



# The Balkan Air War



**The European war that began 10 years ago this month was fought—and won—with airpower alone.**

By Adam J. Hebert, Executive Editor

DOD photo by SrA. Mitch Fuqua

**I**t was 10 years ago this month that Slobodan Milosevic, the strongman of Serbia, rejected peace talks and launched a massive, brutal attack on the ethnic Albanian population of Kosovo. This amounted to a direct challenge to NATO, which responded with Operation Allied Force, the air war designed to compel Belgrade to halt its bloody operations.

Allied Force was poorly planned, launched with a false expectation of quick success, constrained by artificial political limitations, and aimed at a ruthless and despotic leader who was only too determined to absorb the air attacks and fracture the Western alliance with his intransigence. In short, it seemed doomed to fail.

Remarkably, though, Allied Force proved to be a success. After 78 days of bombing, with no use of ground forces, the US-led NATO air campaign forced Serbia to capitulate and withdraw from Kosovo. Military historian John Keegan, formerly a harsh airpower critic, wrote that “the capitulation of President Milosevic proved that a war can be won by airpower alone.”

This war’s immediate cause was Milosevic’s unwillingness to come to



Staff map by Zaur Eylanbekov



USAF photo by SrA. Jeffrey Allen

peaceful terms with Kosovo's ethnic Albanian majority. After the collapse of the Rambouillet talks attempting to replicate the Dayton Peace Accords (which came after Operation Deliberate Force and settled Milosevic's previous conflict with Bosnia), regular Serb forces moved into Kosovo and initiated a deadly ethnic cleansing campaign.

NATO long before had promised it would resist such a move, and on March 24, Operation Allied Force began with a series of air strikes and cruise missile attacks. These were extremely limited, though. On March 24, there were only 400 aircraft committed to the campaign—just 120 of them strike aircraft.

"I don't see this as a long-term operation," sniffed Secretary of State Madeleine K. Albright. Javier Solana, the NATO secretary general, said he expected the war to be over before NATO's 50th anniversary summit began April 23.

Moreover, NATO political officials announced the alliance's military intentions in advance. President Clinton himself immediately ruled out the use of ground forces, saying the day the

**Opposite, an Air Force F-15E Strike Eagle takes off from Aviano AB, Italy, for an Allied Force mission in March 1999. The operation was dominated by US airpower, but wholly reliant upon the European allies for logistical support. Left, targets in Serbia and Kosovo together formed a war zone roughly the size of Kentucky.**

war began, "I don't intend to put our troops in Kosovo to fight a war."

From the beginning, therefore, this was to be an air-only operation, and Milosevic knew it. Recently retired Adm. Leighton W. Smith, who led the Deliberate Force attacks, said telling the enemy which military options you consider to be off-limits is "the absolutely dumbest thing you can do."

### Target Limits

Once the bombs started to fall, Milosevic accelerated his planned ethnic cleansing campaign. He dispersed his Yugoslav army forces and hunkered down in an attempt to wait out the anticipated punitive campaign.

The alliance faced other serious problems as well. The need to keep all 19 NATO members on board slowed down decision-making, produced highly limited target lists, and forced the alliance to embrace only the most cautious rules of engagement. Any NATO member could reject any target, and the war was highly unpopular in some member countries. As then-Maj. Gen. Ronald E. Keys put it, there was no single target that could win the war, but there were many sites that, if hit, could potentially lose the war.

Therefore, alliance leaders initially put off-limits entire categories of targets, including any in downtown Belgrade, for fear of causing civilian casualties.

Similarly, most NATO aircraft on combat missions were kept flying above 15,000 feet to reduce the risk of being

**At Aviano, airmen from Shaw AFB, S.C., load a cart with AIM-120 air-to-air missiles as F-16s in the background await their next Allied Force mission.**

shot down by Serbia's deadly surface-to-air-missile network. This protected the aircrews but made it more difficult to visually identify small mobile targets in the Balkan terrain.

The absence of a credible ground threat meant Milosevic's forces did not have to mass in defensive positions, where they would be easy targets for airpower. They were instead free to disperse as single trucks or tanks, hide under trees, and spread out through neighborhoods.

Initially at least, airpower was most effective as a strategic weapon. "What had begun as a coercive NATO ploy aimed at producing Milosevic's quick compliance quickly devolved into an open-ended test of wills between the world's most powerful military alliance and the wily and resilient Yugoslav dictator," wrote RAND analyst Benjamin S. Lambeth.

This was far from ideal. "I'd have gone for the head of the snake on the first night," said USAF Lt. Gen. Michael C. Short, who ran the air war for NATO. "I'd have turned the lights out" in Belgrade immediately, he said.

"Airpower could not [directly] stop the door-to-door... thuggery and ethnic cleansing," added Chief of Staff Gen. Michael E. Ryan. Targeting critical nodes in Belgrade was "the only way



**The wreckage of this MiG-29 was one of five Serbian MiGs that NATO fighters shot down in the early days of the campaign. Enemy SAMs proved harder to kill.**

you were going to be able to do that.” Unfortunately, the need for unanimous consent prevented this from happening until many weeks into the campaign.

Many observers and participants felt that caution was a higher priority than success, but in other cases the need to “do something” meant the limited target set was hit repeatedly.

“We began bombing the first night with our objective being to demonstrate NATO ‘resolve,’” said Short. It is “tough to tell [pilots] at Aviano to go out and put [their lives] on the line to ‘demonstrate resolve.’ We need to know what our military objectives are, and we need to understand what we are trying to accomplish.”

The war began conventionally. The US-led NATO forces focused on enemy air defenses and fixed military targets, while Serbia did its best to hide and then harass and hit the attackers. NATO fighters shot down five Serb MiG-29s in the first three days, and NATO was able to knock most Serb airfields out of commission relatively quickly.

The enemy’s integrated air defense system was another story altogether. Despite NATO’s best effort to knock out the Serb air defenses, enemy missiles and radars remained a threat to allied aircraft almost to the bitter end.

Learning from Iraq’s experience in Desert Storm, Serb air defense forces left their radars “off” at almost all times, only turning them on long enough to fire a quick volley of SAMs at attacking aircraft. Since many of these

systems were small and mobile, they were extremely difficult for NATO to find and destroy. In fact, the number of SAMs fired at allied aircraft actually increased from week to week early in the war.

On the fourth night of the campaign, the unthinkable happened. An F-117 stealth attack aircraft, previously regarded as being untouchable, was shot down. Its pilot was saved from approaching Serb forces after a harrowing overnight rescue mission. Later, a USAF F-16 was shot down, too; its pilot also safely recovered.

### Count on the JDAMs

The tenuous political situation, the early combat losses, and NATO’s squishy goals could have led to the alliance declaring victory and going home without really accomplishing anything. Milosevic forced NATO’s hand, however.

As the scope and magnitude of the Serb brutality emerged into public view, several things became clear. Serb forces were marauding across Kosovo. There would be a massive humanitarian crisis if hundreds of thousands of displaced people could not return home by winter. There was no reason to believe this ethnic strife would end in Kosovo. Milosevic was directly challenging the credibility of NATO and the United States.

NATO had to find a way to force the Serb forces from Kosovo and allow displaced civilians to safely return home.

This meant more aircraft were needed to hit additional targets, and the attacking forces had to take more risks.

Precision munitions, including cruise missiles, were in short supply. Weapons grew so scarce, in fact, that Gen. Richard E. Hawley, the head of Air Combat Command, memorably commented that it was “really touch and go as to whether we [would] go Winchester on JDAMs before ... the next delivery.”

Lousy weather in the Balkans meant that the US satellite guided Joint Direct Attack Munition was often the only weapon that could be counted on to hit its targets. Only the B-2 bomber could carry the brand-new JDAM. The Air Force had received just 19 stealth bombers at the time, but many of them flew round-trip missions from Whiteman AFB, Mo., to hit multiple targets. Short said he quickly came to expect 16 different designated impact points from each B-2 mission. Once, a B-2 on a single mission destroyed two enemy airfields.

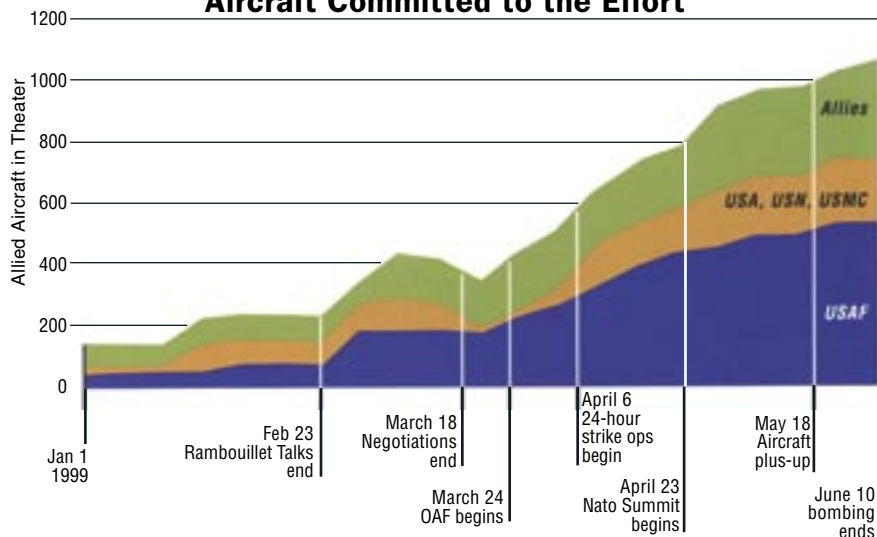
It took 12 days for the allies to hit the same number of targets as the Desert Storm coalition had hit in the first 12 hours of that war. The need for consensus bred a cautious, incremental campaign that was disturbingly reminiscent of the Rolling Thunder air campaign in Vietnam. Attacks on mobile ground targets didn’t begin until the second week of April, and Belgrade was still off-limits.

The gradual ramp-up in attacks let Milosevic and the Serbian people adjust, acclimate, and build an expectation that they could absorb NATO’s best hit. For a while this was true, but more and more combat power was applied to a growing target set in an area the size of Kentucky.

On April 6, Milosevic moved to fracture the alliance by declaring a unilateral cease-fire. His obvious objective was to set at odds those favoring continuation of the war and those ready to throw in the towel. As it turned out, though, NATO had by that time resolved to stay with the bombing campaign and see it through to victory.

Defense Secretary William S. Cohen said that within NATO, asking for anything other than a gradually expanding air campaign would have scuttled the whole operation. And although the US provided the lion’s share of Allied Force’s aircraft, it was wholly dependent upon European allies for logistics—including overflight rights and access to 47 bases by war’s end.

## Aircraft Committed to the Effort



**As NATO got serious about the operation, the number of aircraft dedicated to Allied Force steadily increased. By June 3, the paltry initial total of 400 aircraft had increased by two-and-a-half times, flying from 47 bases.**

The only allied casualties came on May 5, when two Army Apache pilots died in a crash during a training flight in Albania. This was the second Apache attack helicopter crash in two weeks, and put a tragic exclamation mark on the Army's Task Force Hawk deployment.

Army Gen. Wesley K. Clark, Supreme Allied Commander, Europe, requested 24 Apaches early in the war to provide low-level firepower when most fighter missions were being flown above 15,000 feet. Task Force Hawk's deployment was a fiasco, however.

The US Army in 1999 was not configured or trained for expeditionary missions. The deployment required 7,745 troops—337 per Apache—as 23 helicopters ultimately made the trip. The support materiel ate up 269 C-130 sorties and nearly 500 C-17 sorties. The Germany-based Apaches took 17 days to reach Albania, a short flight away. Yet after this enormous logistical undertaking, the Apaches never flew a single combat mission.

Task Force Hawk was an anomaly, however: As the war dragged on, most things improved. The number of aircraft and weapons steadily increased, the target list and rules of engagement were slowly but surely upgraded, aircrews became familiar with the war zone, diplomatic pressure on Milosevic increased, the weather cleared, and Serb air defenses were relentlessly attacked.

Outside observers were largely unable to detect the results of the improv-

ing campaign because official statements did little to inspire confidence. Many were quick to judge Allied Force a failure, and many more said victory would be impossible without land forces joining the fight.

All the while, though, Serbia's will and ability to resist were being eroded.

For Allied Force, there was no equivalent to World War II's D-Day, a hinge event. The closest thing to a turning point was not even military in nature; it was NATO's 50th anniversary summit in Washington, D.C. The April 23 event was supposed to be NATO's Golden Anniversary, but it in fact became an Allied Force strategy session. The allies reaffirmed their commitment to success and agreed they were in this battle for the long haul.

### Grinding Down the Opposition

The importance of the unified front was highlighted May 7, when satellite guided bombs dropped from an Air Force B-2 bomber destroyed the Chinese Embassy in Belgrade. The drop was a perfect strike, but an intelligence disaster. The embassy should never have been targeted; NATO thought it was striking the headquarters of the Yugoslav Federal Directorate of Supply and Procurement. A series of Intelligence Community errors had failed to place a new Chinese Embassy at that particular location.

The attack killed three Chinese nationals and led to a three-week halt of bombing in Belgrade as maps and

databases were double-checked—but it did not fracture the alliance. Nor did a handful of other highly publicized bombing mistakes that accidentally killed civilians.

NATO and the US dealt with problems that have since become common. One was Serb military forces hiding in civilian areas and using "human shields" to deter attacks. Another was the challenge of the 24-hour news cycle that turned every bombing mishap into an instant worldwide story.

Neither side could claim to have won the public relations war, however: The world was also fully aware of the humanitarian crisis brought on by Milosevic's thugs in Kosovo. Then, on May 27, Milosevic was indicted by a United Nations tribunal on war crimes charges.

It is now clear that the war was entering its final phase. Still, there were few outward signs that Serb resistance was about to crumble. In late May, NATO expanded the targeting list once again, and began to take the war to targets affecting the Serb people. Factories, communications systems, and power grids were damaged or destroyed, putting Serbia under more duress than it had felt up to that point.

"I would say the air campaign is working," opined Clark on May 30.

Details were painfully hard to come by, as they had been throughout the campaign. However, by June 3, NATO had committed to OAF duty some 1,045 aircraft—two-and-a-half times the initial number—flying from 47 bases. Some days saw the alliance mount more than 400 strike missions.

The cumulative effort slowly but surely ground down the Serbian opposition. Roads and railways throughout Serbia were destroyed. Allied bombs dropped Belgrade's bridges over the Danube: Across the country, 70 percent of the road and 50 percent of rail bridges across the Danube were brought down.

The economy began to stutter. Once NATO agreed to go after them, critical industries were hard hit. One vehicle and munitions factory that was destroyed left 15,000 Serbs out of work and affected 40,000 other subcontractors. Belgrade's electrical power was knocked out and roughly 30 percent of Serbia's radio relay networks were damaged.

There was another trend as well: As Rebecca Grant noted in 1999, "Good weather and long summer days ahead



**Slobodan Milosevic was turned over to a UN war crimes tribunal when voted out of office after OAF. Here, he is seen under guard at The Hague in 2001.**

meant that more of Milosevic's country and his military forces would be exposed to devastation."

In Kosovo, direct military targets became more vulnerable as the weather improved and NATO pilots learned the lay of the land. Tanks, artillery pieces, and armored personnel carriers were hit with increasing frequency, and Serbia's losses kept piling up. A NATO assessment after the war estimated that roughly 600 pieces of heavy equipment had been hit—about a quarter of Milosevic's total inventory.

Permanent military facilities in Serbia were hammered as well. Over time, the Serb Army's ability to wage war was being destroyed.

By the end of the war, 100 percent of the Serb petroleum refining facilities were destroyed, ammunition production was 65 percent destroyed or damaged, aviation repair capabilities were down 70 percent, and armored vehicle repair was 40 percent destroyed or damaged. Serbia's economic output was reduced by more than half. The pressure on Milosevic, his army, and the Serbian people was quickly becoming unbearable.

On June 5, Clark called special attention to "the accuracy of the precision weapons, the avoidance of losses, and the increasing destruction of the Serb forces." Four days later, NATO and the battered Serbian forces agreed on the terms of a Serb withdrawal from Kosovo. The bombing stopped June 10.

The war was won, and the alliance had employed only air forces to do the job. Before long, however, a host of

"boots on the ground" advocates began struggling to recast history in a different light. Some claims were fanciful—for example, Army Lt. Gen. John W. Hendrix said Belgrade capitulated as a result of the threat of a ground invasion. "The reason Slobodan Milosevic finally caved in—a primary reason—was the presence of US Army ground forces in Albania," he explained.

Other claims willfully ignored reality. The standout in this category was *Newsweek*, which asserted that allied air forces had managed to destroy only 14 enemy tanks during the entire 78-day war. This claim, unfortunately, was parroted by credulous news outlets around the world.

### The Indispensable Condition

For the record, a comprehensive Air Force study led by Brig. Gen. John D. W. Corley (now the commander of Air Combat Command) fully documented 93 successful tank kills.

In any event, it ultimately did not matter if allied forces destroyed zero enemy tanks, because the end result was the same—Serb defeat and withdrawal without the use of NATO ground forces.

Clark, the NATO supreme commander, told the Senate a few months after the end of the war, "I believe the indispensable condition for all the other factors was the success of the air campaign itself." As late as early 2001, Clark was declaring, "The US Air Force saved me, and it saved NATO."

However, Clark had a strange sort of Road-to-Damascus moment in the af-

termath of the war. Clark evidently had his eyes opened to a new reality, at just about the same time as the publication of his book, *Waging Modern War*. In it, Clark claimed he was worried that "the air campaign was in serious trouble if it persisted on its present course" and that "planning and preparations for ground interventions were well under way." Even though there is no objective evidence supporting Clark's claim, and even though it would have taken many months for NATO to build up a ground offensive, Clark maintained, "I am convinced that this, in particular, pushed Milosevic to concede."

Retired Marine Corps Lt. Gen. Bernard E. Trainor found much to dislike about, of all things, airpower's effectiveness; he thought it was too much of a good thing. "Another troubling ... aspect of the so-called 'immaculate' air campaign," wrote Trainor, "is the ability to drive an enemy to his knees without shedding a drop of the bomber's blood." Yes, by "the bomber," Trainor meant the American airmen sent into battle. Evidently, he found their safety to be objectionable.

Those with no commercial or political axes to grind tended to see things in a different light. What they saw was 11 weeks of combat against a competent and determined enemy, the result of which was military victory, a safe return for displaced Kosovars, a total of two allied deaths, zero combat fatalities, and unprecedented safety and precision.

OAF's biggest weakness was that it took too long to gather steam, giving Milosevic time to ransack Kosovo. Yet more than 38,000 sorties were flown, 28,000 bombs were dropped, and fewer than 500 noncombatants died, despite numerous attacks on Belgrade. Given the normal fog and friction of war, these results are remarkable.

NATO-led peacekeepers promptly moved in to protect Kosovo, giving land force advocates the presence they had long sought. In a few months, Milosevic was turned out of office in the national election of 2000. He was later arrested by Yugoslavia's new government so he could be tried in The Hague on war crimes and genocide charges. Milosevic died in his prison cell in March 2006, before the trial was complete.

On Feb. 17, 2008, Kosovo declared its independence from Serbia. Two million Kosovars live in the democracy that is now Europe's newest nation. ■