In the predictable rush to identify “lessons learned” that followed in the wake of the air war’s successful outcome, senior administration officials hastened to acclaim Operation Allied Force as “history’s most successful air campaign.” Yet NATO leaders on both sides of the Atlantic had little to congratulate themselves about when it came to the manner in which the air war was planned and carried out. On the contrary, there was a dominant sense among both participants and observers that the desultory onset of Allied Force and its later slowness to register effects reflected some fundamental failures of allied leadership and strategy choice.

Indeed, the six years that preceded Allied Force saw a clear regression in the use of air power after the latter’s casebook performance in Desert Storm. With the singular exception of Operation Deliberate Force in 1995, a trend toward what came to be called “cruise missile diplomacy” had instead become the prevailing U.S. pattern, owing to the ability of cruise missiles to deliver a punitive message without risking the lives of any U.S. aircrews. The origins of this pattern went back to June 1993, when President Clinton first ordered the firing of several TLAMs in the dead of night against an empty governmental building in Baghdad in symbolic reprisal for confirmed evidence that Saddam Hussein had underwritten an assassination attempt against former President George Bush.

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That trend was next reflected in the administration’s unwillingness or inability to use air power decisively in dealing with Bosnian Serb atrocities throughout the two years before Operation Deliberate Force, and in the costly, yet apparently ineffectual, TLAM strikes launched later by the administration against presumed assets of the terrorist Osama bin Laden in Sudan and Afghanistan.\footnote{In fairness to the Clinton administration, it must be said that bombing the Bosnian Serbs unilaterally was not a realistic option for the United States as long as three NATO allies (France, the Netherlands, and the United Kingdom) had troops on the ground who would have been helpless against Serb reprisals had U.S. air strikes taken place. It was only after the UN Protection Force (UNPROFOR) pulled back into defensible positions so that the Serbs could not take its troops hostage that Operation Deliberate Force became politically feasible. Weakness on the ground can often negate strength in the air.} It culminated in the three-day Operation Desert Fox, a mini-air operation that was executed against Iraq, to no significant consequence, at the very height of President Clinton’s impeachment trial in December 1998. Less than a year earlier, a more serious campaign plan called Operation Desert Thunder, set in motion shortly after Iraq had expelled the UN’s arms inspectors in January 1998, was aborted by President Clinton literally at the last minute, as allied strike aircraft were taxiing for takeoff, in response to the extraction by UN Secretary General Kofi Annan of an eleventh-hour, later unfulfilled, promise from Saddam Hussein to permit UN inspections.\footnote{For an informed, if also sharply judgmental, account of this history, see Joshua Muravchik, “The Road to Kosovo, \textit{Commentary}, June 1999, pp. 17–23. See also Lieutenant Colonel Paul K. White, USAF, \textit{Crises After the Storm: An Appraisal of U.S. Air Operations in Iraq Since the Persian Gulf War}, Military Research Papers No. 2, Washington, D.C., Washington Institute for Near East Policy, 1999.} In all of these cases, the declared emphasis was merely on “degrading” or “damaging,” rather than destroying, enemy assets, so that the operation could be terminated at any moment in a manner allowing success to be declared.

That may have been the administration’s going-in hope for Operation Allied Force as well. Not long after the effort began, however, senior U.S. military leaders began voicing off-the-record misgivings over the slow pace of the air operation, its restricted target base, and its rules of engagement that all but proscribed any serious application of air power. One Air Force general spoke of officers in Europe who had characterized the air war to date as “a disgrace,” adding that “senior military officers think that the tempo is so disgustingly slow it
makes us look inept.”4 Another, harking back to the initial concept of operations developed for Desert Storm, complained: “This is not Instant Thunder, it’s more like Constant Drizzle.”5 Yet a third Air Force general, reflecting the consensus of most airmen, commented that “the hammer is working just fine. But when the blueprints have to undergo revision each day by 19 separate architects before it is determined where to drive the nail, one has to wonder what the final product is going to look like.”6

Indeed, the highly politicized and sometimes seemingly random targeting process was so cumbersome that Clark himself would discover from time to time that he was stymied by the system as action time neared.7 The frequent hesitancy and indecision on the part of NATO’s political leaders, and the resultant fits and starts which that indecision inflicted on the daily target allocation machinery, ended up producing what some uniformed critics later faulted as “ad hoc targeting”: Air strikes were demanded on the same day that they had been approved, missions that had not yet been approved were assigned to the JFACC, and those same missions were later removed from the list at the last minute if they had not been approved by NATO’s civilian authorities. The resulting confusion led the commander in chief of Allied Forces in Southern Europe, Admiral James Ellis, to complain: “We don’t like this kind of process where something could be left on [the ATO] by omission.”8 The burdensome rules and restrictions that dominated the target approval process, moreover, contributed to a defensive and reactive mind-set among target planners and mission coordinators at the working level, who

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7To illustrate, Clark recalled after the cease-fire that he would often have to call Solana at the last minute with an urgent request like: “You’ve got to help me with target 183. I need 183.” Michael Ignatieff, “The Virtual Commander: How NATO Invented a New Kind of War,” *The New Yorker*, August 2, 1999, p. 34.

8Ibid.
were said by some to be locked into a resigned “we can’t do it” position rather than amenable to a more creative “let’s try it” attitude.9

To be sure, it was not as though NATO’s uniformed professionals had been railroaded into an operation against Milosevic without having given it prior consideration. On the contrary, serious and detailed options planning for an air operation of some sort against Yugoslavia had begun at USAFE headquarters as far back as June 1998—planning that was never ultimately made use of for political reasons. Nevertheless, it became clear, shortly after the bombing effort began, that the relatively seamless performance by the coalition in Desert Storm was not to be replicated in Allied Force. Instead, what unfolded was a highly dissatisfying application of air power that showed not only the predictable fits and starts of trying to prosecute a war through an alliance of 19 members bound by a unanimity rule, but also some failures even within the operation’s U.S. component to make the most of what air power had to offer within the prevailing constraints of alliance warfare.

ALLIED MISCALCULATIONS AND FALSE HOPES

To begin with, despite the ultimate success of Allied Force, a misjudgment of near-blunder proportions came close to saddling the United States and NATO with a costly and embarrassing failure: NATO’s leaders did not appreciate the historical and cultural importance of Kosovo to the Serbs and the consequent criticality of Kosovo to Milosevic’s continued political livelihood. Fortunately for the allies, their faulty assessment was not a show-stopper, although it easily could have been had Milosevic refrained from launching his ethnic cleansing campaign and instead merely hunkered down in a defensive crouch to wait out the bombing in a contest of wills with NATO. Once he elected to raise the stakes by proceeding with Operation Horseshoe, however, NATO’s determination to prevail at all cost deprived his strategy of any foundation it may previously have had.

9Roundtable discussion with Hq USAFE/XP, USAFE/DO, and USAFE/IN staff, Ramstein AB, Germany, May 2, 2001.
One reason for NATO’s overconfidence that air power alone would suffice in forcing Milosevic to yield on Kosovo was almost surely a misreading of the earlier Bosnian war and the role of Operation Deliberate Force in producing the Dayton accords of 1995. As has been widely noted since Allied Force ended, Bosnia was a part of the former Yugoslav Federation where Milosevic generally got what he wanted and to which he was not particularly deeply attached. In the negotiations that eventually yielded the Dayton accords, Milosevic succeeded in keeping Kosovo unburdened by their stricture at the price of abandoning Sarajevo to the Muslims, in a direct and outright betrayal of his Bosnian Serb compatriots, because there was no significant Serb minority living there.

In contrast, Kosovo was generally acknowledged to be of profound historical importance for Serbia. Among other things, it contained Kosovo Polje, the site where the Ottoman Turks defeated the Serb kings in 1389. As journalist Michael Ignatieff has pointed out, “it was here that the Kosovar lands passed under Turkish Ottoman control for more than five centuries; it was here that the Serbian dream of reconquering Kosovo one day was born, a dream not realized until just before World War I. And it was here, in 1989, that Milosevic held his infamous rally of 250,000 supporters which launched his campaign for a Greater Serbia.”10 With that depth of commitment, it was all but inconceivable that Milosevic would be talked out of Kosovo by allied diplomacy, even if supported by a threat of NATO bombing which he was inclined, for good reason, not to take seriously.11

Expounding further on the erroneousness of assuming that Operation Allied Force would produce the same relatively quick and easy results that the earlier Operation Deliberate Force had produced in the Bosnian crisis of 1995, Adam Roberts noted that “the mythologizing of [that earlier] campaign ignored one inconvenient fact: that it followed a period of sharp Serb military reverses on the ground,

11As one observer wrote of Operation Allied Force afterward, “so low was NATO’s credibility with Milosevic that the threat of war and even war itself were not enough to convince him that he had anything to fear.” Christopher Cvic, “A Victory All the Same,” Survival, Summer 2000, p. 178.
including the mass expulsion of the Serbs from the Croatian Krajina. Also, the 1995 bombing was not against Serbia proper, and thus did not arouse the same nationalist response as would the bombing in 1999. The real lesson of those 1995 events might be a very different one: that if NATO wants to have some effect, including through air power, it needs to have allies among the local belligerents and a credible land-force component to its strategy.\footnote{Adam Roberts, “NATO’s ‘Humanitarian War’ over Kosovo,” \textit{Survival}, Autumn 1999, pp. 110–111.} A false assumption that air power alone had produced the Dayton accords may thus have contributed further to NATO’s miscalculation that Milosevic could be induced to give up in Kosovo after merely a few days of token bombing.\footnote{This point bears emphasizing. It was not just that Serbia’s stakes in Kosovo were much higher than in Bosnia. The two cases diverged additionally in three fundamental ways, each of which should logically have led the United States and NATO to adopt a more robust and considered strategy in the Kosovo war. First, the 1995 NATO air campaign was linked to a major ground effort by Croatian and Bosnian forces coming in from the north and west and by some 10,000 NATO troops who had been deployed weeks prior to the onset of the bombing. Second, the objective of Deliberate Force was limited (ending the siege of Sarajevo) and achievable through a phased, coercive bombing campaign, whereas the goals of Allied Force were ambiguous (including forcing Milosevic back to the bargaining table) and more difficult to achieve through air power alone. Finally, even before the onset of the 1995 bombing, Milosevic had told U.S. negotiators that he was interested in forging a deal to end the war in Bosnia on terms acceptable to the international community. That was anything but the case on the eve of Allied Force. I thank Ivo Daalder of the Brookings Institution for calling my attention to these differences.} Aleksa Djilas, son of the Yugoslav cold-war dissident Milovan Djilas and an able intellectual in his own right, attested from first-hand knowledge that the West had “badly underestimated the Serbian attachment to Kosovo.”\footnote{Michael Dobbs, “‘Europe’s Last Dictator’ Digs In,” \textit{Washington Post}, April 26, 1999.} In light of that, rather than ask why it took so long for NATO’s bombing to coerce Milosevic to back down, a more appropriate question might be why he yielded as quickly as he did.

**PROBLEMS AT THE COALITION LEVEL**

In their joint statement to the Senate Armed Services Committee after the war ended, Secretary Cohen and General Shelton rightly
insisted that Operation Allied Force “could not have been conducted without the NATO alliance and without the infrastructure, transit and basing access, host-nation force contributions, and most important, political and diplomatic support provided by the allies and other members of the coalition.”

Yet the conduct of the air war as an allied effort, however unavoidable it may have been, came at the cost of a flawed strategy that was further hobbled by the manifold inefficiencies that were part and parcel of conducting combat operations by committee.

Those inefficiencies did not take long to manifest themselves. During the air war’s first week, NATO officials reported that up to half of the proposed strike missions had been aborted due to weather and “other considerations,” the latter, in many cases, being the refusal of some allies to approve certain target requests. Indeed, the unanimity principle made for a rules-of-engagement regime that often precluded the efficient use of air power. Beyond that, there was an understandable lack of U.S. trust in some allies where the most important sensitivities were concerned. The Pentagon withheld from the allies mission specifics for literally hundreds of sorties that entailed the use of F-117s, B-2s, and cruise missiles, to ensure strict U.S. control over those U.S.-only assets and to maintain a firewall against leaks from any allies who might compromise those operations.

In addition to the natural friction created by NATO’s committee approach to target approval, the initial reluctance of its political leaders to countenance a more aggressive air campaign produced a resounding failure to capitalize on air power’s potential for taking down entire systems of enemy capability simultaneously. In his first interview after Allied Force had begun six weeks earlier, the air component commander, USAF Lieutenant General Michael Short, was frank in airing his sense of being constrained by the political limits imposed by NATO, pointing out that the graduated campaign was

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counter to all of his professional instincts.\textsuperscript{18} Short further admitted that he was less an architect of the campaign than its implementor. He was particularly critical of NATO’s unwillingness to threaten a ground invasion from the start, noting that that failure was making it doubly difficult for NATO pilots to identify their targets because of the freedom it had given VJ forces to disperse and hide their tanks and other vehicles.

Finally, Operation Allied Force was hampered by an inefficient target planning process. Because NATO had initially expected that the bombing would last only a few days, it failed to establish a smoothly running mechanism for target development and review until late April. The process involved numerous planners in the Pentagon and elsewhere in the United States, at SHAPE in Belgium, at USEUCOM headquarters in Stuttgart, Germany, and at the CAOC in Vicenza, Italy, with each participant logging on daily to the earlier-noted secure digitized military computer network called SIPRNET.

Daily target production began at the U.S. Joint Analysis Center at RAF Molesworth, England, where analysts collated and transmitted the latest all-source intelligence, including overhead imagery from satellites and from Air Force Predator, Navy Pioneer, and Army Hunter UAVs. Because the United States commanded the largest number of intelligence assets both in the theater and worldwide by a substantial margin, it proposed most of the targets eventually hit, although other allies made target nominations as well.\textsuperscript{19} With the requisite information in hand, target planners at SHAPE and USEUCOM would then begin assembling target folders, conducting assessments of a proposed target’s military worth, and taking careful looks at the likelihood of collateral damage. In addition, lawyers would vet each proposed target for military significance and for conformity to the law of armed conflict as reflected in the Geneva Conventions.

Once ready for review and forwarding up the chain of command for approval, these target nominations would then go to the Joint Target


\textsuperscript{19}General Wesley Clark, USA, testimony to the Senate Armed Services Committee, Washington, D.C., July 1, 1999.
Coordination Board for final vetting. That board’s recommendations would then go to Admiral James Ellis, commander of Joint Task Force Noble Anvil and commander in chief, Allied Force Southern Europe (CINCSOUTH), and his staff in Naples, who would review all target nominations and forward his recommendations to General Clark, who in turn would personally review each target to ensure that it fit the overall guidelines authorized by the NAC.20

Approved targets would then go back to Admiral Ellis, who would task both the USAF’s 32nd Air Operations Group at Ramstein Air Base, Germany, and the 6th Fleet command ship deployed in the Mediterranean to develop target folders. The 32nd AOG would assign multiple aim points per nominated target set and multiple weaponry solutions for a broad spectrum of air-delivered munitions. The 6th Fleet planning staff would do the same for TLAM targets.21 As one might expect, this exceptionally time-consuming process greatly limited the number of potential targets that could be struck at any given time. Moreover, even after these multiple hurdles had been crossed, an approved target could still be countermanded or withheld by U.S. or NATO political authorities.22

22Comments on an earlier draft by Hq USAFE/SA, April 6, 2001. As a rule, the 19 individual allies did not deliberate over every new target added to the list. True enough, the NAC—that is, all 19 members, from the United States to Luxembourg—had to agree to move from one phase in the air war to the next. On January 30, 1999, for example, the NAC authorized NATO’s secretary general to commence Phase I (attacking the IADS and some command and control targets) whenever diplomatic efforts had been deemed exhausted (as it turned out, on March 24, when Solana finally ordered Clark to begin the bombing). The NAC also approved moving to Phase II on March 27, thereby allowing NATO to strike against military targets north of the 44th parallel. Although it never approved Phase III, which entailed strikes against military targets throughout the former Yugoslavia, the NAC gave de facto approval to entering this phase on March 30. From that point on, aside from Britain, France, and the United States, no NATO country ever reviewed, let alone approved or vetoed, any individual weapon aim point. France insisted on reviewing targets in Montenegro; Britain, France, and the United States all demanded the right to review any target that had high political significance or was located in or near civilian areas where the risks of collateral damage were significant. But the remainder of the allies only got to vote on proposed new target categories. Moreover, targets struck by U.S. aircraft operating outside NATO but within USEUCOM were not subject to outside review unless they met these two criteria.
Further compounding the unavoidable inefficiency of this multistage and circuitous process, two parallel but separate mechanisms for mission planning and air tasking were used (see Figure 7.1). As noted earlier, any U.S.-specific systems involving special sensitivities, such as the B-2, F-117, and cruise missiles, were allocated by USEUCOM rather than by NATO, and the CAOC maintained separate targeting teams for USEUCOM and NATO strike planning. This dual ATO arrangement meant increased burdens on the planning system to execute workarounds in cases where automated mission planning systems could not support the dual process, as well as added complications in airspace control planning created by the presence of low-observable aircraft, the limited use of IFF systems in some cases, and the absence of a single, integrated air picture for all participants. Although the use of stealthy aircraft in this dual-ATO arrangement was dealt with by time and space deconfliction, it nonetheless made for problems for allies who were not made privy to those operations, yet who needed information about them in the interest of their own situation awareness and force protection.\(^2\) Commenting on the friction that was inevitably occasioned by this cumbersome system, General Short recalled in hindsight that he was constantly having to tell allied leaders to “trust me” regarding what U.S. assets would be doing and that he would have preferred to find a way of ensuring that the daily allied air operations schedule reflected those U.S. systems in some usable way. As it was, their absence led on occasion to some significant force deconfliction problems, such as U.S. aircraft suddenly showing up on NATO AWACS displays when and where they were not expected.\(^3\)

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\(^2\)This problem will only get worse as the low-observable F-22 and Joint Strike Fighter begin coming on line in significant numbers toward the end of this decade. Should the United States intend to use these third-generation stealth aircraft in a coalition context, as seems to be most likely, a dual ATO arrangement of the type used in Allied Force will not work. New standardized tactics, techniques, and procedures will need to be perfected and employed regularly in routine allied and combined peacetime training. I am grateful to my RAND colleagues James Schneider, Myron Hura, and Gary McLeod for this important insight.

PROBLEMS AT THE U.S. LEVEL

It was not only the alliance-induced friction that made the air war inefficient. As Allied Force unfolded, it became increasingly clear that even the U.S. military component was divided in a high-level
struggle over the most appropriate targeting strategy—a struggle reminiscent of the feuding that had occurred nine years earlier between the Army’s corps commanders and the JFACC, USAF Lieutenant General Charles Horner, over the ownership and control of air operations in Desert Storm.\textsuperscript{25} There was visible tension in this regard between General Clark and his air commander, General Short, over the heated issue of target priorities: Aggressive micromanagement on the former’s part was eventually met by understandably frustrated and increasingly transparent passive-aggressive rebellion against it on the latter’s. As Clark later characterized this difference of view in his memoirs, he considered the achievement of success against Serbian ground troops in the KEZ to be the air effort’s “top priority,” unlike “some of [his] American commanders [who] subscribed to a more doctrinaire view of the conflict,” one which, he added, was “the classic view of the American air power adherents who saw air power as strategically decisive, without recourse to the dirty business of ground combat,” in contrast to the view of “Army leaders, who want the Air Force to make a difference on the ground.” Short, no doubt, would offer his own no-less-principled view of that characterization.\textsuperscript{26}

Once the initial hope that Milosevic would fold within a few days after the bombing commenced was proven groundless, NATO was forced into a scramble to develop an alternative strategy. The immediate result was an internecine battle between Clark and his Air Force subordinate over where the air attacks should be directed. Short had naturally chafed from the very beginning at the slowness of Operation Allied Force to gather momentum—three successive


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nights had been required just to get through the 51 targets that had been approved up to that point, most of them air defense-related and only a few located anywhere in or near Belgrade. In light of the absence of an allied ground threat to flush out Serbia’s dispersed and hidden forces in Kosovo, Short insisted that a more effective use of allied air power would be to pay little heed to those forces and to concentrate instead on infrastructure targets in and near downtown Belgrade and other cities, including key electrical power plants and government ministries.

Indeed, by the account of numerous observers who either participated in or later watched the videotapes of the 94 top-level video teleconferences (VTCs) conducted throughout Allied Force, a typical exchange between Clark and Short during the air war’s early days would have Clark ask: “Are we bombing those ground forces yet, Mike?” To which Short would typically offer a noncommittal response. Even in the case of fixed infrastructure targets, Clark reportedly would venture deep into the most minute details of the target list. “Let’s turn to target number 311,” Clark would say, by this account “opening his binder as other participants flipped to the proper page, as if they were holding hymnals.” He would then raise questions about a target’s relevance, expostulate on allied sensitivities, or abort attacks already in progress. He would also, by this account, sometimes gainsay his own intelligence experts and targeteers by looking at a particular DMPI placement and asking “Isn’t that an apartment building?” or “Can’t we move that [DMPI] over 100 feet?” At which point Short would be seen “slumping back in his chair, folding his arms in disgust, and mentally checking out.” General Jumper would then weigh in out of earshot of the others, and a compromise arrangement would typically be worked out. By this informed account, it was never clear to participants whether Clark, through such ex cathedra interventions, was genuinely responding to political pressure from above or was engaged in a divide-and-rule game by playing on putative “constraints” to his advantage and

27 Of these initial approved targets, 35 were IADS-related, seven entailed VJ and MUP facilities, seven involved command and control nodes, and two were industrial. Comments on an earlier draft by Hq USAFE/HO, May 10, 2001.
gathering diverse inputs and opinions until he heard the one he wanted to hear.28

As the commander of U.S. naval forces participating in Allied Force, Vice Admiral Daniel Murphy, recalled after the air war ended, “there was a fundamental difference of opinion at the outset between General Clark, who was applying a ground commander’s perspective . . . and General Short as to the value of going after fielded forces.” Short believed that it made little sense to waste valuable munitions, sorties, and time going after the VJ’s 3rd Army in Kosovo “if we don’t have an army in the field [or] unless we have defined the opposing army in the field as a center of gravity.”29 He later commented that he thought going after that elusive army entailed a “high level-of-effort, high-risk, low-payoff option” because there was no friendly ground presence poised nearby “to make them predictable.”30 Nevertheless, Clark’s view as to where the target priority emphasis should lie prevailed throughout most of the air war. Not only did Clark insist on attacking dispersed and hidden VJ ground forces as the first priority—indisputably his prerogative as the theater CINC—he reportedly micromanaged the day-to-day execution of Allied Force, at times even choosing the particular type of weapon to be used against a given target.31

28William M. Arkin, “How Sausage Is Made,” Washington Post, July 17, 2000. Clark himself later affirmed in a backhanded way that he regarded General Short more as a subordinate to be managed than as a source of trusted counsel on air employment matters, and that he looked instead to Short’s immediate Air Force superior, General Jumper, for the latter: “My real window on the operation was going to be provided by the senior American airman in Europe, John Jumper. Although he wasn’t in the NATO chain of command for this operation, as the senior American airman he was my adviser and had all the technology and communications to keep a real-time read on the operations. As Mike Short’s commander in the American chain of command, he also had a certain amount of influence in an advisory capacity.” Clark, Waging Modern War, p. 195.

29Tirpak, “Short’s View of the Air Campaign.”

30Interview with Lieutenant General Michael Short, USAF, PBS Frontline, “War in Europe,” February 22, 2000. Short also later indicated his belief that the use of VTCs “improperly allowed senior leadership to reach down to levels they did not need to be involved in.”

31In one reported exchange during a daily video teleconference, Clark insisted that NATO air power remain committed against enemy fielded forces in Kosovo, and Short countered that such missions were a waste of assets and should be supplanted by missions against downtown Belgrade. Noting that U.S. aircraft were about to attack the Serbian special police headquarters in Belgrade, Short said: “This is the jewel in
In fairness to the record, Clark was in the decidedly unenviable position of having multiple masters tugging at him from different directions, including the civilian ambassadors to NATO who made up the NAC; NATO’s Secretary General Solana, who was responsible for political control over NATO military operations; and the diverse cast of players in Washington, notably the president, Secretary Cohen, General Shelton, and the service chiefs with their independent interests. In the presence of these often conflicting influences, Clark’s overarching responsibility as SACEUR was to ensure that coalition warfare worked and that the allies remained in step until they produced a successful outcome. To his credit, keeping the other 18 allies on board to the very end was an immense and remarkable accomplishment. As Columbia University political scientist Richard Betts later pointed out in this respect, Clark’s command “was compromised by more conflicting pressures—political, diplomatic, military, and legal—than any other in history. Given these constraints, keeping the enterprise from flying apart was no mean feat.”

That said, Clark had the option all along of leaving the day-to-day operational responsibilities of planning and implementing the air effort to his JTF commander, Admiral Ellis, as the principal subordinate warfighting CINC. That is what U.S. Army General George Joulwan had done as SACEUR in 1995 with Admiral Leighton Smith during Operation Deliberate Force, so he could devote his full time, attention, and energy to his paramount duties as a diplomat in uniform. Instead, Clark elected not only to shoulder his diplomatic burdens as NATO’s supreme commander, but also to conduct the air war himself from Brussels, in the process bypassing not only Admiral Ellis but also his air component commander, General Short, in making air apportionment decisions. Whereas General H. Norman Schwarzkopf, on the eve of Desert Storm, had become wholly persuaded by his trusted JFACC, then–Lieutenant General Horner, of the merits of the chosen air campaign strategy, Clark would not be moved by Short from his less trusting insistence that the VJ’s 3rd

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the crown.” To which Clark replied: “To me, the jewel in the crown is when those B-52s rumble across Kosovo.” Short: “You and I have known for weeks that we have different jewelers.” Clark: “My jeweler outranks yours.” Dana Priest, “Tension Grew with Divide in Strategy,” Washington Post, September 21, 1999.

Army in Kosovo, rather than vital equities closer to Milosevic in and around Belgrade, constituted the principal enemy target set.\[^{33}\]

**THE DESULTORY ONSET OF THE AIR WAR**

Notwithstanding their narrow intent and the admitted constraints that impeded them, the initial strikes of Allied Force, by their measured nature, stood in marked contrast to the massed and highly orchestrated hammer-blow that were delivered with such paralyzing effect by coalition air power against Iraq from the earliest moments of Operation Desert Storm. On the home front, criticism of NATO’s seeming timidity was both instant and searing. The morning after the operation’s opening night, Senator John McCain, a former Navy attack pilot and Vietnam POW, complained that “these bombs are not going to do the job. . . . It’s almost pathetic. You’re going to solidify the determination of the Serbs to resist a peace agreement. You’d have to drop 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, escalation, negotiations, trouble.”\[^{34}\] In a similar vein, NATO’s tentativeness and preemptive forswearing of a ground option led the respected London *Economist* to declare that the West had “stumbled into one of its riskiest ventures” since World War II and to predict that if the bombing eventually succeeded, it would “owe as much to luck as to precision.”\[^{35}\]

[^33]: During a 10th-anniversary retrospective featuring Schwarzkopf’s principal deputies in Desert Storm, Horner was emphatic on the crucial importance of the ability of those key deputies to work together harmoniously in producing the war’s successful outcome: “The one thing you need to understand if you’re going to understand Desert Storm is that the relationship among the four people at this table—[Admiral Stanley] Arthur, [General Walter] Boomer, [Lieutenant General John] Yeosock, and me—was highly unusual. Such a relationship probably has never existed before, and it probably won’t exist in the future. The trust and respect we had for one another was unbelievable. This was a function of personality as much as a desire to get the job done. Unless you understand our relationships, then you really won’t understand what went on in Desert Storm, all the good and bad—and there was plenty of each.” “Ten Years After,” *Proceedings*, January 2001, p. 65.


In response to such charges, NATO’s spokesman at the time, RAF Air Commodore David Wilby, gamely said of the enemy as Allied Force entered its second week: “He’s hurting. We know that he’s running short of fuel. We’re starting to hit him very hard on the ground. You will start to see the resolve starting to crack very quickly.” However, USAF officers were complaining bitterly about the restrictive rules of engagement from the first days of combat operations. Similarly, RAF pilots flying combat missions out of Italy scored the insipid air effort as “nancying around” and bordering on cowardice. General Short later commented that the frustration felt by airmen was “under control” because the alliance was not losing aircraft and airmen. He added, however, that had losses begun to occur on a repetitive basis, the alliance would have had to rethink the guidance its leaders were handing down on strategy and rules of engagement.

Indeed, so counter to military common sense was the strategy selected by NATO that Short became convinced early on that strike planning was all “just planning for diplomatic threat,” that his air planners were “just going through the motions to some degree,” and that “we’re probably never going to drop a bomb.” Short added that he and his planners had determined that there were somewhere between 250 and 300 “valid, solid military targets” in the area for the sort of campaign effort that airmen ideally would like to conduct, but that he was told: “You’re only going to be allowed to bomb two, maybe three nights. That’s all Washington can stand, that’s all some members of the alliance can stand, that’s why you’ve only got 90 targets, this will all be over in three nights.” At that, Short frankly conceded that he assumed a prior deal had been struck with Milosevic, whereby Milosevic had told NATO, in effect, that he could not accept NATO’s terms and keep his job unless NATO bombed him and inflicted some degree of at least symbolic damage. That meant, or so Short thought, a token NATO bombing effort against the approved set of 90 targets, 51 of which were IADS targets selected for force

38Short, interview on PBS Frontline.
39Ibid.
protection—both south and north of the 44th parallel—and some in Montenegro, after which Milosevic would dutifully show the white flag.

Short later declined even to give Allied Force the courtesy of calling it a “campaign,” saying that it was not an operation aimed at achieving clear-cut strategy goals with dispatch, but rather something more in the nature of “random bombing of military targets.”40 It was one thing, Short said, to go after enemy tanks and APCs in the Iraqi desert the way the coalition did with such success in Desert Storm before the ground offensive began. In that instance, everything behind the forward edge of the battle area was enemy territory, where one could attack targets at will without concern for collateral damage or the potential for killing refugees. In the contrasting case of Kosovo, he said, “we felt that the risk was enormous, and we felt that we were going to spend a lot of assets to get minimum return. It was going to take a lot of sorties to kill a tank, and there was enormous risk of hitting the wrong target because we knew refugees would be moving around in this ethnic cleansing environment.” Short’s preference was to “go after the head of the snake,” as he put it. In an illustration of what he meant, he suggested that ten combat sorties against Belgrade would all hit their targets and achieve a desired effect, whereas “if I send those same ten sorties into Kosovo, perhaps we’ll find a tank, perhaps not, [and] if we don’t, we send the ten sorties to what in my business we call a ‘dump target,’ which is a suspected assembly area or a barracks from which the enemy has fled two weeks ago, and we’ll blow up empty buildings. So the bombs will hit something but the impact on ethnic cleansing is zero.”

For their part, NATO’s civilian leaders could not even bring themselves to face the fact that they were engaged, to all intents and purposes, in an ongoing war. Three weeks into Allied Force, Secretary Cohen declared before the Senate Armed Services Committee: “We’re certainly engaged in hostilities. We’re engaged in combat. Whether that measures up to, quote, a classic definition of war, I’m not prepared to say.”41 Such diffidence on the administration’s part was ostensibly intended to reflect due executive-branch obeisance to

40 Ibid.
the war declaration powers of Congress. Indeed, one report noted that the White House had expressly ordered all U.S. government agencies and departments not to refer to ongoing operations as a war out of concern that by so doing, they might bring the administration into a confrontation with Congress over war declaration powers.42 Yet the stance also reflected an ingrained administration discomfort over coming to full grips with what its leaders had signed up for in Operation Allied Force. That discomfort was most palpably telegraphed in President Clinton’s statement on March 26 that the standoff was “not a conventional thing, where one side’s going to win and one side’s going to lose.”43

True enough, there was no pronounced groundswell of American popular support for the Kosovo air war as there had been for the 1991 Gulf War, thanks largely in the latter case to the obvious economic interests at stake in the Gulf, the blatant cross-border aggression that characterized Saddam Hussein’s invasion, and President Bush’s sustained efforts during the preceding five months to mobilize such support. At the end of the first week, a Washington Post and ABC News poll found that only 51 percent of the American people approved of the way President Clinton was handling the Kosovo crisis, with 55 percent supporting NATO’s air war against Serbia.44 In contrast, 79 percent of the American populace had supported the air offensive against Iraq at the start of Operation Desert Storm.45

One can reasonably ask whether NATO’s initial assumptions about public opinion on the issue of casualties underestimated the degree of popular support that could have been mobilized for a more robust and effective strategy by a more proactive and committed U.S. leadership. The chairman of the respected Louis Harris and Associates polling firm rejected easy suggestions that the American people would inevitably oppose the commitment of ground troops or any other determined use of force. “When the U.S. achieves victory in a

just cause,” he pointed out, “the public applauds the use of force. When it loses—worse still, when America is defeated or runs away (as in Somalia or Vietnam)—the public reasonably says the use of the military was a mistake.” Citing the precedent of Desert Storm, he recalled how during the days immediately preceding the outbreak of hostilities, no poll found a majority of Americans in favor of prompt military action. Yet immediately after the air campaign had begun and was deemed to have gotten off to a good start, surveys found that between 68 and 84 percent of those polled approved. Similarly, up to the day before the Desert Storm ground push commenced, a typical poll taken by the New York Times and CBS found that the public preferred a continuation of the air war by 79 percent, with only 11 percent favoring the start of ground operations. A few days after the ground push began, however, a full 75 percent of those polled believed it had been “right to start the ground war,” as opposed to only 19 percent who opposed it.46

In contrast to the celebratory reaction and commemorative parades down Wall Street and Constitution Avenue that predominated in the heady aftermath of Operation Desert Storm, one reason for the subdued response of the American rank and file to the successful conclusion of Allied Force may have been that popular expectations were so low—limited, at bottom, to the simplest hope that the United States might somehow extricate itself from the morass it had entered with its reputation as a superpower still intact. Up to the day that Milosevic finally caved in, even the most ardent air power proponents were gloomily eyeing the prospect of an open-ended bombing campaign. They were also coming to accept the growing likelihood of having to send in allied ground troops to bring the nation’s involvement to a decisive end. Immediately after the cease-fire, a USA Today/CNN/Gallup poll reported that 53 percent of Americans did not consider the outcome to be a victory for the United States, as opposed to only 40 percent of respondents who did. The poll further reported 46 percent as believing that worldwide respect for the United States had declined as a result of U.S. actions in the crisis, as opposed to 44 percent who thought that it had grown.47

THE FAILURE TO EMPLOY A COHERENT PLAN

As noted earlier, everything having to do with arrangements already in place when Allied Force began was driven by the assumption that the operation would entail, at most, a two- to three-day series of air strikes directed at approximately 50 targets. Numerous earlier planning exercises had generated air attack options that varied in length from two to roughly ten days. None, however, came close to approaching anything as protracted as the 78 days that the air effort ultimately required. In February 1999, SACEUR directed that all existing attack plans be interwoven and that two to three days be assumed as the likely length of expected operations. Taking into account SACEUR’s guidance (“I’m only going to give you 48 hours”), the lack of stomach either in the United States or in Europe for a serious combat operation, and the past history of post–Desert Storm air power application in mere token doses by the Clinton administration, virtually no one in the planning loop questioned the short length of the expected operations.

Once NATO’s hope proved hollow, a frenetic rush ensued at SHAPE to come up with additional target nominations that could be more quickly and easily approved by NATO’s political authorities. At the end of the air war’s first week, Clark had only 100 approved targets. With the bombing effort going nowhere, he accordingly went to the NAC and received blanket approval to go after certain broad classes of targets, including air defenses, command and control, fielded forces, and resupply sources, at his own discretion. Other broad target sets and individual targets of a more politically sensitive nature, however, still had to be submitted for review by the United States, Britain, and France.

Having thus been cleared to go after most military targets at will, Clark pressed his staff to identify 5,000 candidates. His target planners quickly convinced him that 5,000 legitimate aim points were not to be found in all of Serbia, whereupon Clark declared a new goal of coming up with 2,000 target candidates, a goal later derided by some

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48 Ignatieff, Virtual War, p. 99.
planners as “T2K.”

That goal soon led to the targeting of objects that had no connection whatever to Yugoslavia’s military capability, what William Arkin later characterized as a “mechanical process of meticulous selection with little true military justification.” Sometimes the target selection criterion entailed little more than the fact that an assigned DMPI was located safely away from civilian homes. That resulted in an approach to force employment that was “neither calibrated nor intelligible,” but instead spawned “a succession of unfocused and unconvincing air excursions—experiments in communication by detonation.” It was only at that point that coalition planners began a serious and methodical target development process, in which prospective targets were categorized into four ascending tiers of collateral damage sensitivity.

Even then, there was little by way of a consistently applied strategy behind the target development process. As one U.S. officer reporting to an assignment at the CAOC midway into the operation noted afterward, he was told upon arrival: “I know you won’t believe this, but we don’t have a plan.” He learned that NATO aircrews could only attack those targets that came out of the target approval process and could never, at any time, attack an entire target set systematically in pursuit of paralysis. Target allocations, he said, were driven by rules of engagement of the moment, which, in turn, were set primarily on the basis of judgments regarding what the political traffic would bear domestically and within the alliance. Whenever an untoward event occurred that had a negative impact on public opinion, the ROE would seem to tighten almost reflexively. As a case in point, he noted, target planners were directed by the “highest levels” to cease using CBU after Milosevic’s press staff had persuaded CNN to do a story on the CBU “terror weapon” that was being employed by

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49 Elaine M. Grossman, “U.S. Military Debates Link Between Kosovo Air War, Stated Objectives,” *Inside the Pentagon*, April 20, 2000, p. 7. According to one Allied Force participant, Clark would press his operators down the line to propose target candidates. They would reply, “Give us the targets and we will take them out,” to which Clark countered: “You don’t get it. You develop the targets.” Quoted in Ignatieff, *Virtual War*, p. 99. Clark himself later justified 2,000 as “a large round number, large enough to get us past the daily struggle over the number of targets approved for that day.” Clark, *Waging Modern War*, p. 250.


51 Ibid.
NATO. In the words of another officer, “nobody ever said, ‘no fooling, what we want to accomplish in this country is X.’” As a result, NATO started “throwing bombs around, hoping that objectives would materialize.” Said still another, “the targets we selected—because we had no objectives—were based on nothing other than that they had been approved. So we slung lead on targets [but] we couldn’t say, ‘the objectives are X, so we blew up Y.’”

Indeed, although the methodology of effects-based targeting had long since been elevated to a high art, most of the attack planning throughout Allied Force was not driven by desired effects but rather entailed simply parceling out sortie and munitions allocations by target category in boilerplate fashion, without much consideration given to how neutralizing a target might contribute to advancing the operation’s objectives. A typical example involved attacking refineries, factories, and bridges in ones and twos over time rather than as interconnected components of a larger entity whose simultaneous destruction might instantly undermine Yugoslavia’s capacity to function effectively. To be sure, some bridges were dropped not to curtail the flow of traffic over the bridges, but rather to halt the flow of commodities that flowed along the river under the bridges, or to cut fiber-optic cables and other conduits that ran through the bridges. To that extent, effects-based targeting could be said to have been successfully applied. For the most part, however, owing to the absence of any systematic effects-based target analysis and strategy execution, NATO military chiefs had an unnecessarily hard time convincing NATO’s civilian leaders of the importance of many targets. General Jumper scored this failure when he stressed the importance of effects-based targeting and faulted what often happened instead, namely, what he called “campaign-by-target-list management,” whereby planners simply took a list of approved targets and managed them on a day-to-day basis.

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52 Personal communication to the author, August 23, 1999.
On the plus side, the methodology used in *individual* target planning, now a bona fide science in its own right, had evolved to a point where target analysts could predict, for any given weapon type and impact angle, how far the blast effects would extend, how far shards of glass could be expected to fly, and even at what distance they would retain enough force to penetrate skin. The use of this methodology in arriving at a precisely determined weapon yield, aim-point placement, and weapon heading and impact angle to minimize unwanted collateral damage often proved decisive in persuading NATO’s civilian leaders to approve attacks on many of the most politically sensitive targets. The four-tier collateral damage predictive model that had been developed toward that end was validated time and again in strike operations against sensitive targets in built-up areas. Not only did it permit targeting successes against electrical power, POL, lines of communication, and other objects of interest in the very heart of downtown Belgrade, it also allowed for the planned *preservation* of systems, such as road links within Kosovo for later use by KFOR peacekeeping troops.

Nevertheless, the scramble to form a targeting cell and establish smoother planning procedures in the CAOC spotlighted gross inefficiencies in the air tasking arrangement. That led General Jumper to suggest afterward that the Air Force needed to start thinking of the air operations center “as a weapons system” and giving it the same seriousness of thought that is now given to weapon systems, recognizing that “our product in war is dead targets, and our product in peace is all that goes into generating the warrior proficiency that kills those targets in wartime”—including proficiency at planning and managing an air campaign.\(^5\)

After the dust of Operation Allied Force had settled, the since-retired commandant of the U.S. Marine Corps, General Charles Krulak, support for such targeting, remarked, “the campaign was more like random acts of violence than true effects-based targeting. The legal restrictions and political constraints in the target approval process were inexplicably given as excuses not to do effects-based targeting. Achieving the desired effects while minimizing the undesired effects, particularly under the restrictions and constraints that were placed on SACEUR, is precisely why effects-based targeting should have been applied. Anything else is just high-tech vandalism.” Conversation with Captain C. J. Heatley, USN (Ret.), Arlington, Virginia, June 21, 2000.

commented from firsthand involvement that “we did not have a real strategy.” Likewise, General Short remarked, in what was surely an understatement for him, that the bombing effort had produced its objectives “to some extent by happenstance rather than by design.” There were later intimations that a hidden agenda of both the Clinton administration and General Clark had been not just a reversal of the ethnic cleansing in Kosovo, but nothing less than the removal of Milosevic from power and the democratization of Yugoslavia. On that point, one NATO official later described Clark as having said, “you must understand that the objective is to take Yugoslavia away from Mr. Milosevic, so we can democratize it and modernize it. That’s our objective.” But it was never communicated to subordinate staffs or made a declared goal of Allied Force.

Given the unseemly rush for targets that ensued at SHAPE and elsewhere for more than a month after NATO’s initial assumptions proved groundless, it seemed more than a bit disingenuous for administration officials to have claimed afterward that although they had “hoped” that military action would end the Serb abuses in Kosovo quickly, “we knew that it was equally possible that it would not and that a sustained campaign might be necessary to stop the killing and reverse the expulsions” and that “we were prepared to do what it took to win.” In what bore every hallmark of a post-hoc attempt at historical revisionism, one official professed that “people in Washington” knew that there would be a need to attack infrastructure targets once it became clear that a three- to four-day bombing effort would not compel Milosevic to settle, but because the allies, especially the French, were “not on board” initially, NATO could not

57 Tirpak, “Kosovo Retrospective,” p. 33.
59 General Krulak later remarked that even had it been an unstated goal, it was a “non-starter,” because it would never have gained the backing of NATO.
start attacking Phase III targets until it had consensus about the bombing.\textsuperscript{61} Two critics of administration policy countered convincingly that such claims by the administration that it had been prepared all along for the possible need for a prolonged air campaign were flatly belied by “the hasty improvisation that marked the bombing effort.”\textsuperscript{62} True enough, General Clark was said on strong authority never to have suggested that just a few days of bombing would suffice to do the job, even though he did limit his planners to a short-duration operations plan out of a conviction that the alliance’s political leaders would not sit still for anything longer.\textsuperscript{63} But the presumptions of both NATO and the most senior officials of the Clinton administration were well reflected in U.S. interagency reports in January and February 1999, which argued confidently that “after enough of a defense to sustain his honor and assuage his backers, [Milosevic] will quickly sue for peace.”\textsuperscript{64}

\textsuperscript{61}This official further claimed that Clinton had never intended to take the ground option off the table but “downplayed” it at first on the grounds that any public mention of it could have prompted a bruising debate in Congress and premature pressures to invoke the War Powers Act. He added that by April, the administration felt compelled to change that perception when it had become clear that important audiences had concluded that the president had flatly ruled out any ground option. That attempt to shift perceptions, he said, included asking Solana to initiate a review of the forces that would be required and encouraging Clark to accelerate planning for a ground invasion, making no effort to keep this quiet. The official admitted that there was no way a ground invasion could have been imminent when Milosevic capitulated on June 3, but that any decision to proceed with an invasion most definitely would have had to be made by mid-June so that the logistical provisions needed to support a ground offensive could be completed before the onset of winter. Interview by RAND staff, Washington, D.C., July 11, 2000.

\textsuperscript{62}Christopher Layne and Benjamin Schwarz, “Kosovo II: For the Record,” The National Interest, Fall 1999, p. 12.

\textsuperscript{63}Conversation by RAND staff with Lieutenant General Ronald Keys, USAF, director of operations, U.S. European Command, Stuttgart, Germany, March 8, 2000. Clark himself was clear on this point in his subsequently published memoirs. Although he acknowledged that “there was a spirit of hope at the political levels [going into the bombing] that Milosevic might recognize that NATO was actually going to follow through with its threat and then quickly concede in order to cut his losses,” he, for his own part, suspected all along that it was “going to be a long campaign.” Clark, Waging Modern War, pp. 177, 201.

THE DOWNSIDE OF ALLIANCE WARFARE

Throughout Operation Allied Force, there were targets that one or more of the key NATO countries would not approve, those that such countries would not allow to be hit by attacks launched from their soil, and those that they would not hit themselves but would allow other allies to hit. The principal NATO member-states also had differing political agendas and even differing business and financial interests, which heavily affected their reluctance or unwillingness to countenance attacks against certain targets. As a result, General Short was never able to mass forces in the execution of an integrated campaign plan in pursuit of desired strategic effects that had been carefully thought through in advance. Instead, he was left to go after approved targets largely in piecemeal fashion, in what one Allied Force participant caustically dismissed as “target-based targeting” rather than conscious effects-based targeting.

As the air war entered its second fitful week, one senior U.S. official suggested that the bombing effort was turning out to be a real-world battle laboratory, in which the allies were “learning by doing how you conduct a NATO operation, both at a political and at a military level.”65 Another later declared, less charitably: “This is coalition warfare at its worst.” After Allied Force ended, yet another complained that “the NATO troops had too many political masters. The system was so cumbersome that it limited the effectiveness of some of the best technology. Joint STARS, for example, couldn’t be used to direct aircraft to the targets it saw because it took too long to get approval for a strike.”66

A senior NATO official commented that “NATO got in way over its head, stumbled through, didn’t know how to get out, [and] was

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66David A. Fulghum, “Lessons Learned May Be Flawed,” Aviation Week and Space Technology, June 14, 1999, p. 205. Even deeper than the problem of slow target approval, however, was the problem of positive target identification, given the exceptional stringency of the prevailing rules of engagement. For example, Joint STARS could not distinguish a column of refugees from a column of military vehicles loaded with enemy troops, a performance shortfall far more difficult to fix than streamlining the approval process. I am grateful to my colleague Bruce Pirnie for pointing this out.
scared to death by what was happening.” This official added that the entire bombing effort had been a “searing experience” that had “left a bitter taste of tilting within governments, between governments, between NATO headquarters in Brussels and the military headquarters at Mons.”

Reflecting the consensus arrived at by many senior U.S. military officers, both active and retired, Admiral Leighton Smith concluded that “the lesson we’ve learned is that coalitions aren’t good ways to fight wars” and that, at a minimum, the political process in NATO needed to be streamlined so that the collective could use force in a way that made greatest military sense.

In what became a particular sore spot, leaks of target information were discovered early on during Allied Force, contributing in part to the change in procedure described above to streamline the target selection process to allow commanders and planners greater freedom to bomb without consulting every NATO ally every time. In one instance of a suspected leak, two empty Interior Ministry buildings in Belgrade were struck by cruise missiles at the end of the third week. Only 24 hours previously, those buildings had been full of employees, suggesting that the enemy knew the attack was coming and when.

Even before that event, the Pentagon had admitted the discovery of operational security problems, as well as its suspicions that the Serbs had gained access to at least parts of the ATO, thereby enabling them to reposition mobile SAMs in anticipation of planned attacks. Allegations that France, in particular, had been kept out of the loop with respect to some target planning because of concern that the information would be passed on to Milosevic were tacitly confirmed in early April by a Clinton confidant, who remarked that “there are cir-

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In a post–Allied Force interview, Clark admitted that at least one ally had leaked secret targeting information to Yugoslav officials. Without naming the alleged culprit, he said that the security breach was “as clear as the nose on your face.”

After the air war ended, Secretary Cohen conceded in a statement to the Senate Armed Services Committee that “it was very difficult to take 19 different countries and get an effective campaign under way without some bumps in the road.” Cohen added that the alliance was “slow, in some cases too slow, to achieve a consensus.”

Citing what he called “self-inflicted wounds in asymmetric warfare,” Admiral Ellis added, in his own after-action briefing to Pentagon officials, that the enemy had most definitely drawn aid and comfort from the cumbersome White House and NAC target approval process, as well as from the poor operational security the coalition operations had generated, not only on the NATO side but on the U.S. side as well.

**COMMAND AND CONTROL SHORTCOMINGS**

The problems created by the lack of a coherent strategy in Allied Force were further aggravated by a confusing chain of command, unsuitable organizational structures, and a lack of staff integration where it was needed most. Indeed, the air war was dominated by what General Short called “about as murky a command relationship as you could possibly get.”

Two parallel chains of command (see

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74 Other examples of such self-inflicted wounds, in Ellis’s view, were excessively high standards for limiting collateral damage, NATO’s self-suspension of the use of cluster munitions, the aversion to casualties and ground combat, and the reactive as opposed to proactive public affairs posture, all of which slowed allied response time and reduced allied control over the air war’s operational tempo.
Figure 7.2) worked simultaneously for each allied participant: The first was a NATO chain of command, which began at the North Atlantic Council, the alliance’s political leadership, and went from
Lapses in Strategy and Implementation

there to General Clark as SACEUR, through the NATO military staff at SHAPE, to the regionally involved CINCSOUTH, Admiral Ellis, and his JTF staff in Naples, and finally to General Short as commander, Allied Air Forces, Southern Europe (COMAIRSOUTH) and his staff, along with his subordinate Allied Tactical Air Forces, including 5 ATAF, which also operated the CAOC at Vicenza, Italy.

Paralleling this NATO chain of command were the individual chains of each allied member, typified by that of the United States, which began with the National Command Authorities (NCA) at the White House and Pentagon and proceeded to the regional commander in chief, General Clark, in his capacity as CINCEUR (CINC U.S. European Command) and, in turn, to the various subordinate U.S. component commands. The most important two of those subordinate commands were JTF Noble Anvil, established under the command of Admiral Ellis as CINCSOUTH, and USAFE, under the command of General Jumper, who retained operational control of some U.S. assets, specifically the B-1, B-2, B-52, F-117, E-3, KC-135, and U-2 aircraft that flew in Operation Allied Force. General Short exercised tactical control over these aircraft and was assigned operational control of all other combat aircraft assigned to the 31st Air Expeditionary Wing at Aviano Air Base, Italy. Finally, a joint special operations task force maintained operational control over all aircraft dedicated to combat search and rescue missions, and the allied participants ceded operational and tactical control over their aircraft to General Short, who, in his capacity as COMAIRSOUTH, was the designated NATO operational commander and who directed all air missions flown in the NATO-releasable ATO.

This dual-hatting of so many commanders and operational functions often made it hard for Allied Force participants, irrespective of level, to determine exactly who was operating in what capacity at any given time. For example, the CAOC at Vicenza, which was operated by

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76 Although the USAF’s still-embryonic Air Expeditionary Forces were not available for participation in Operation Allied Force, the AEF concept was exercised at Aviano when the reinforced 31st Fighter Wing was designated a provisional air expeditionary wing for the air war’s duration.

77 Complicating matters even further was the added confusion created by having Task Force Hawk and JTF Shining Hope functioning as separate command entities within the joint operating area.
NATO’s 5 ATAF, performed command and control functions both for NATO and for U.S.-only operations. That odd arrangement emanated from the fact that the command and control apparatus put in place for what ultimately became Operation Allied Force had initially been created for a U.S.-only operation, an apparatus that remained in place even as the air war became a NATO effort. As one informed account of this “flawed organizational structure” later observed, the JCS, the USAFE staff, and Admiral Ellis’s JTF all “performed roles outside their doctrinal bounds,” further confusing the execution of Allied Force and producing numerous instances of “conflicting guidance, command echelons being skipped or omitted entirely, and either a duplication of effort or functions not being performed at all, since one organization erroneously thought the other was responsible for a particular task.”

Amplifying further on this bizarre command arrangement, RAF Air Commodore Andrew Vallance later noted from his vantage point as chief of the NATO Reaction Forces air staff in Kalkar, Germany, that the control of an operation in NATO’s southern region would normally have fallen to CINCSOUTH and his subordinate air commander (COMAIRSOUTH), Admiral Ellis and General Short, as had been the case earlier with Admiral Smith and then–USAF Lieutenant General Michael Ryan during the successful Operation Deliberate Force over Bosnia in 1995. Yet in the case of Allied Force, following the precedent set earlier by NATO’s IFOR/SFOR operation in Bosnia, General Clark as SACEUR elected to take direct personal control of the air effort, effectively cutting CINCSOUTH out of the command chain, to all intents and purposes.

In contrast, the commander, Allied Air Forces, Central Europe (COMAIRCENT), a USAF four-star general, would not normally have been directly involved in a southern region operation. However, in the case of Allied Force, through his national responsibilities as commander, U.S. Air Forces in Europe (COMUSAFE), General

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78 Wight, “What a Tangled Web We Wove,” p. 7. As a case in point. the Joint Chiefs, despite their formal status as advisers to the NCA, issued directives as though they were part of the warfighting chain of command, for instance, ruling out the use of CBU’s by U.S. forces and placing certain targets on “JCS withhold.” Likewise, JTF Noble Anvil was often placed in a position of providing direction and guidance to NATO operational units, even though it nominally exercised operational and tactical control over U.S. assets only.
Jumper had “a major say in how the huge USAF contribution was used.” Moreover, unlike General Horner in Desert Storm, who answered directly to the theater CINC, General Schwarzkopf, Short reported not to Clark but rather to Admiral Ellis, who in turn reported to Clark—a situation which, Short cautiously said, “colors the equation a bit in terms of my latitude, if you will, in this air campaign.”

Considering all this confusion and more, concluded an informed and expert observer, operational effectiveness in Allied Force was probably achieved “in spite of the . . . command structures and processes rather than as a direct result of them.”

In addition, because NATO had initially anticipated that the bombing would last only a couple of days, the CAOC was woefully understaffed and unprepared for the demands that immediately fell upon it. For example, on the night the air war began, there was no assigned strategy cell, no flexible targeting cell, no established guidance, apportionment, and targeting (GAT) process, and no BDA team in place.

Even when more fully developed, the BDA process left much to be desired. It was well enough equipped, calling as required on national and theater offboard sensors such as satellites and the U-2, tactical sensors such as Predator and Hunter UAVs, and onboard sensors such as the LANTIRN targeting pod carried by the F-14D, the F-15E, and the Block 40 F-16CG. Inputs from these information sources would be forwarded to the JAC at RAF Molesworth, which wielded chief BDA authority, and other BDA-related entities such as the CAOC, national agencies, the SACEUR staff, JTF Noble Anvil, and the JFACC apparatus. However, inputs from national and theater assets could take days to register an impact because of frequent weather complications and higher-priority taskings. Moreover, because BDA

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79 Air Commodore A. G. B. Vallance, RAF, chief of staff, NATO Reaction Forces (Air) Staff, Kalkar, Germany, “After Kosovo: Implications of Operation Allied Force for Air Power Development,” unpublished paper, p. 3. Although Clark did, by numerous eyewitness accounts, sometimes treat Jumper as though he were the air component commander by virtue of his seniority to Short, Jumper never usurped his superior rank, never insisted that Short follow his suggestions, and frequently lent a helpful hand by quietly adjudicating the more prickly VTC sessions to good effect when Clark and Short got into their differences over targeting strategy and target priorities.

80 Michael R. Gordon, “Allied Air Chief Stresses Hitting Belgrade Sites.”

often required two or more independent sources to confirm a target kill, combat assessment often took longer than the time required for mission planning and retargeting. As a result, targets were often reattacked unnecessarily, which made for additional operational inefficiencies, and the air war’s overall progress could not be adequately tracked and measured. For fixed targets in Serbia, BDA confirmation was generally adequate, but the results were frequently not incorporated into replanning. Daily counts of flexible targets known to have been hit in the KEZ were not kept, resulting in a large band of uncertainty with respect to estimates of kills of mobile targets. Finally, there was a recurrent problem with ISR prioritization, reflected in repeated tension between SACEUR’s tasking of information sources to support BDA and the felt need at the operator level for information to support the attacking of targets.\(^{82}\)

The CAOC also suffered from an inadequate airspace management system for assigning tanker tracks and for managing the nightly flow of combat and combat-support aircraft. Not until late April did the CAOC create separate flexible targeting cells for enemy IADS assets and fielded forces. Only by Day 37 was there a smoothly running target development and review mechanism in place, and only on Day 47 was the first Joint Integrated Prioritized Target List (JIPTL) produced, along with the first operational assessment briefing to Short and Clark. Until that time, the would-be Master Air Attack Plan (MAAP) team had been picking targets almost solely on the basis of what had been politically approved. That meant that for the first half of Operation Allied Force, a consistent targeting strategy not only was not attempted but was not even possible.\(^{83}\)

Moreover, the generally poor intelligence preparation of the battlefield (IPB) occasioned by the faulty assumption that Milosevic would capitulate after just a few days of token bombing complicated both planning and execution. NATO’s failure to anticipate and prepare adequately for a range of adverse enemy actions, such as the commingling of Kosovar Albanian civilians with Serb military convoys and the highly successful VJ and MUP camouflage, concealment, and

\(^{82}\)Briefing to the author by Brigadier General Daniel J. Darnell, commander, 31st Fighter Wing, Aviano Air Base, Italy, June 13, 2000.

\(^{83}\)Wight, “What a Tangled Web We Wove,” p. 9.
deception measures, made air operations against both fixed and mobile targets far more difficult than they had been in Desert Storm. In addition, IPB in the KEZ was hindered by the absence of a land component commander in the Allied Force chain of command, which meant that some of the attendant organizations that could have helped the JFACC with this mission were also absent.\textsuperscript{84} On top of that, the nonstandard target nomination and approval process, SACEUR’s unusually heavy involvement at the micro-level of targeting, and a de facto requirement for zero friendly losses and an absolute minimum of collateral damage hindered the application of classic doctrinal solutions, limited the choices that were available, and put extra stress on systems such as UAVs and other ISR assets that always seemed to be in insufficient supply. Finally, the extended timelines created by the demands of the target approval process, as well as the multiplicity of players at senior levels who had managed to insert themselves into that process, frequently rendered operations against fleeting targets downright impossible and further attested to the poor integration of ISR management practices with the command and control functions required to respond within those timelines. Because the process was so time-consuming, it was frequently impossible to balance the competing priorities of target development and battle damage assessment.

Yet another source of friction in the orderly execution of the daily ATO was the complex overlay of institutional roadblocks and delays, the net result of which was an information-sharing arrangement described by one participant as “cumbersome. It really means we were unable to get timely intelligence to our allies, particularly the British. . . . It’s not that the information is so secret. It’s that we have a bureaucracy, and the way we transfer from ‘U.S. Secret’ to ‘NATO Secret’ takes a little bit of time.”\textsuperscript{85} As a rule, each allied nation had its own levels of security classification, and each of these had to be

\textsuperscript{84}The problem was not just the absence of a land component per se, but that no component whatsoever undertook the task of IPB until far too late in the operation. What is required are clearer stipulations regarding whose responsibility it is to conduct IPB, as well as new approaches and processes for doing so. At present, only the land component is resourced and prepared to meet that responsibility. Comments on an earlier draft by Hq USAF/XOXS, July 11, 2001.

downgraded in order for the information to be released to other allied participants. Frequently the computer systems that operated with these different levels were not mutually compatible, and there were instances, notably in the area of information operations, but also including B-2 and F-117 operations, in which the very nature of the activity meant that information could not be widely released.\footnote{As for information operations, one Allied Force participant commented that “due to the involvement of a few compartmented programs, the entire planning effort was classified at an unnecessarily high level, unreleasable to all but a very few U.S. planners. Unfortunately, implementing the overall plan was critical to the success of the operation, but because of the excessive classification, those charged with implementing it could not be told of the plan until it was too late.”}

Over time, the CAOC went from badly understaffed to packed with a surfeit of personnel as a result of the rampant inefficiencies of the target planning and apportionment process. On one occasion, there were as many as 1,400 people in the small and cramped facility, producing a staffing level that bordered on gridlock.\footnote{The CAOC’s normal peacetime manning was around 250 assigned personnel. It had a reinforced staff of 375 on March 24, the night the air war began, which was finally ramped up to more than 1,400 as Allied Force peaked at more than 900 sorties a day.} Some augmentees from other USAF commands brought only limited experience with high-intensity operations, further hampering the CAOC’s operational effectiveness. In a representative example of the needless inefficiencies that ensued, a PACAF colonel, say, serving as senior duty officer, would overrule something decided at a lower level with a “we don’t do that in PACAF,” only to have a lieutenant colonel on the permanent CAOC staff reply, uneasily, that that was the way it was done in Allied Force, for good reason.\footnote{Conversation with Major General P. J. M. Godderij, deputy commander in chief, Royal Netherlands Air Force, Scheveningen, the Netherlands, June 7, 2000.} In general, the abnormally large number of senior officers (lieutenant colonels and colonels) populating the CAOC limited the effectiveness of the often more expert junior officers in shaping key decisions. As a rule, the CAOC and General Short mainly performed battle management and support functions rather than operating as a master planning center and high-level command and control entity along the lines of the Air Operations Center and General Horner in Desert Storm.

Yet for all its eventually ramped-up staffing and improved organization, according to its director at the time, the CAOC remained “target
poor” throughout much of Allied Force. Because it was denied any opportunity to apply an overarching strategy in shaping the air operation’s plan owing to the slowness and randomness of the target approval process, “as targets were approved, we’d go hit them. . . . We had plenty of targets [in principle to go after]—850 or 900—but no authority to hit them.” Indeed, the CAOC was reportedly so lacking in available targets and BDA feedback that by Days 55–65, planners were “putting the same targets up [for approval] two and three nights in a row, hoping we could give you different DMPIs from the night before.”

As for the flexible targeting effort against VJ forces in the KEZ, the CAOC at first lacked any on-hand Army expertise to help develop the ground order of battle. With no land component in place, the Army’s TPQ-36 and TPQ-37 counterbattery radars in Albania required a direct feed to the CAOC, yet information from them was not provided until the very end because Army doctrine had planned for those systems to be used in a different manner and the CAOC was not configured to take advantage of them. Worse yet, TF Hawk and its parent command, the U.S. Army in Europe (USAREUR), consciously elected not to provide processed intelligence data to the JFACC and JTF Noble Anvil until circumstances and senior-official intervention occurred later. Eventually, Clark sent a 10-man Army team to the CAOC to provide such assistance, which aided considerably in the flexible targeting effort. By mid-May, TF Hawk finally began sending the CAOC useful real-time targeting information collected by its counterbattery radars, and a battlefield coordination element staffed with TF Hawk representatives was established in the CAOC to provide additional ground intelligence and operator input into the flexible targeting cell concerned with dispersed and hidden enemy forces in the KEZ.


90During an after-action presentation by the USAREUR battlefield coordination element, Hq USAF’s AWOS study team learned that JTF Noble Anvil had prepared a memorandum of agreement for USAREUR coordination expressly stipulating that TF Hawk would provide the CAOC with processed intelligence data from the TPQ-36 and TPQ-37 counterbattery radars. In the ensuing coordination process, the USAREUR intelligence directorate reportedly excised pertinent language from the text. Comments on an earlier draft by Hq USAF/XOXS, July 11, 2001.
These ground support elements became progressively more integrated with CAOC operations over time, but their contribution was disturbingly slow in coming. In his postwar briefing to the Pentagon leadership, Admiral Ellis suggested that even though no ground operation had been planned for Allied Force, having an assigned joint-force land component commander in place from the very beginning would have gone far toward obviating these and most other related deficiencies.\textsuperscript{91} There was also a sentiment in the CAOC toward the end of the air war that the many other units involved in the war effort, including naval air and the B-2 and F-117 communities, needed to send their most experienced operators to the CAOC where their expertise was most badly needed, even if they risked hindering the operational performance of their parent units as a result. As it was, the best use of certain systems available to the JFACC was not always made. For example, the 6th Fleet battle staff consistently felt that its Carrier Air Wing 8 deployed aboard the USS \textit{Theodore Roosevelt} was improperly treated by the CAOC merely as just another allied fighter squadron, rather than the integrated and independent strike force with ISR and command-and-control backup it actually was. Navy planners and operators also pressed repeatedly to have the F-14 TARPS capability employed for direct mission support, whereas the CAOC persisted in using it primarily for BDA.\textsuperscript{92}

In a widely noted operations management “first,” the use of video teleconferencing communications was pioneered in Allied Force,

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\item \textsuperscript{91}Amplifying on this point a year after the air war ended, Ellis further remarked that because air power had been the only force element actively used in Allied Force, the JFACC naturally had a heavy air emphasis. Yet, he added, the planning and execution system badly needed land and maritime component commanders deep in the loop as well, so they could explain to the JFACC, as authoritative equals, what their services were able to bring to the planning table. Noting how the “J” in JFACC was all too often silent, Ellis recalled that the contributions of other services were not invariably made the best use of. For example, he said, the EA-6B, TLAM, and F-14 TARPS all brought good capabilities to the fight and the JFACC needed to know about those capabilities directly from their most senior operators. TARPS, in particular, offered excellent potential value, but the Air Force, now out of the manned tactical reconnaissance business, sometimes gave the impression of believing that if the information did not come from space, it did not have an obvious use. Ellis’s overall point was that the services have not yet become sufficiently joint-minded at the operational and tactical levels, let alone the strategic level. Interview with Admiral Ellis, May 30, 2000.
\item \textsuperscript{92}Conversation with Vice Admiral Daniel J. Murphy, USN, 6th Fleet commander, aboard the USS \textit{LaSalle}, Gaeta, Italy, June 8, 2000.
\end{itemize}
with VTC sessions taking place daily at the most senior level because of the wide geographic spread of the key players. Sometimes as many as three or four VTCs were conducted in one day among the most senior principals. Admiral Ellis later characterized them as a powerful tool if properly used, owing to their ability to shorten decision cycle times dramatically, to communicate a commander’s intent clearly and unambiguously, and to obviate any requirement for the leading commanders to be collocated. But he cited the propensity of VTCs to be voracious consumers of leadership and staff working hours (often involving time wasted composing flashy but unnecessary—and even at times counterproductive—briefing graphics) and poor substitutes for rigorous mission planning and written orders. Decisions made in the VTC were all too readily prone to misinterpretation as key guidance was successively handed down to lower staff levels.93

Indeed, in contrast to Desert Storm, the ad hoc nature of the initial planning, the absence of collocation of senior commanders, the highly distributed nature of the bombing effort, the compartmented and often overclassified planning, and an overreliance on email, VTCs, and other undocumented communication resulted in a notable lack of integration of many of the key staff elements in Allied Force. Typically the only time General Clark was able to speak to his subordinate commanders was via the daily VTC, a limitation that one observer said “made it extremely difficult for the senior leaders to develop a useful working relationship where they possessed the necessary trust and confidence to issue and execute ‘mission-type’ orders without the need to provide detailed tactical guidance.”94 Clark’s VTC guidance was never written down or distributed in any systematic way. In the absence of such formal documentation, most cell chiefs did their best to debrief their staffs. Yet the time-pressures of combat frequently made doing that nigh impossible, with the result that “rumor guidance” tended to predominate throughout the course of Allied Force.95

95 Ibid., p. 11.
After the war ended, criticism of the VTC approach by many senior officers was quite vocal. In a characteristic observation, the UK Ministry of Defense’s director of operations in Allied Force, RAF Air Marshal Sir John Day, remarked that for all its admitted efficiencies when its use was properly disciplined, the VTC mechanism was highly conducive to “ad-hocracy” of all sorts, sometimes resulting in a lack of clarity regarding important matters of both planning and execution. For example, he observed that because of the federated nature of the operation’s planning and the extensive use of VTCs involving a large number of U.S. and NATO headquarters, many agencies had full knowledge of the planning details. That generated initial confusion among the UK participants as to who precisely was running the air war, since, until it was confirmed (as suspected) that it was indeed General Short, they could obtain the same information from any headquarters that was involved in the VTC. Consistent with others who reflected on the many negatives of VTCs with the benefit of hindsight, Air Marshal Day suggested that participation in high-level VTCs should henceforth be limited exclusively to those directly in the chain of command and that the commander in chief should devote careful thought beforehand to the following: (1) the appropriate participants and viewers; (2) a prior agenda, so that essential participants would not hesitate to raise an item out of fear that an item might already be on the CINC’s checklist; (3) diligent minute-taking; and (4) a summary of command decisions taken, so that the commander’s intent would always be unambiguous.96

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96 Interview with Air Marshal Sir John Day, RAF Innsworth, United Kingdom, July 26, 2000. Rather more bluntly, retired USAF General Chuck Horner, the JFACC during Desert Storm, commented that had he been SACEUR during Allied Force, he would have shot every TV monitor in sight. The biggest problem with VTCs, Horner said, is that one does not know who is present and listening, even as a videotaped record of the proceeding is being made. That, he added, inclines participants to pull their punches and speak “for the record,” rather than to speak their mind in a manner that only privacy can ensure. Conversation with General Horner at Farnborough, United Kingdom, July 27, 2000.