo and southern Serbia, near Podgorica the capital of Montenegro. To avoid enemy air defenses, pilots flew above 15,000 feet even though this altitude reduced bombing accuracy in some cases.²⁰

Ironically, FRY gunners didn’t fire a single SAM on the first night. Instead, a dozen FRY fighters launched in an effort to intercept the NATO combat aircraft making strike sorties during

¹⁷ Ibid.

¹⁸ Jim Garamone and Linda D. Kozaryn, “NATO Attacks Serbs to Stop Kosovo Killings,” AFISNA (Defense Link, DoD, 24 Mar 99), http://www.defenselink.mil/news/Mar1999/n03241999_990345.html.

¹⁹ Ibid. For similar remarks, see Apple, “A Fresh Set of U.S. Goals.”

²⁰ Tirpak, “Six Weeks,” p. 27; Linda D. Kozaryn, “First NATO Strikes Aimed at Serb Air Defenses,” AFISNA (Defense Link, DoD, 25 Mar 99), http://www.defenselink.mil/news/Mar1999/n03251999_9903251.html.

the first night. The Yugoslav pilots proved to be no-match for NATO airmen with two MiG-29s being shot down by USAF F-15Cs and one by a Dutch F-16.²¹

Following these attacks, General Clark announced to reporters that, “We’re going to systematically and progressively attack, disrupt, degrade, devastate, and ultimately, unless President Milosevic complies with demands . . . , we’re going to destroy these forces and their facilities and support . . .”²²

It soon became clear to NATO planners that strikes had to continue. At first, leadership seemed reluctant to press the attacks because during the first week, the sorties had only a minimal effect. President Milosevic clearly was not moved and continued his efforts to kill or expel as many Kosovar Albanians as possible.

From the outset, the Allies employed a wide range of air assets, with the U.S. contributing F-15s, F-16s, and B-52s to the initial attacks. In addition, KC-135R air refueling aircraft proved essential for the attack aircraft to reach targets and return from sorties. One of the most interesting early attacks came when two B-2 Stealth bombers of the 509th Bomb Wing flying out of Whiteman Air Force Base, Missouri, successfully dropped two satellite-guided 2,000 pound bombs obliterating targets inside Yugoslavia. As one report read, “Flying 30-hour-long, non-stop missions from Whiteman to Yugoslavia and back, two USAF B-2s attacked heavily defended targets in all weather conditions and all returned without a scratch.” The success of the \$2.1 billion aircraft, while spectacular, had greater ramifications for the future of air power than to the outcome in Kosovo. As one air power analyst declared, “In its first combat test, the B-2 bomber defeated not only the Serbian air defense system but also the critics who for years had insisted it would not work as advertised or would never be risked in real war.”²³

²¹ Linda D. Kozaryn, “Allied Force Pilots Down Three Serb Fighters,” AFISNA (Defense Link, DoD, 25 Mar 99), http://www.defenselink.mil/news/Mar1999/n03251999_9903254.html.

²² *Ibid.*, p. 1; “Verbatim Special: The Balkan War,” *AFM*, (June 1999) Vol. 82, No. 6, p. 47, [hereafter Verbatim].

²³ ABC News, “B-2 Sees First Combat,” ABC News. Com, 24 Mar 99, <http://abcnews.go.com/sections/world/DailyNews/bomber990324.html>; quotes from John A. Tirpak, “With Stealth in the Balkans,” *AFM* (October 1999), Vol. 82, No. 10, pp. 23-28 (quotes on p. 23).

President Clinton and Defense Secretary William Cohen at the Pentagon

On 27 March, yet another kind of American aircraft made the headlines when a USAF F-117A was shot down by ground fire near Belgrade. It was the kind of news every NATO leader feared, especially President Clinton. After several hours of gripping television coverage, the pilot



Figure 3: President Clinton and Defense Secretary William Cohen at the Pentagon

was rescued unharmed. With the potential of casualties now thrust before the American public, the tepid support for the President's policy emanating from Washington and the nation, came bubbling to the surface. While Congress officially supported the U.S. president in wartime, many like Senator John M. McCain (R-Arizona), a former Vietnam era Navy pilot and one of America's most famous POWs, led some respected critics to wonder how the current trickle of bombs would ever get the Serb leadership to curb its inhumanity. Referring back to the timid policies of Vietnam, where constant pauses and targeting restrictions thwarted any hope of an effective air war, McCain called for NATO to crank it up or get out. There were even

private and guarded criticisms of the operations within the Air Force.²⁴

This criticism, the increased suffering of the Kosovars, and the clear need for more action led General Clark to ask for and receive North Atlantic Council permission to intensify the offensive. Now targets were selected, and the ops tempo increased. On 29 March, Defense Secretary William S. Cohen, announced that the U.S. was sending five B-1B "Lancer" bombers, five EA-6B "Prowler" long-range, all-weather aircraft equipped with electronic countermeasure (ECM) and ground-attack aircraft designed to degrade enemy air defenses. In addition, ten refueling aircraft as well as "several Predator and Hunter unmanned aerial reconnaissance aircraft were sent to Europe." This brought to more than 250 the number of aircraft and 7,300

²⁴ Linda D. Kozaryn, "Stealth Fighter Down in Yugoslavia, Pilot Rescued," AFISNA (Defense Link, DoD, 28 Mar 99), http://www.defenselink.mil/news/Mar1999/n03281999_9903281.html; Rowan Scarborough, "U.S. Pilots Call NATO Targeting a 'Disgrace'," *Washington Times* 1 Apr 99.

the number of U.S. personnel committed to OAF. Cohen also suggested that the Army's highly publicized AH-64 "Apache" attack helicopters might also soon be deployed. This remained a controversial subject since many in NATO, Washington, and the Administration feared that the Apache would signal to a squeamish public that a potentially bloody ground war was in the offing. Equally important, even though Gen. Clark wanted a ground option as well as the Apaches, many military experts worried privately if they could survive very well in such a missile and AAA laden environment.²⁵

But even with this increase, Phase II of the campaign dragged along with only a "50-70 average daily sortie rate, a far cry from the 800-1,200 during the Gulf War air campaign." Worst of all, bad weather and orders not to risk bombing civilian and nonmilitary targets meant that dozens of sorties returned without having dropped their ordnance load. All of this meant that Milosevic, like North Vietnamese leaders of the 1960s and 1970s, had hunkered down in safety, unconcerned with the suffering of his army or people and stubbornly continuing the cruel mass expatriation of Albanian Kosovars.²⁶

In spite of massive U.N. relief efforts which created sprawling border tent towns mostly on the Albanian border, it soon became clear that the neighboring countries and provinces of Albania, Macedonia, and Montenegro could not fully accommodate the hundreds of thousands of displaced people. The U.N. and dozens of international aid agencies began discussing airlifting thousands to other countries to avert a humanitarian catastrophe. At the same time, defense leaders began to turn their attention to aerial interdiction as a means to cut off the Serb and FRY military forces and threaten both Milosevic's base of power and his means to force Albanian Kosovars out of Kosovo.²⁷

²⁵ Linda D. Kozaryn, "U.S. Commits More Air Power to Allied Force," AFISNA (Defense Link, DoD, 30 Mar 99), http://www.defenselink.mil/news/Mar1999/n03301999_9903301.html.

²⁶ *Ibid.*; MOD, UK, "Kosovo—An Account of the Crisis; Responding to A Humanitarian Crisis," 15 Dec 99, <http://www.mod.uk/news/kosovo/account/response.htm>, [hereafter Humanitarian Crisis].

²⁷ MOD, UK, 'Humanitarian Crisis,' Linda D. Kozaryn, "Kosovo Matters Because Europe Matters, Cohen and Shelton Say," AFISNA (Defense Link, DoD, 30 Mar 99), http://www.defenselink.mil/news/Mar1999/n03291999_9903291.html.

The Conflict Ebbs and Flows

On 29 March, the first chink in Milosevic's intransigence began to appear. After meeting with Russian Premier Yevgeny Primakov, Milosevic said he would withdraw some forces if NATO would cease bombing. The NATO leadership including President Clinton, Prime Minister Tony Blair, German Chancellor Gerhard Schroeder and French President Jacques Chirac quickly and roundly rejected the proposal calling it "unacceptable."²⁸

However, Milosevic's attitude grew defiant again two days later, when the U.S. suffered the humiliation of having three noncombatant soldiers abducted and beaten while patrolling on the border of the former Yugoslav Republic of Macedonia. NATO leaders put a brave face on the incident but they all realized the gravity of the incident. General Clark declared, "We've all seen their pictures . . . We don't like the way they are treated . . ." British Foreign Minister Robin Cook condemned the entire affair saying that, "There is no justification for using soldiers who have been captured for propaganda purposes . . ." ²⁹

However, this was exactly what Milosevic did. In the U.S. the media played up the story wondering out loud if the lives of any Americans were worth involvement in a strictly European affair. With public and domestic support for President Clinton already shaken by earlier impeachment proceedings at home, the general isolationist sentiment of U.S. citizens, the downing of the F-117A, and the lack of movement on the part of Milosevic, the entire incident placed not only Operation Allied Force but also the future of NATO as a viable institution in jeopardy. While the three soldiers would eventually be released through the ex-officio efforts of the Reverend Jesse Jackson, the weeks of captivity undermined what was already an unenthusiastic effort at best on behalf of OAF.

Reluctantly but surely, NATO leaders came to realize that unless they acted more decisively, the entire operation might backfire. On 2 April, Secretary Cohen directed the deployment of 12 more F-117A Stealth fighters from Holloman AFB, New Mexico to join NATO

²⁸ Linda D. Kozaryn, "U.S., NATO Turn Thumbs Down on Milosevic Offer," AFISNA (Defense Link, DoD, 31 Mar 99), http://www.defenselink.mil/news/Mar1999/n03311999_9903314.html.

²⁹ Linda D. Kozaryn, "Serb Forces Abduct Three U.S. Soldiers," AFISNA (Defense Link, DoD, 1 Apr 99), http://www.defenselink.mil/news/Apr1999/n04011999_9904012.html.

forces conducting OAF. This addition brought to 24 the number of F-117As in the theater and to 210 the number of strike aircraft present. Even so, this increase seemed to be a trickle compared to the torrent of refugees fleeing Kosovo. By 2 April, NATO authorities estimated that 634,000 people had been displaced by the fighting.³⁰

To deal with this problem, during early April, the Department of Defense (DoD) airlifted 500,000 humanitarian rations units including food, large tents, cots, clothes, and blankets on C-17 “Cargo Master II’s,” C-5 “Galaxies,” and even Civilian Contract Boeing 747s. Officials also dispatched forklifts, trucks, pallets, and a 60,000 pound (60K) loader to facilitate the aid effort.³¹

As the Allied air campaign entered its third week, the overall focus shifted from attacks on IADS to destroying FRY/Serb supply lines and lines of communications. In a classic aerial interdiction scenario, NATO targeted not only logistics and communication, but sought to create

choke points to force vehicle concentrations which its aircraft could attack. In addition, they targeted storage and marshaling areas. The entire process proved to be very difficult, but not unusual. Throughout air power history, aerial interdiction has always



Figure 4: F-15E dropping a bunker buster laser-guided bomb.

been the hardest mission for air assets. Notwithstanding the successful isolation of the battlefields in North Africa and Normandy, Allied air operations in World War II, Korea, Vietnam, even the Gulf War proved nothing else so clearly as the fact that such attacks were and are

³⁰ Linda D. Kozaryn, “More U.S. Fighters Join NATO Air Campaign,” AFISNA (Defense Link, DoD, 2 Apr 99), http://www.defenselink.mil/news/Apr1999/n04021999_9904024.html.

³¹ Linda D. Kozaryn, “DoD Airlifts Rations to Balkans,” AFISNA (Defense Link, DoD, 5 Apr 99), http://www.defenselink.mil/news/Apr1999/n04051999_9904051.html.

dangerous, they continued to be difficult to execute, hard to accurately assess, difficult to calculate effect, and almost impossible to sustain pursuant to either the attacks or the interruption of the flow of men and/or materials.³²

In addition to these difficulties, aerial interdiction is often further complicated by bad weather, dense foliage, mountainous terrain, and a dedicated and determined enemy. In Kosovo, NATO pilots and planners soon discovered that all these factors were present. Enemy dispersion tactics were extremely effective as were their greater than expected theater air defenses. Further, successful aerial interdiction requires a robust ground presence and an intense and redundant air campaign. It is the essence of joint operations and at the core of Air Land Battle Doctrine. A ground engagement or at least the threat of one draws the enemy ground forces into the open, exposes his logistics lines, and forces concentration of his assets, particularly vehicles, armor, and artillery. The validity of this proposition has been borne out in every major air/ground conflict since World War II. The lack of this ground element and/or the lack of intense, decisive, consistent, round-the-clock air assaults as happened in Vietnam and, at times, in Korea consistently led to essential and ultimate failure.³³

By the second week of April, it seemed all the elements of defeat were in place in Kosovo. The air campaign muddled on in less than decisive fashion, the weather was horrible, the terrain often impossible, and the Serbs seemed as determined as ever. Worst of all, there was no threat of NATO ground action. The NATO leaders had emphasized this omission from the outset fearing a lack of public support to accept even minimal battlefield casualties. This was a concern enhanced by the initial response to the above-mentioned F-117 downing and the seizure and mistreatment of three American soldiers. The torrent of criticism continued to flow from all corners ranging from open questions about the success of bombing by such reputable sources as

³² For two excellent works on aerial interdiction, see Eduard Mark, *Aerial Interdiction: Air Power and the Land Battle in Three American Wars* (Washington, D.C.: Center for Air Force History, 1994), [hereafter *Aerial Interdiction*]; General William W. Momyer, *Air Power in Three Wars: World War II, Korean and Vietnam* (Washington, D.C.: Government Printing Office (GPO), 1978), [hereafter *Air Power in Three Wars*].

³³ See again Mark, *Aerial Interdiction*; Momyer, *Air Power in Three Wars*. Also, see Col. Phillip S. Meilinger, USAF, *10 Propositions Regarding Air Power* (Washington, D.C.: Air Force History and Museums Program, 1995); AFDD-1 *Air Force Basic Doctrine Manual*, September 1997.

the *New York Times* to scathing new attacks by Senator McCain.³⁴ In one *New York Times* article McCain erupted declaring:

*These bombs are not going to do the job. It's almost pathetic. You're just going to solidify the determination of the Serbs to resist a peace agreement. You'd have to drag the bridges and turn off the lights in Belgrade to have even a remote chance of changing Milosevic's mind. What you'll get is all the old Vietnam stuff—bombing pauses, escalations, negotiations, trouble.*³⁵

One Pentagon spokesman exclaimed, “We miscalculated. We thought when the bombing started Milosevic would play the victim, not turn into Adolf Hitler, Jr.” Even Ken Bacon, in a DoD briefing admitted, “I think right now it is difficult to say that we have prevented one act of brutality at this stage.”³⁶

With the memories of Vietnam burned in their minds, there is little wonder that senior U.S. military, especially Air Force, leaders also became utterly frustrated. Publicly they saluted smartly but privately (sometimes not so privately) they expressed fears that as currently arranged the air campaign would fail. They also suggested means and methods to repair the process. One general compared OAF to Operation Instant Thunder and characterized it as operation “constant drizzle.” Most airmen agreed that air power was fine, it was the constant changes in the basic plans that screwed things up. Even NATO civilian leaders, albeit slowly, came to realize nothing short of an intensive and massive campaign would work. They also realized that at least some threat of ground operations had to be introduced.³⁷

The buildup process continued on 3 April when Secretary Cohen announced that the U.S.S. “Theodore Roosevelt” Carrier Battle Group would stay in the Mediterranean and redeploy to a position capable of launching attack aircraft strikes on targets inside Kosovo. Two days later,

³⁴ R.W. Apple, Jr., “Conflict In the Balkans: News Analysis; Bombs Fall, Goal Unmet,” *NYT*, 29 Mar 99; John D. Morrocco, David Fulgham and Robert Wall, “Weather, Weapons, Dearth Slow NATO Strokes,” *Aviation Week and Science Technology (AW&ST)*, (5 Apr 99), pp. 26-27.

³⁵ Apple, “A Fresh Set of Goals”; “Verbatim,” p. 47.

³⁶ “Verbatim,” p. 47.

³⁷ William M. Arkin, “Inside the Air Force, Officers Are Frustrated About the Air War,” *Washington Post (WP)*, 25 Apr 99.

President Clinton approved an increase in air operations tempo. Thus, in spite of increased SAM firings, NATO aircraft began to attack with added frequency. Of equal importance was the aforementioned proposed dispatch of 24 Army Apache attack helicopter, Multiple Launch Rocket System (MLRS) Artillery, 2,000 U.S. ground troops and 14 Bradley fighting vehicles to Albania. The vehicle-killing helicopters and the buildup of ground forces it was believed would at least plant the possibility of ground operation in the minds of FRY leaders. While, at first, officials turned down the dispatch of the Apaches, the President and Secretary of Defense eventually approved their deployment to display their resolve. In addition, brief weather improvements meant that NATO planes were finally able to get at the well-hidden and disguised Serbian forces. As April progressed, the death and expulsion of thousands more Albanian Kosovars made it more essential than ever for NATO efforts to begin having effect.³⁸

With criticism of real-time targeting capability, target acquisition, and target selection cascading over NATO from such respected sources as *Jane's Defense Weekly*, as well as numerous attacks on the aimless NATO policy and their apparently dysfunctional leaders, NATO leaders had to reexamine their policy and take more decisive action.³⁹

On 10 April, Pentagon officials announced the dispatch of an additional 82 U.S. aircraft to



Figure 5: USAF F-16 fighter aircraft line up for take-off at Aviano AB, Italy during OAF

OAF. These included 24 F-16CJ "Falcons," 4 A-10 "Thunderbolt IIs" for close air support (CAS), 6 EA-6B "Prowlers" reconnaissance aircraft, 39 K-135R aerial refueling aircraft, 2 KC-10 aerial refuelers, and 7 C-130

³⁸ Linda D. Kozaryn, "Pentagon Sends in Carrier Battle Group," AFISNA (Defense Link, DoD, 5 Apr 99), http://www.defenselink.mil/news/Apr1999/n04051999_9904052.html; Jim Garamone, "Air Ops in Yugoslavia Picks Up; Apaches to Albania," AFISNA (Defense Link, DoD, 6 Apr 99), http://www.defenselink.mil/news/Apr1999/n04061999_9904061.html.

³⁹ Bryan Bender, "Kosovo Crisis: Allies Still lack real-time targeting," *Jane's Defence Weekly* (Headlines), 7 Apr 99, <http://www.janes.com/defence/features/kosovo/targeting.html>.

tactical cargo/transport. Six other F-15C aircraft had just deployed from Elmendorf AFB, Alaska, bringing to nearly 500 the number of U.S. aircraft committed to the NATO campaign. Air Force leaders publicly blamed the weather for the poor showing until then and stated that the new additions would increase their “deep-strike capability and help increase the intensity of round-the-clock air strikes in Yugoslavia, . . .”⁴⁰

By the third week of April, General Clark, thwarted by the concealed Serbian forces in Kosovo, requested 300 more planes from the U.S. Clark’s proposal called for an increase of the total number of NATO aircraft to 988, more than doubling the number with which the U.S. and her allies had started. At first, many DoD military officials complained that such a commitment would take vital assets, especially high-demand E-3 AWACs and EA-6Cs, away from more important theaters such as Iraq/Kuwait and Korea. They also worried that the “Apaches” might not be able to survive in such a high threat environment laced with SAMs and AAA. Besides, many officials believed Clark’s requests were nothing short of overkill. They argued that if Clark used his assets better, they would be adequate.⁴¹

Week three witnessed one dramatic success. On 8 April, a cruise missile destroyed the enemy’s primary communications facilities in Pristina, Kosovo’s capital. Even with this victory, the air campaign had not as yet taken on any real strategic character since only 28 of the 439 targets attacked during the third week were in Yugoslavia. Clearly, most U.S. and NATO officials could not seem to bring themselves to the harsh reality that they were in the midst of a war and not a one-time response to some terrorist attack. The lack of sustained success eventually drew more and more finger pointing and recrimination among domestic leaders in the U.S. It also left senior U.S. executive leaders groping for policy direction. For example, Secretary Cohen at one point declared before Congress “We’re certainly engaged in hostilities. We’re engaged in combat.” In the next breath he equivocated “Whether that measures up to a classic definition of war I am not prepared to say.” At least part of this unwillingness to publicly acknowledge a

⁴⁰ Jim Garamone, “U.S. Sending 82 More Aircraft to Join NATO Forces,” AFISNA (Defense Link, DoD, 12 Apr 99), http://www.defenselink.mil/news/Apr1999/n04121999_9904126.html.

⁴¹ Steven Lee Meyers, “Crisis In The Balkans: Pentagon Said to Be Adding 300 Planes to Fight Serbs,” *NYT* 13 Apr 99; Elaine M. Grossman, “Clark’s Firepower Request for Kosovo Prompts Anxiety Among Chiefs,” *Inside the Pentagon*, 15 Apr 99.

state of war was President Clinton's fear that he might be confronted by an already hostile Republican Congress over the War Powers Act.⁴²

It seemed to those in Congress and the public that America's policy in southeastern Europe was, at best, without direction and, at worst, nonexistent. By the end of week three, public pronouncements out of the Pentagon declared that the main purpose of the NATO operation was the expulsion of Serbian forces.



Figure 6: President Bill Clinton congratulates Gen. Wesley Clark

Clearly, this was a shift from the original declaration that focused on “diminishing” Milosevic's military ability to expel Albanian Kosovars and conduct ethnic cleansing. It was a shift brought about by the fact that with hundreds of thousands of refugees either in neighboring states or airlifted to other nations, the Serbian leader had all but accomplished his initial goal.⁴³

Perhaps of equal embarrassment, and certainly of equal tragedy, was the fact that interdiction campaigns often lead to attacks against friendly forces or innocent noncombatants. On 15 April, Secretary Cohen acknowledged NATO responsibility for an accidental bombing of a refugee convoy in which 64 Albanian Kosovars died. One of the biggest problems facing Allied pilots throughout April and May was the difficulty in identifying enemy and refugee convoys. On occasion, the Serbs interspersed their vehicles with lines of refugees to confuse or divert NATO attackers. While U.S. officials officially apologized, the damage had been done. Unfortunately, it would not be the last accidental bombing in Kosovo or Yugoslavia.⁴⁴

While the Pentagon wrestled with this public relations disaster, they were also forced to confront growing calls for some sort of plans for the introduction of ground forces. While

⁴² Bill Gertz and Rowan Scarborough, “No War,” *Washington Times*, 16 Apr 99.

⁴³ Ibid.

⁴⁴ Jim Garamone, “NATO Apologizes for Bombing Accident, Details Precautions” AFISNA (Defense Link, DoD, 16 Apr 99), http://www.defenselink.mil/news/Apr1999/n04161999_9904162.html.

Secretary Cohen publicly reiterated the Administration's resolve not to introduce ground forces in combat areas, Secretary of State Madeleine Albright wondered out loud to the media if, from a strategic point of view, ground forces might be necessary at some later date. Even General Michael J. Ryan, Chief of Staff, U.S. Air Force (CSAF) declared in the *New York Times*, "I don't know if we can do it without ground troops."⁴⁵

Behind the scenes, General Clark pushed relentlessly for at least preparations and plans for ground actions. Officials around the President, as well as those in the Air Force, held out hope that the air campaign might yet succeed. Air Force leaders were convinced that a focused, intensive, and dedicated series of attacks against meaningful Yugoslav targets would prove decisive. By mid-April, Clark's insistence had forced a consensus among NATO leaders, led by Prime Minister Blair that the ground option should remain a possibility at least.⁴⁶

To solidify the buildup process and demonstrate his resolve, President Clinton asked Congress for nearly \$6 billion to help finance Allied Force and humanitarian aid missions in the Balkans. Of the monies requested, about \$5.5 billion was allocated to the DoD for air operations, replenishment of cruise missile stocks, precision-guided munitions (PGMs), refugee relief, and Operation Desert Fox in Iraq. More than \$4 billion was specifically for air operations. Air Force leaders, no doubt, were now hopeful that a full court press could begin against targets in and around Belgrade.⁴⁷

With the bombing campaign about to become a month old and a NATO summit soon to convene, NATO planners began to expand the scope of the campaign to include not only FRY forces in Kosovo but also key industrial and infrastructure targets deep within Yugoslavia. These "four pillars," as they became known, were Milosevic's political power centers: the tightly-controlled Serbian digital and print news media, his security forces and their facilities, and

⁴⁵ "Verbatim," p. 46; Paul Richter, "Use of Ground Troops Not Fully Ruled Out," *The Los Angeles Times (LAT)*, 29 Mar 99, [hereafter Use of Ground Troops].

⁴⁶ Richter, "Use of Ground Troops;" Dan Balz, "U.S. Consensus Grows to Send in Ground Troops," *WP*, 6 Apr 99.

⁴⁷ Jim Garamone, "Clinton Sets Kosovo Emergency Funding at \$6 Billion," AFISNA (Defense Link, DoD, 21 Apr 99), http://www.defenselink.mil/news/Apr1999/n04211999_9904212.html.

Serbia's economy, especially its oil refineries, electrical grids, and lines of communication. Among the sites added to the target list were roads and bridges over the Danube River, petroleum depots and oil refineries, railroad lines and military rolling stock, facilities and buildings at military headquarters, communication lines and installations, and factories producing weapons, munitions, and spare parts.⁴⁸

Early on 21 April, the new strikes began when NATO issued communiques warning employees of Belgrade radio and television stations to evacuate all facilities. A few hours later, three cruise missiles slammed into the central Belgrade radio/television complex, temporarily shutting down all service. Not only did the attack bring the war home to the Serbian people, but it proved NATO was ready to go for the throat after a month of tiptoeing. In addition, the strike also introduced the threat of further attacks against the industry and finances of Serbian elites, and nearly all of Slobodan Milosevic's personal and business associates. To compound the shock value, no sooner had the first wave of missiles struck than another wave struck the headquarters buildings of Milosevic's Serbian Nationalist Party.⁴⁹

These attacks preceded a rapid succession of raids on Milosevic's family dwellings. The highlight of these attacks was the use of a GBU-37 4,700 pound "bunker-busting" weapon dropped on the FRY national command center which was comprised of a multi-story underground facility located over 100 feet below ground level. Planned as a safe haven for Milosevic and his family, the structure hosted extensive communications nets, food and supplies for more than a month,



Figure 7: The B-2 Spirit deployed during Operation ALLIED FORCE.

⁴⁸ Eric Schmitt and Steven Lee Meyers, "Crisis In the Balkans: News Analysis; NATO said to Focus Raids on Serb Elites's Property," *NYT*, 19 Apr 99, [hereafter *Raid on Serb Elites*]; MOD, UK, "Kosovo An Account of the Crisis: The Politico-Military Interface," no date, <http://www.mod.uk/news/kosovo/account/politico.html> [hereafter *Interface*].

⁴⁹ Schmitt and Meyers, "Raids on Serb Elite's Property."

as well as living space and medical supplies/facilities for the main FRY civilian and military defense leadership.⁵⁰

NATO Finally Flexes Its Muscle

As the air campaign intensified, NATO leaders, many uncertain of the organization's future, held a summit meeting in Washington. The meeting, which lasted from 23 to 25 April, not only paid homage, albeit briefly, to the 50th anniversary of NATO, but also focused on solidifying the alliance's resolve to bring Milosevic to heel. The Serbian leaders had consistently sought to pry the partnership apart often using Russia and other U.N. nations as a wedge. Indeed, Russia, a historic Serbian ally, had often vehemently opposed NATO's actions throughout the affair, but had also roundly condemned Milosevic's methods of handling Kosovo. The Russian military was a mere shell of the once powerful Soviet Red Army and the Russian government was desperate for U.S. and Western monetary and economic aid. Thus, she was in a position to do little more than irritate the NATO partners. On 25 April, following a congenial and reassuring three days of talks, NATO leaders restated their original demands: "a verifiable stop to Serbian military action in Kosovo; withdrawal of all Serbian forces; an international military force in Kosovo; refugee return; and acceptance of a political framework based on Rambouillet."⁵¹

As if to demonstrate American sincerity, President Clinton signed a selected reserve call-up on 27 April, authorizing 33,102 reserve component members to enter active duty for OAF. The call-up encompassed a 270 day period, initially focusing on 2,046 airmen and 47 aircraft in eight Air National Guard (ANG) and Air Force Reserve Command (AFRC) units. While the order potentially affected every branch of the U.S. military, Air Force reservists bore the brunt of the call-up. The Air Force ceiling was set at 25,000, the Army at 6,100, the Navy at 892, the Marine Corps at 1,100, and the Coast Guard at 10. The first activation involved only aerial refueling units. The ANG units were: the 161st Air Refueling Wing (ARW), Phoenix, Arizona; 171 ARW, Pittsburgh, Pennsylvania; 117 ARW, Birmingham, Alabama; and 128 ARW, Milwaukee, Wisconsin. The AFRC

⁵⁰ *Ibid.*; Paul Richter, "Bunker-Busters Aimed At the Heart of Leadership," *LAT*, 5 May 99.

⁵¹ MOD, UK, "Interface"; R.W. Apple, Jr., "Crisis in the Balkans: The Summit; Kosovo Overshadows Subdued NATO Event," *NYT*, 24 Apr 99.

units were 927 ARW, Detroit, Michigan; 940 ARW, Marysville, California; 434 ARW, Kokomo, Indiana; and 931 Aerial Refueling Group (ARG), Wichita, Kansas. They were to be stationed in Budapest, Hungary.⁵²

Just two days later, during a Pentagon news brief, U.S. Army General Henry Shelton, Chair, Joint Chiefs of Staff (JCS), announced the deployment of 13 more U.S. aircraft including 10 B-52Hs. Shelton emphasized that the air campaign was finally having an effect, reminding reporters that, “we faced three formidable challenges in the area. First was the integrated air defense system; second was the terrain; third was the weather.” Shelton assured the gathering that in spite of the problems, NATO aircraft would soon move into the “‘domination phase’ of the operation where NATO aircraft will aim at decimating Yugoslav field forces.” Both he and Secretary Cohen reiterated NATO resolve and openly chortled at what they called Milosevic’s “underestimation of the will of the alliance.”⁵³

By early May, the Allies had over 700 aircraft on station, of which 400 were strike airplanes. This number was growing continually toward the commitment of 988 aircraft previously made to General Clark. NATO aircraft had flown 15,000 sorties by 5 May, 5,000 of which had been bombing sorties. The numbers and the magnitude of the attacks would soon grow dramatically.⁵⁴

On 6 May, the Group of eight nations (G8) Foreign Ministers met in Bonn, Germany. Here again they resolved to push FRY forces out of Kosovo. This meeting became the initial forum where the framework for the eventual settlement was formulated. It was at Bonn that the NATO foreign ministers agreed on the basic principles for resolving the crisis. Using the good offices of Finnish President Marti Ahtisaari and Russian Premier and envoy Viktor Chernomyrdin as go-betweens, it was through these initiatives that President Milosevic eventually agreed to terms

⁵² Jim Garamone, “President Calls-up Reservists, AF Authorized Sop/Loss,” AFISNA (Defense Link, DoD, 27 Apr 99), http://www.defenselink.mil/news/Apr1999/n04271999_9904275.html.

⁵³ Jim Garamone, “More B-52s Join Allied Force Mission,” AFISNA (Defense Link, DoD, 30 Apr 99), http://www.defenselink.mil/news/Apr1999/n04301999_9904302.html.

⁵⁴ Tirpak, “Six Weeks,” p. 22.

on 3 June. On 7-8 June, in Bonn and Cologne, the G8 Foreign Ministers signed this draft agreement which became U.N. Security Council Resolution (UNSCR) 1244 on 10 June.⁵⁵

By mid-May, some Yugoslav officials began to openly admit that Serbia's economy was suffering from the upgraded assaults. This meant widespread hardship among the people of Serbia especially those in and around Belgrade. Unemployment soon became a particular hardship with over 100,000 civilians inside Yugoslavia losing their jobs due to bomb damage. After one attack on Krujevac, a large munition plant and car and truck plant were totally destroyed. Over 9,000-12,000 plant employees were left without work. Without orders for tires, plastics, windshields, etc., collateral industries were forced to shut down or cut back 30,000-45,000 jobs. Many other factories suffered the same fate. Add to this the effects of over 90 months of sanctions brought on by the conflict in Bosnia and dire economic hardship soon became something nearly all FRY citizens experienced. Some Yugoslav economists called it worse than the economic destruction during World War II.⁵⁶

One target still not fully exploited was the FRY's electric power generating systems. What had been an initial target during Desert Storm had only seen an early May "love tap" which temporarily shorted power for some hours and destroyed nothing. On 24 May, NATO planes attacked with devastating accuracy obliterating the entire FRY electrical grid. Yugoslav air defenses, banking and defense computers, and numerous other key national and military institutions completely lost power and Belgrade was BLACK! But why had it taken so long to achieve this level of success? Two months into the war, decisive action had finally received approval. As an apparently vindicated General Clark said later, "this was the only air campaign in history in which lovers strolled down river banks in the gathering twilight and ate at outdoor cafes and watched the fireworks." That is until 24 May!⁵⁷

⁵⁵ MOD, UK, "Interface"; United Nations, Resolution 1244 (1999) "Security Council resolution 1244 (1999) on situation relating of Kosovo," 4011th meeting, 10 June 1999, 7 pages, found on <http://www.un.org/Docs/scres/1999/99sc1244.html> [hereafter UNSCR 1244].

⁵⁶ Robert Block, "In Belgrade, Hardship Grows Under Sustained Air Assaults," *The Wall Street Journal*, 12 May 99; Steven Erlanger, "Crisis in the Balkans: Economists Find Bombing Cuts Yugoslav's Production in Half," *NYT*, 30 Apr 99.

⁵⁷ Michael Ignatieff, "The Virtual Commander: How NATO Invented a New Kind of War," *The New Yorker* (2 Aug 99), pp. 33-35. The author must acknowledge that Benjamin Lambeth requested that other scholars not quote

Even with these successes, NATO leadership was not going to wind down operations until Milosevic capitulated. Throughout May, the buildup continued. On 7 May, Secretary Cohen signed an order deploying 176 more fighters and refueling aircraft to Europe in support of OAF. Of these, there was one squadron of 18 A-10s and F-16CJs as well as two squadrons of 36 F-15E “Strike Eagles” and 24 F/A-18D “Hornets.” In addition, 80 KC-135s were also deployed. The deployment also meant that 2,789 more ANG and AFRC service members would be called up raising the total to 5,035. The ANG units affected included the 104th Fighter Wing (FW), Barnes Field, Westfield, Massachusetts; the 110 FW, Kellogg Airport, Battle Creek, Michigan; and the 124 FW, Boise, Idaho. All were A-10 units.

Active duty units affected included the 20 FW, Shaw AFB, South Carolina and its F-16CJs; the 4 FW, Seymour Johnson AFB, North Carolina and its F-15Es; and the Marine Aircraft Group (MAG) 31, Marine Corps Air Station, Beaufort, South Carolina and its F/A-18s. In addition, 524 Air Force Red Horse engineer reservists from Kelly AFB, Texas and Great Falls, Montana were deployed to Albania to support overflow refugee operations. Lastly, 70 Air Force weather and intelligence personnel deployed as part of the culmination of General Clark’s April request for about 1,000 aircraft.⁵⁸

Beginning of the End

On the battlefield, operations shifted to Kosovo. On 26 May, 4,000 Kosovo Liberation Army irregulars advanced into Kosovo at two points along the southwestern border. Their goal was to form a secure corridor in an effort to resupply their beleaguered comrades. The offense quickly bogged down, and FRY forces, using effective artillery attacks, soon pushed the KLA into a defensive position on 6,523 foot Mount Pastrok, just inside Albania. On the one hand, this seemed a terrible turn of events since it proved that even after 2 ½ months of air attacks, the FRY troops in Kosovo were strong and determined. On the other hand, it drew into the open 700-800 FRY troops and dozens of vehicles and artillery.

his draft of his article “NATO Air War for Kosovo,” that the authors originally derived Clark’s quote from that source, although they found it in other resources. We assume it will appear in Lambeth’s upcoming book.

⁵⁸ Jim Garamone, “More Aircraft, Personnel Set for Allied Force,” AFISNA (Defense Link, DoD, 11 May 99), http://www.defenselink.mil/news/May1999/n05111999_9905111.html.

According to initial reports, when KLA forces counterattacked, FRY forces had to congregate to defend themselves. Employing E-8C Joint Surveillance Target Attack Radar system



Figure 8: CALCMs loaded onto B-52s at RAF Fairford.

(Joint STARS) aircraft deployed from Robins AFB, Georgia, Allied forces soon detected groups of FRY troops trying to maneuver for safety. As they did, it was reported that NATO fighters smashed these columns devastating FRY forces. Although the damage did not equal the level of destruction in the Kuwaiti “Highway of Death” from the Gulf War,

much of the Serbian mechanized hardware became smoldering hulks.⁵⁹

Soon thereafter many skeptical reports, helped by Serbian propaganda, appeared in the media downplaying Serbian losses. This prompted a major NATO effort to research the battlefield and discern the true outcome of the engagement. It was clear enough the skeptics (and Serbia) had underplayed the defeat and the actual destruction was not far short of the original NATO estimates. Still, the Serbian ground forces seem to have left Kosovo in good order and more intact than the Iraqi Army in the Gulf War. In any case, it appears likely the damage to Milosevic’s fielded forces was not the decisive factor in his decision to quit.⁶⁰

⁵⁹ Tony Capaccio, “JSTARS Led to Most Lethal Attacks on Serbs, *Defense Weekly* (6 July 99), pp. 12-13. For more on the E-8C Joint STARS and the 93rd Air Control Wing which operates these reconnaissance marvels, see History (For Official Use Only (FOUO)), Warner Robins Air Logistic Center (WR-ALC), Fiscal Year (FY) 1991, pp. 114-120 (Unclassified (U)); FY92, pp. 133-137 (U); FY93, pp. 77, 139, 157, 177-191 (U), 182-189 (FOUO); FY94, pp. 132-134, 138-141 (U), 131, 135-137 (FOUO); FY95, pp. 124, 128-139 (U), 125-127 (FOUO); FY96, pp. 131-132, 138-139 (FOUO), 133-137 140-142 (U); FY97, pp. 153, 159 (FOUO), 154-158, 160-163 (U); FY98, pp. 130, 132, 135-142 (U), 131, 133-134 (FOUO/Distribution (DL)) all information used is Unclassified. For more on the “Highway of Death,” see Michael T. Corgan, “Clausewitz’s ‘On War’ and the Gulf War,” in William Head & Earl H. Tilford, Jr., eds., *The Eagle In The Desert: Looking Back on U.S. Involvement in the Persian Gulf War* (Westport, CT: Praeger Publishers, 1996), pp. 285-286.

⁶⁰ For negative criticism of the numbers during OAF see, John Barry and Evan Thomas, “The Kosovo Cover-Up,” *Newsweek* (15 May 2000): pp. 23-27. For more current and clearly the most accurate numbers see, General Wesley K. Clark, United States Army, “Press Conference on the Kosovo Strike Assessment.” Available online at <http://www.fas.org/man/dod-101/ops/docs99/p990916a.html>.

Chinese Embassy Bombing

In spite of the apparent progress on the battle front on 6 May, one of the worst public relations catastrophes occurred when NATO aircraft accidentally bombed the Chinese Embassy in Belgrade killing three persons described as “journalists” and injuring twenty others, six critically. The magnitude of protest and outcry from China was considerable. Even U.S. films, such as “Saving Private Ryan” were removed from Chinese movie theaters and America-based fast food restaurants were forced to close partly in protest and partly out of fear of violence.

On 8 May, President Clinton apologized for the accidental bombing and expressed profound condolences to Chinese President Jiang Zemin. In spite of these generous U.S. and NATO apologies, the Chinese seemed inconsolable. Thousands of demonstrators hurled rocks and debris at the U.S. and British Embassies in Beijing during several days of riotous protests. Even so, China could do very little to change the progress of the conflict and her diplomatic protests fell short of any real threats. After a time, the furor died down, and the bombing continued.⁶¹

By early June, the Serbs were near the end. The NATO buildup had finally proved effective enough for diplomatic efforts to begin bearing fruit. On 1 June, *Jane's Defence Weekly* reported that NATO had 59 airbases in 12 countries supporting OAF. At these bases they had 941 fixed-wing aircraft, 279 helicopters, and 1,220 unmanned aerial vehicles (UAVs). The next day, *Jane's* reported that the Serbs were near the end of their SAMs. They reported that they had wasted many of them often firing blind shotgun-pattern salvos at NATO attack aircraft.

In addition, many of the missiles had been lost to NATO SEAD operations spearheaded by USAF F-16CJs carrying AN/AGM-88 High-speed Anti-Radiation Missiles (HARMs). *Jane's* believed the SEAD attacks had been so effective that most subsequent attack sorties were unopposed.

⁶¹ Press Release, “Joint Statement by Secretary of Defense William S. Cohen and CIA Director George J. Tenet,” AFISNA (Defense Link, DoD, 8 May 99), http://www.defenselink.mil/news/May1999/n05101999_pr225-99.html; CNN News, “Clinton apologizes to China over embassy bombing,” 10 May 99, <http://www.cnn.com/WORLD/europe/9905/10/kosovo.china.02/>.

One unnamed F-16 squadron commander told a *Jane's* reporter, "We have attrited 80% their SAMs—they have fired off 90% of their SAMs. They can't have an endless supply."⁶²

However, later analysis suggested that the IADS had not been destroyed. Rather, it had been forced off the air for the most part. This meant that the SEAD attacks had at least been partially successful even if not at the level first claimed. Still, the enemy IADS remained as a kind of fleet-in-being that continued to threaten the allied air campaign, forcing NATO sorties to remain at medium altitudes where their target acquisition and bombing accuracy with some weapons were not as effective as the might have been at lower altitudes.⁶³

With potential disaster staring him in the face, Milosevic blinked. On 2 June, former Russian Prime Minister Viktor Chernomyrdin and Finnish President Martti Ahtisaari, representing the European Union, traveled to Belgrade. There they offered Milosevic a peace plan to end the war, with Ahtisaari present to guarantee that Milosevic clearly understood NATO intentions. The next day, President Clinton announced that both sides had agreed to a draft proposal whereby: all Serbian and FRY forces would withdraw promptly, all refugees would be allowed to return, self-rule of Albanian Kosovo under Yugoslav sovereignty would be restored, a few hundred Serbian liaison personnel would assist in removing mines, Allied peacekeeping forces would occupy key positions in Kosovo to assure a peaceful transition, and once all FRY forces withdrew, the bombing would end.

Later, the President and Secretary Cohen agreed that NATO would provide about 50,000 peacekeepers and America 7,000. NATO troops, and U.N. forces from several nations including Russia, were scheduled to participate as part of the peacekeeping force. It should be noted that Russia was not a welcome partner.⁶⁴

⁶² Tim Ripley, "Kosovo Crisis: Operations Allied Force/Allied Harbour/Joint Forge—Order of Battle/Basing/June 1999," *Jane's Defence Weekly*, 4 Dec 99; *Ibid.*, "Kosovo Crisis: 'Serbs running out of SAMs, Says USA," 15 Dec 99, <http://www.janes.com/defence/features/kosovo/airassets.html>.

⁶³ Robert Wall, "SEAD Concerns Raised in Kosovo," *Aviation Week & Space Technology*, (26 July 1999): p. 75; Secretary of Defense William S. Cohen and General Henry H. Shelton, Press Release, "Joint Statement on the Kosovo After Action Review," (14 October 1999): pp. 7, 20. Available online at <http://www.nyu.edu/globalbeat/balkan/Cohen10149999.html>.

⁶⁴ Linda D. Kozaryn, "Serbs Fold, U.S. Hopeful for Peace Agreement, but Wary," AFISNA (Defense Link, DoD, 4 Jun 99), http://www.defenselink.mil/news/Jun1999/n06041999_9906041.html.

Soon after the two sides reached an agreement in principle, a continuing squabble developed over how and when Serbian forces should withdraw and when NATO air strikes would end. The delay, apparently staged by the Serbs, clearly provided them time to continue attacks against KLA forces. In response, NATO re-intensified the air strikes in Kosovo. On 7 June, two B-52s and two B-1Bs dropped 86 MK82 unitary bombs and dozens of CBU-97 cluster weapons on Serb forces in an open plain near Albania. Of the approximately 1,000 FRY forces initial assessments estimated as many as half of these forces, their artillery and vehicles were destroyed. Subsequent appraisals have suggested that slightly smaller numbers of enemy forces were destroyed. Even so, the FRY attack came to an abrupt halt and for one of the few times in the war a ground engagement between FRY and Allied forces—KLA in this case, had exposed the enemy to the full and effective fury of NATO airpower.⁶⁵

The next day, negotiations began again in earnest, and by the 9th a final agreement was reached and signed in Macedonia. Following the agreement, NATO Secretary-General Javier Solana officially suspended the NATO air attacks. However, he warned Yugoslav leaders that NATO would resume intensive bombing if they did not follow the letter of every provision of the peace agreement. Plans called for all Serb forces to be out of Kosovo in 11 days. The province was divided into three zones of occupation to be administered by the U.S., Great Britain, and France. The advance guard of the 7,000-man U.S. contingent was comprised of the 26th Expeditionary Force and army units of Task Force Hawk. Together this force was designated Task Force Falcon and commanded by Brigadier General John Craddock, Assistant Division Commander, 1st Infantry Division.⁶⁶

On the 10th, the U.N. Security Council voted 14-0, China abstaining, to approve Resolution 1244. Not only did this agreement put Kosovo under U.N. international civilian control, but it reconfirmed previous U.N. and NATO resolutions and declarations calling for Serbian troop

⁶⁵ William Drozdiak, "Yugoslav Troops Devastated by Attack," *WP*, 9 Jun 99.

⁶⁶ R. Jeffrey Smith and Molly Moore, "Plan for Kosovo, Pullout Signed," *WP*, 10 Jun 99, [hereafter Kosovo Pullout]; Jim Garamone, "Serb Withdrawal Begins, NATO Suspends Bombing," AFISNA (Defense Link, DoD, 10 Jun 99), http://www.defenselink.mil/news/Jun1999/n06101999_990610.html [hereafter Withdrawal Begins].

withdrawals, Kosovan autonomy and an international peacekeeping and monitoring forced under U.N. authority.⁶⁷

The Aftermath

On 11 June 1999, President Clinton declared “victory” in a nationwide speech. The next day, with FRY forces already pulling back, the first peacekeeping forces entered Kosovo preceded by a Russian advance party which, without prior agreement, took up positions around Pristina Airport. Although an annoyance, the Russian move hardly stopped the U.N. force deployment. Eventually they were integrated into the overall occupation forces. By 20 June, Serbian forces had completely withdrawn, and U.N. forces had taken up their places on schedule. At the same time, overall commander British Army Lieutenant General Sir Michael Jackson, began the difficult task of disarming the KLA within 90 days. With the occupation in place, Secretary General Solana officially terminated the air campaign on 20 June.⁶⁸

Plans called for the number of forces to remain around 50,000. U.S., British, and French force numbers would slowly shrink to about 5,000 while other countries augmented the United Nations’ military presence. By 21 September, officials announced the successful demilitarization of the KLA. The winter months heightened the need for shelter, food, clothes, and medical supplies as the occupation continued, the length of which may not be known.



Figure 9: U.S. bombing targets in Belgrade

Troops remain in Bosnia to this day to enforce the Dayton Accords and as long as the specter of Slobodan Milosevic lurks just across the border and the breakup of Yugoslavia continues, the occupation will likely continue.

⁶⁷ Smith and Moore, “Kosovo Pullout”; Garamone, “Withdrawal Begins”; UNSCR 1244.

⁶⁸ MOD, UK, “Interface,” p. 2; Tim Weiner, “Crisis in the Balkans: From President, Victory Speech and a Warning,” *NYT*, 11 Jun 99; R.W. Apple, Jr., “Crisis in the Balkans: Washington Memo; Clinton Tailors Legacy But Kosovo Isn’t Fabric,” *NYT*, 10 Jun 99.

Assessing the Numbers

Officially, the NATO air campaign, known as Allied Force, lasted from 24 March to 20 June, or 89 days. Actual air attacks spanned 78 days, with no actual attacks taking place during the last 11 days. All totaled, 22,200 Air Force, Army, Navy, and Marine personnel were assigned to United States European Command (USEUCOM), although not all participated directly in the conflict. The Allies flew 38,004 sorties, 10,484 of which were strike missions. All totaled, 829 aircraft from 14 countries took part in the air campaign. Initial target reports showed that NATO had destroyed 11 railroad bridges, 34 highway bridges, 29 percent of all stored ammunition, 57 percent of stored petroleum supplies, all Yugoslav oil reserves, 268 non-track military vehicles, 1220 trucks, 203 armored personnel carriers, 314 artillery pieces, 100 aircraft of all kinds, and 10 military capable airfields.⁶⁹

CNN, citing official NATO sources, estimated that FRY and Serb forces suffered nearly 10,000 killed and wounded, while the U.S. lost two soldiers killed in a helicopter accident, and three Chinese diplomats died in the accidental NATO bombing of the People's Republic of China's Belgrade Embassy. Citing numbers from the U.N. High Commission for Refugees and Yugoslav government figures, CNN reported that 1,500 civilians had died and 5,000 had been wounded during the air raids. Perhaps of equal import was the U.N. report that by the end of OAF half of all Albanian Kosovars were displaced persons. All totaled, 200,000-300,000 ethnic Albanians had fled Kosovo prior to the air attacks while 68,000 had traveled west to Montenegro, 440,000 southwest to Albania, and 240,000 southeast to Macedonia after the war officially began. All totaled, 850,000-900,000 of the 1.8 million Albanian Kosovars departed the province after the air campaign began.⁷⁰

In NATO's summation of the conflict on 21 June, they recorded that attacks had begun at 2:00 p.m. EST on 24 March, had been suspended at 10:00 a.m. EST on 10 June, and halted at

⁶⁹ EUCOM, "Operation Allied Force," 14 Dec 99, <http://www.eucom.mil/operations/af/>; CNN, "CNN In-depth; Kosovo Crisis," 15 Dec 99, <http://www.cnn.com/news/kosovo/figures.html>, [hereafter CNN Kosovo]; MOD, UK, "NATO Air Strikes," 14 Dec 99, <http://www.mod.uk/news/kosovo/account/nato.htm>.

⁷⁰ CNN, "CNN, Kosovo," p. 1.

10:50 a.m. EST on 20 June. At the start, enemy forces had 114,000 active duty service personnel and 1,400 artillery pieces. They also had 100 SAMs including SA-2, SA-3, SA-6, SA-7, SA-9, SA-13, SA-14, and SA-16 missiles. The FRY had 1,850 air defense artillery weapons, 240 aircraft, 48 attack helicopters, 1,270 tanks, and 824 armored fighting vehicles. The Serbs had 40,000 troops and 126 tanks in Kosovo or on the border, and they had over 10,000 troops and several dozen tanks near their border with the Former Yugoslav Republic of Macedonia.

According to NATO sources, 19 member nations contributed to Operation Allied Force. All total 31,600 U.S. service personnel participated, 18,400 ashore and 13,200 at sea, with over two-thirds of that number belonging to USEUCOM. NATO Naval forces included the carrier U.S.S. "Theodore Roosevelt," one British and one French carrier, two U.S. cruisers, three U.S. and six British, French, Italian, and Greek destroyers, two U.S. and one British submarine, and 10 frigates from Britain, Spain, Turkey, Italy, the Netherlands, Germany, and Greece. The U.S. also committed the *Kearsarge* Amphibious Ready Group (ARG), consisting of three specialized vessels.

By 21 June, the U.S. had committed over 650 aircraft. These included: the Navy F-14 "Tomcat" and F/A-18 "Hornet" fighter aircraft; the Air Force F-15E "Strike Eagle," F-16CJ "Fighting Falcon" multi-role F-117A "Nighthawk," AV-8B "Harrier," and A-10 "Thunderbolt" fighter and attack aircraft. Bombers included: the Air Force B-1B "Lancer," B-2 "Spirit" and B-52H "Stratofortress." Cargo transport aircraft were: the Air Force C-5B "Galaxy," C-17 "Cargo Master II," C-130 "Hercules," and C-141 "Starlifter." The Air Force also contributed KC-10A "Extenders" and KC-135R "Stratotankers" for aerial refueling as well as AC-130H "Spectre" Gunships and E-8C Joint STARS ground surveillance aircraft. The Navy also contributed EA-6B "Prowlers" for Electronic Warfare duties, while the Army sent AH-64A "Apache" Attack helicopters.

Last, but not least, the U.S. had contributed dozens of RQ-1A "Predator" and "Hunter" UAVs. The remaining NATO members contributed 277 total aircraft of which 192 were fighters, fighter/bombers, and bombers; 63 support aircraft; 19 reconnaissance; and 3 helicopters.

The operations ultimately cost billions of dollars, ensuring that yet another corner of the world had been occupied by U.S., U.N., NATO, and Allied forces in an effort to assure peace. One wonders how many more such venture these nations can afford.⁷¹

Analysis

This article is not designed to provide some searing analysis or definitive lessons learned. Clearly, such things will be easier to do as time passes and official documents become available and history provides a better perspective. Even so, one feels compelled to make some observations and at least attempt to lift some factual trends if not eternal truths from Kosovo which, in fact, like the Gulf and Bosnia is an ongoing story which is far from over.

What the Participants Said

Perhaps one way to begin analyzing this operation is to examine what others have said. Nick Cook, in a special feature in *Jane's Defence Weekly*, wondered as many senior NATO officials had, if the harsh military lessons would be lost in the euphoria and relief of cessation of the conflict and the minimal loss of lives, especially on the NATO side. According to Cook, one U.S. official declared, "We pulled off the Kosovo caper through fortuitous circumstances, bombing the Serbs back to their country for just two aircraft lost." This same source wondered, however, "What if the Serbs had deployed their air defense system and inflicted major losses? How long would the United States have stuck it out? The answer is not very long. Then what would Europe have done?"⁷²

Cook's entire piece could have been also titled, "I have some good news and bad news." For example, the aerospace technological revolution (ATR) which brought us PGMs, Global Positioning Satellite (GPS) Systems, Joint STARS, UAVs, Joint Direct Attack Munitions (JDAMs), etc. during and after the Gulf war has continued. The upgrades demonstrated on aircraft, radar, missiles, navigation, SEAD, etc. seemed nothing short of science fiction. On the other hand, such

⁷¹ DoD, "NATO Operation Allied Force," (Defense Link, DoD, 21 Jun 99), <http://link.mil/specials/kosovo/>.

⁷² Nick Cook, "Kosovo: War of Extremes," *Jane's Defence Weekly*, 7 Jul 99, <http://www.janes.com/defence/features/kosovo/extremes.html> [hereafter War of Extremes].

systems are very expensive, and fewer were available than during the Gulf conflict. Perhaps equally troubling is that 90 percent of this sophisticated equipment is U.S. built, owned, and deployed. Undoubtedly, NATO, whose fragile existence was tested greatly during OAF, cannot be comforted by the reality that it was, again, utterly dependent, “on U.S. air power and technology to fight and win a war that took place in the heart of Europe.”⁷³

Another issue with mixed results was the way in which the air war was conducted. Clearly, the Yugoslavian conflict involved not one, but two air campaigns. The first half was, as it turned out, hampered by political circumstances and highly restrictive rules of engagement which reminded many of the catastrophic policies of Vietnam, policies airmen had hoped were discarded. In a 21 October Senate Armed Services Committee hearing, Air Force Lieutenant General Michael Short, General Clark’s air chief and a former combat aviator, declared, “I’d have turned the lights out, . . . I’d have dropped the bridges across the Danube, I’d have hit five or six political-military headquarters in downtown Belgrade. Milosevic and his cronies would have woken up the first morning asking what the hell was going on.”⁷⁴

Admiral James Ellis, NATO Naval Commander Southern Europe, and General Clark sitting with Short generally agreed. Clark said, “Once the threshold is crossed and you are going to use force that force has to be as decisive as possible in attaining your military objectives.” However, Clark also pointed out that much of the early timidity came from the need to obtain, “the consensus of 19 nations . . . to approve action, and many countries had preconceptions about how to apply force.” In the end, Clark chose to focus his remarks on the positive aspects of the operation, such as the fact that 19 countries with varying backgrounds, some even former enemies, hung together to put a stop to inter-territorial barbarism.⁷⁵

⁷³ *Ibid.*; The Center for Defense Information, “Lessons of Kosovo: More B-2s?” *Weekly Defense Monitor* (24 Jun 99), Vol. 3, Issue 24, pp. 1-5.

⁷⁴ Cook, “War of Extremes,” pp. 1-8; Linda D. Kozaryn, “Air Chief’s Kosovo Lesson: Go for the Snake’s Head First,” AFISNA (Defense Link, DoD, 26 Oct 990, http://www.defenselink.mil/news/Oct1999/n10261999_9910264.html [hereafter Snake’s Head].

⁷⁵ Kozaryn, “Snake’s Head.”

Naturally, there were those who, in spite of kind words about the military effort and courage of NATO forces, could not refrain from bashing the overall policy. Of particular note was the ever growing criticism that Milosevic had initially achieved his goal of expelling or killing most Albanian Kosovars in spite of the air war. Many in Congress hammered at President Clinton, blaming the human disaster in Kosovo on slow and flawed diplomacy and indecisive military action. Echoing these sentiments, Senator William V. Roth, Jr., Republican from Delaware, went so far as to make lengthy (later published) remarks on the Senate floor on 16 September which claimed, "While Operation Allied Force did attain victory, the accomplishment of its goal did not yield a shared sense of triumph and finality." He believed that NATO's poor use of its power had actually helped Milosevic because, "in the course of Operation Allied Force, Milosevic accelerated and expanded his campaign of terror. Before the war was over, nearly 90% of Kosovar Albanians were driven from their homes... Nearly one half were actually expelled from Kosovo." In addition, Roth claimed 10,000 Kosovars were "executed by Milosevic's henchmen."⁷⁶ While some of Roth's numbers may have been high and his attacks politically motivated, the lack of initial resolve undoubtedly made the situation in Kosovo worse.

Many military and civilian leaders of NATO and non-NATO countries questioned not only NATO's policy but also what ended the conflict. General Jackson, the U.N. occupation commander, openly scorned the notion that air power won the conflict, claiming he had never favored such a policy. In his opinion, Russian, and later Finnish diplomacy, had convinced Milosevic to pull back in order to save his forces for later mischief.⁷⁷

Criticisms like that from Roth and Jackson, while certainly stating facts, seemed motivated by resentment or politics. As John Keegan, a one-time critic admitted later,

All this [positive remarks] can be said without reservation, and should be conceded by the doubters, of whom I was one, with generosity. Already some of the critics of the war are indulging in ungracious revisionism, suggesting that we have not witnessed a strategic revolution and that Milosevic was humbled by the threat

⁷⁶ U.S. Senator Bill Roth, Republican, Delaware, "News Release: Roth Floor Statement on Lessons Learned in Kosovo Conflict," Release 106-207, 16 Sep 99, <http://www.senate.gov/~roth/press/kosovo.floorstmnt.html>.

⁷⁷ Andrew Gilligan, "Russia Not Bombs, Brought End to War in Kosovo, Says Jackson," *London Telegraph* (Sunday), 1 Aug 99.

*to deploy ground troops or by the processes of traditional diplomacy, in this case exercised—we should be grateful for their skills—by the Russians and the Finns. All to be said to that is that diplomacy had not worked before March 24, when bombing started, while the deployment of a large ground force, though clearly a growing threat, would still have taken weeks to accomplish at the moment Milosevic caved in. The revisionists are wrong. This was a victory through air power.*⁷⁸

To be sure, Keegan received criticism of his own. He, like many, was appalled by the initially sluggish ops tempo, NATO's fragile state of unity and resolve, the mishandling of diplomacy prior to the conflict, and the apparent failure to heed past lessons. In the end, while pleased, he urged specifically Tony Blair and, by implication, all NATO leaders to reexamine OAF to learn its lessons and never enter a similar situation without better consideration and clearer military goals and policies.⁷⁹

Certainly, one encouraging note has been the apparently earnest official efforts by NATO, especially the U.S. and the United Kingdom (UK), to formulate, and learn, lessons from this often perplexing conflict. During the Fall of 1999, the UK Ministry of Defense published a report on "Initial Lessons Learned" suggesting such things as the value of NATO having better unity of purpose, clearer objectives and mutual determination to achieve these goals. At the same time, both the DoD and JCS not only made similar reports, but Secretary Cohen and General Shelton presented a lengthy prepared statement to the Senate Armed Services Committee. While optimistic in tone, "For 50 years NATO has given caution to our foes and comfort to our friends," it noted the need to learn from this "victory" in order to prevent such human tragedy in the future.⁸⁰

Perhaps as telling as anything about lessons learned for those leaders of the 19 NATO nations were General Short's comments to the *Washington Post* on 20 June, following a final

⁷⁸ Keegan, "Please Mr. Blair."

⁷⁹ Ibid.

⁸⁰ MOD, UK, "Kosovo An Account of the Crisis: Initial Lessons Learned," 15 Dec 99, <http://www.mod.uk/news/kosovo/account/lessons.htm>; Secretary of Defense, William S. Cohen and JCS Chair, General Henry H. Shelton, "Joint Statement on The Kosovo After Action Review," (Defense Link, DoD, 14 Oct 99), http://www.defenselink.mil/news/Oct1999/b10141999_bt478-99.html.

Allied Force joint NATO briefing. Short, a firm believer in the lessons of the Gulf air war and utterly frustrated by the NATO political conundrum that slowed necessary air action by a month declared, "I hope those [NATO] nations that could not participate in the way they would have liked will take the necessary investments to catch up. Otherwise, we run the risk of creating second or third teams within the Alliance."⁸¹

What Can We Agree on?

Certainly, it is hard to disagree with an expert like Keegan. In spite of all the other factors and nuances Operation Allied Force was a NATO victory, an air power victory. To be sure, as General Clark has said, "This really wasn't a war [like the Gulf War]. It was diplomacy backed by force."⁸² Thus, if we accept von Clausewitz's notion that war is an extension of diplomacy, then, as Clark suggests, NATO used its considerable power to enforce its diplomatic will in Southeastern Europe. Clearly OAF was also one of those times when diplomacy or political fears and gamesmanship left the component military members without viable options and unable to fulfill their mission. Vietnam, from 1965 to 1971, was certainly one such case and few can deny that the first month of Allied Force degenerated into a similar state. Perhaps John T. Carroll, Editor-in-Chief of *Air Force Magazine* said it best,

*Diplomacy and war are related, but they are not the same. Diplomatic objectives are ambiguous by design, leaving room not only for negotiation but also for varying interpretation, which is often beneficial for political purposes. This was seen, for example, in Allied peace proposals of May 6. Military objectives are, or should be, as unambiguous as possible. They are about employing lethal force and putting ordnance on targets. The difference goes a long way toward explaining why so many assumptions went awry in Kosovo.*⁸³

One other critical question was best stated by a UK Ministry of Defense (MOD) report which asked, "Why did Milosevic concede?" As mentioned, some have suggested that the threat

⁸¹ "Verbatim Special: The Balkan War," *AFM* (Aug 1999) Vol. 82, No. 8, p. 65, original quote from *WP*, 20 June 1999 [hereafter Verbatim, August].

⁸² *Ibid.*, original *NYT*, 12 June 1999.

⁸³ John T. Cotrell, Assumptions Fall in Kosovo," *AFM* (June 1999), Vol. 82, No. 6, p. 4.

of ground action or Russian/Finnish diplomacy convinced the dictator to quit. The UK MOD report suggested four reasons: 1) NATO and international (Russian too) unity and resolve, “strengthened as the crisis and air campaign continued;” 2) the increase “in the tempo of the air operations, and the huge damage and disruption they caused to his [Milosevic’s] forces’ operations, was a highly significant factor;” 3) Milosevic’s indictment by the “Criminal Tribunal for the Federal Republic of Yugoslavia” added pressure; and 4) “Finally, the increasing pace of the buildup of ground troops in neighboring countries.”⁸⁴

Most analysts would agree more or less with all or part of these reasons, however, it is worth examining each point. As Keegan points out, the buildup of ground forces, while a threat was, in fact, just that, only a threat. It was one which most NATO leaders, no matter how seriously they think they discussed this option, were highly reluctant to execute. The vision for President Clinton or Prime Minister Blair of U.S. or British men, and women, coming home in body bags or television clips, as in Somalia, of dead Americans dragged through the streets was not something their people or those of the other NATO nations would have stomached for long. This risk was particularly great for the President who had to face major Congressional and popular opposition to U.S. involvement at all. Many Americans wondered why U.S. servicemen had to suffer the inconvenience of going to distant Southeastern Europe to defend Albanian Muslims again? Many Americans wondered why their allies needed the United States to bail them out of a situation which was, after all, at Europe’s back door. Had not enough Americans died to guarantee a free and democratic Europe in World War II? The thought of a perhaps bloody ground conflict was, at best, a last option and this is something Milosevic had to know. Thus, the ground threat had to be less of a factor.

As for Milosevic’s indictments and world condemnation, such theories are ridiculous. If Milosevic were concerned with appearances, he would not have helped slaughter so many in Bosnia. If one accepted such notions, it would follow that Hitler worried about world condemnation over the final solution, or Stalin over his treatment of Kulaks, or Saddam Hussein

⁸⁴ MOD, UK, “Interface.”

over his treatment of the Kurds. The prospect of foreign outrage obviously had little or no effect on Milosevic.

There is little doubt that Russian and Finnish diplomatic efforts played a key role in concluding the affair, yet, as Keegan points out, there had been intensive negotiations by many parties long before 24 March. Most revealing is the fact that in many ways, earlier demands on Milosevic from the Rambouillet Accords were, in fact, less strict and less stringent than the ones he ultimately accepted. When the bombing first began, Milosevic was defiant and carried out the majority of expulsions and ethnic cleansing against the Kosovar Albanians. It is not a coincidence that this began to change when air ops intensified in late April.

NATO unity may well have had an effect, however this factor was uncertain at first and played a major role in political restrictions on air ops during the first month, thereby hampering the effectiveness of the air campaign. Clearly, once political leaders provided Generals Clark and Short with the means, material, and policy freedom to turn out the lights in Belgrade everything changed. It was at this point that NATO showed real unity and Milosevic showed real fear.

Regardless of one's perspective, airpower was undoubtedly an important facet of the conflict's resolution, political blunders notwithstanding. It might be imprudent to assert that either strategic or tactical airpower was decisive individually, the combination was certainly



Figure 10: Serbian air defenses

effective. Milosevic's friends were hurting in late May. Those elites who kept him in power and far from the long arm of international justice were inconvenienced, frightened, hurt in the pocketbook, or even killed. These problems, direct results of the allied air campaign, eventually proved too much for

the Serbian leader. As General Clark remarked when asked if the operation had been a success,

“The final standard is: Did it work? Did it provide crucial leverage to diplomacy? I think yes, it did?”⁸⁵

Kosovo’s Effect on Strategic Bombing Theory and Doctrine

From a technical point of view, Kosovo suggested that American airmen had responded to the “lessons” of the Gulf War, one of which was that the enemy still could enjoy a weather sanctuary. The B-2 armed with JDAMS showed that accurate attacks could be made through adverse weather conditions—targets could be hit without being in sight. Even in the case of the Chinese Embassy, the JDAMS hit the intended target—the problem being that intelligence erroneously identified it as a target. This experience suggested that a fundamental doctrinal change was afoot. JDAMS are relatively cheap, and can be bought in great numbers. They are also capable of being adapted to fit much smaller weapon systems—weapons that can do the jobs of much larger ones provided they can accurately and consistently hit the target.

The JDAMS program was in its infancy at the time of Kosovo and only the B-2 had been certified to carry it. In the time since that conflict, practically all the air-to-ground aircraft currently in the USAF inventory have been certified for the JDAMS. In addition, success immediately led the U.S. to retrofit its other precision weapons, like the laser and television-guided bombs, with the relatively simple inertial measurement units and global positioning system receivers that turned them into all-weather weapons.⁸⁶ All these developments had two major doctrinal implications for the future of strategic air war.

First, the strategic airpower advocates had argued that the coming of PGMs allowed air forces to undertake parallel instead of the traditional sequential air campaigns. That is to say they could simultaneously fight for command of the air and damage the enemy’s vital centers on the ground. However, the PGMs of that day were very expensive and required clear air for their

⁸⁵ “Verbatim,” August, original *NYT*, 12 June 1999.

⁸⁶ Air Force Materiel Command, Directorate of Science and Technology, Wright-Patterson AFB, Ohio, “FY96 Conventional Armament Technology Area Plan,” 1 August 1995, p. 13; David A. Fulghum, “Small Smart Bomb to Raise Stealth Aircraft’s Punch,” *Aviation Week & Space Technology*, (27 February 1995): p. 50; U.S. Department of the Air Force, White Paper, “Precision Guided Munitions Investment Strategy,” 25 April 1995, p. 19; Tirpak, “Brilliant Weapons,” p. 53; I-250, “Small Smart Bomb,” *Jane’s Air Launched Weapons*, 11 November 1998, n.p. Available online at <http://fore.thomson.com/janes>.

delivery. Following Kosovo, JDAMS and a complementary weapon coming on line known as the Joint Standoff Weapon (JSOW) had apparently overcome these limitations. The JSOW has similar guidance, is relatively cheap, and can be delivered from much greater ranges than JDAMS. It can also be equipped with a precision seeker when necessary.⁸⁷ Both these weapons can inflict the same damage with fewer weapons than were necessary in the past, giving rise to the second great doctrinal implication.

It is a well-established principle of crises that the earlier the force arrives, the less force is required. The fall of the USSR entailed a huge draw down in western armed forces and, in the case of the United States, major reductions in overseas garrisons. The subsequent absence of a clearly defined threat mandated that major forces would have to be stationed in the Continental United States (CONUS) and provided with the mobility necessary for expeditionary operations rather than the forward based structures of the Cold War. By the end of the century, the pace of warfare had accelerated to the point where CONUS based forces not only had to be mobile, but also rapidly mobile. Thus, the fact that far fewer munitions will be required than in the past

⁸⁷ "Fraser approves JDAM/JSOW go-ahead; seeker commonality stressed," *Aerospace Daily*, (25 June 1992): p. 494; John Boatman, "USAF, navy agree on 'smart' bombs," *Jane's Defence Weekly*, (29 February 1992): 6; David A. Fulghum, "DAB Approves Development of a Joint Stand-Off Weapon," *Aviation Week & Space Technology*, (15 June 1992); "Pentagon to Approve JSOW Development, Initial Work on Direct Attack Munition," *Aviation Week & Space Technology*, (1 Jun 1992): 28; Clifford Beal, "Bolt from the blue: stand-off weapon developments," *International Defense Review*, (Aug, 1992): 757-62; Clifford Beal, "Bolt from the blue: Part 2," *International Defense Review*, (Dec, 1992): 1173-80; Eric H. Biass, "The Guided Dispenser: the Ultimate Attack Weapon?" *Armada*, Vol 15, (Aug/Sep, 1991): 6-14; Roy Braybrook, "Sharpening the 'Eyes' of Air-to-Surface Guided Weapons," *Armada*, Vol. 16, (Aug/Sep, 1992): 6-20; "USAF Holds Pre-JDAM Test," *Aviation Week & Space Technology*, (5 July 1993): 27; "ATARS Sensors Likely to Find New Homes," *Aviation Week & Space Technology*, (5 July 1993): 28; John Haystead, "Autonomous Weapons--Are We Smart Enough for Them?" *Defense Electronics*, Vol. 24, (Feb, 1992): 29-37, 65; Heinz Hilgendorf, "Are Stand-off Air-to-Ground Weapons a Necessity?" *Military Technology*, (Jun, 1993): 57-62; Philip J. Klass, "SAR Seeker Seen as New Contender to Guide 2,000-lb. Mk.84 Bomb," *Aviation Week & Space Technology*, (30 Mar 1992): 64-6; David A. Fulghum, "JDAM Errors to be Slashed," *Aviation Week & Space Technology*, (27 February 1995): 46-7; John D. Morrocco, "Navy Primed for JSOW Critical Design Review," *Aviation Week & Space Technology*, (27 February 1995): 48; Glenn W. Goodman, Jr., "Mining Silver Bullets: Navy and Air Force Pursue Longer Range, Autonomous Standoff Weapons," *Armed Forces Journal International*, (July, 1997): 26-7, cites an accuracy of 33 feet for JDAMS and JSOW, and states that Low Rate Initial Production has been approved for both the JSOW and the Navy's Standoff Land Attack Missile, Expanded Response; Roy Braybrook, "Not-too-close Encounters of the Air-to-Ground Kind," *Armada International*, Vol. 20, (February/March 1996): 28-39; James W. Canan, "Smart and Smarter," *Sea Power*, Vol. 38, (April, 1995): 93-6; JDAMS achieved rave reviews aboard the B-2 in that both platform and weapon performed in a spectacular way during the Kosovo air campaign. That generated complaints that this economical weapon was not on hand in sufficient numbers to equip the entire strike force, David A. Fulghum and Robert Wall, and John Morrocco, "Weapons, Intelligence Targeted in Probe," *Aviation & Space Technology*, (26 July 1999): 69-71.

and that the same destructive power can be put into ever smaller packages both tend to enable the formulation of a practical expeditionary doctrine that might otherwise have been impossible. Standard munitions are much too heavy to be routinely moved by air and, under current conditions, pre-positioning ships can never be numerous enough to cover all the threats in the world. Further, when the precision weapons are packed into small enough bombs, then they can be carried internally in stealth aircraft. This should result in another huge weapons cost savings. It also reduces the need for auxiliary aircraft like air escorts and defense suppression airplanes not to mention all the logistical support these entail.

Perhaps it is not too much to suggest then that the combination of the Gulf War and Kosovo experiences might enable U.S. airpower to preserve national security at an affordable price notwithstanding the amorphous nature of the present threats. Some have suggested that the platforms now in development might be the last manned air vehicles we will ever build. But it might be possible to combine them with the new munitions to sustain a real air expeditionary force doctrine.

On another level, the experience in the Balkans requires the most straightforward analysis. Kosovo air operations during the first four weeks suggested to many air leaders, as had Vietnam, the difficulty of allowing political restriction to dictate tactical decisions and limit general offensive capability of airpower. The tension between maintaining coalition solidarity and the desire to push for parallel attack is probably inherent in all future campaigns—certainly in the short term. The last six weeks in Kosovo tended to verify the efficacy of the basic U.S. Air Force aerospace doctrine since there can be little question that airpower, once provided proper leeway, can exert influence beyond the battlefield and diminish the enemy's means and will to fight by taking the war to its heartland. During the last days of the conflict, it also performed its battlefield role with equal effectiveness. Former CSAF Tony McPeak has already summed it up best by saying:

So many people have predicted that air power would be ineffective if it's used alone that, now, they have to describe what's happened in this case as some sort of a defeat. Now victory comes in many

*flavors, and this one will obviously not be to everyone's taste, but the fact of the matter is, air power carried the day here.*⁸⁸

Even those who thought there was more to the successful termination of the conflict than airpower alone, such as Secretary of Defense Cohen, tended to grant a decisive role to the air attack. So, airpower proponents had ammunition to argue that Kosovo was a victory and a confirmation for air power theory and doctrine, one that again demonstrates its decisive nature and its potential for the future. Notwithstanding the role of diplomacy and the implied threat of a ground invasion, airpower advocates had additional evidence for the argument that sometimes, airpower may indeed be able to win alone.



⁸⁸ *Ibid.*, original General Tony McPeak, USAF, Ret., PBS News Hour, 16 June 1999.



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