NATO'S AIR WAR IN PERSPECTIVE

Operation Allied Force was the most intense and sustained military operation to have been conducted in Europe since the end of World War II. It represented the first extended use of military force by NATO, as well as the first major combat operation conducted for humanitarian objectives against a state committing atrocities within its own borders. It was the longest U.S. combat operation to have taken place since the war in Vietnam, which ended in 1975. At a price tag of more than \$3 billion all told, it was also a notably expensive one. 1 Yet in part precisely because of that investment, it turned out to have been an unprecedented exercise in the discriminate use of force on a large scale. Although there were some unfortunate and highly publicized cases in which innocent civilians were tragically killed, Secretary of Defense William Cohen was on point when he characterized Allied Force afterward as "the most precise application of air power in history." In all, out of some 28,000 high-explosive munitions expended altogether over the air war's 78-day course, no more than 500 noncombatants in Serbia and Kosovo died as a direct result of errant air attacks, a new low in American wartime experience when compared to both Vietnam and Desert Storm.³

¹Lisa Hoffman, "U.S. Taxpayers Faced with Mounting Kosovo War Costs," *Washington Times*, June 10, 1999.

²Bradley Graham, "Air Power 'Effective, Successful,' Cohen Says," *Washington Post*, June 11, 1999.

³That was the final assessment of an unofficial post–Allied Force bomb damage survey conducted in Serbia, Kosovo, and Montenegro by a team of inspectors representing Human Rights Watch. A U.S. Air Force analyst who was later briefed on the study commented that Human Rights Watch had "the best on-the-ground data of anyone in

After Allied Force ended, air power's detractors lost no time in seeking to deprecate NATO's achievement. In a representative case in point, retired U.S. Army Lieutenant General William Odom charged that "this war didn't do anything to vindicate air power. It didn't stop the ethnic cleansing, and it didn't remove Milosevic"—as though those were ever the expected goals of NATO's air power employment to begin with.⁴ Yet because of the air war's ultimate success in forcing Milosevic to yield to NATO's demands, the predominant tendency among most outside observers was to characterize it as a watershed achievement for air power. One account called Operation Allied Force "one of history's most impressive air campaigns."⁵ Another suggested that if the cease-fire held, the United States and its allies would have accomplished "what some military experts had predicted was impossible: a victory achieved with air power alone."6 A Wall Street Journal article declared that Milosevic's capitulation had marked "one of the biggest victories ever for air power," finally vindicating the long-proclaimed belief of airmen that "air power alone can win some kind of victory." And the New York

the West." "A New Bomb Damage Report," *Newsweek*, December 20, 1999, p. 4. A later report, however, indicated that Human Rights Watch had identified 90 separate collateral damage incidents, in contrast to the acknowledgment by NATO and the U.S. government of only 20 to 30. Bradley Graham, "Report Says NATO Bombing Killed 500 Civilians in Yugoslavia," *Washington Post*, February 7, 2000.

⁴Mark Thompson, "Warfighting 101," *Time*, June 14, 1999, p. 50. Regarding Odom's first charge, General Jumper categorically declared after the bombing effort successfully ended that "no airman ever promised that air power would stop the genocide that was already ongoing by the time we were allowed to start this campaign." Quoted in *The Air War Over Serbia: Aerospace Power in Operation Allied Force*, Washington, D.C., Hq United States Air Force, April 1, 2000, p. 19. One of the few detractors of air power who was later moved to offer an apologia for having been wrong was military historian John Keegan, who acknowledged a week before Milosevic finally capitulated that he felt "rather as a creationist Christian . . . being shown his first dinosaur bone." John Keegan, "Modern Weapons Hit War Wisdom," *Sydney Morning Herald*, June 5, 1999. Keegan, long a skeptic of air power's avowed promise, wrote on the eve of Milosevic's capitulation that the looming settlement represented "a victory for air power and air power alone." Quoted in Elliott Abrams, "Just War. Just Means?" *National Review*, June 28, 1999, p. 16.

 $^{^5}$ William Drozdiak and Anne Swardson, "Military, Diplomatic Offensives Bring About Accord," $Washington\ Post$, June 4, 1999.

 $^{^6}$ Paul Richter, "Air-Only Campaign Offers a False Sense of Security, Some Say," *Los Angeles Times*, June 4, 1999.

⁷Thomas E. Ricks and Anne Marie Squeo, "Kosovo Campaign Showcased the Effectiveness of Air Power," *Wall Street Journal*, June 4, 1999.

Times called the operation's outcome "a success and more—a refutation of the common wisdom that air power alone could never make a despot back down." These and similar views were aired by many of the same American newspapers that, for the preceding 11 weeks, had doubted whether NATO's strategy would *ever* succeed without an accompanying ground invasion.

Similarly, defense analyst Andrew Krepinevich, a frequent critic of claims made by air power proponents, conceded that "almost alone, American air power broke the back of the Yugoslav military and forced Slobodan Milosevic to yield to NATO's demands. What air power accomplished in Operation Allied Force would have been inconceivable to most military experts 15 years ago." Krepinevich further acknowledged that unlike earlier times when air power was considered by other services to be merely a support element for land and maritime operations, that was no longer the case today, since air power had clearly demonstrated its ability in Allied Force to "move beyond the supporting role to become an equal (and sometimes dominant) partner with the land and maritime forces." 9

It was not just outside observers, moreover, who gave such ready voice to that upbeat assessment. Shortly after the cease-fire, President Clinton himself declared that the outcome of Allied Force "proved that a sustained air campaign, under the right conditions, can stop an army on the ground." Other administration leaders were equally quick to congratulate air power for what it had done to salvage a situation that looked, almost until the last moment, as though it was headed nowhere but to a NATO ground involvement of some sort. In their joint statement to the Senate Armed Services Committee after the air war ended, Secretary Cohen and General

⁸Serge Schmemann, "Now, Onward to the Next Kosovo. If There Is One," *New York Times*. June 16, 1999.

⁹Andrew Krepinevich, "Two Cheers for Air Power," Wall Street Journal, June 11, 1999.

¹⁰Pat Towell, "Lawmakers Urge Armed Forces to Focus on High-Tech Future," *Congressional Quarterly Weekly*, June 26, 1999, p. 1564. Actually, the air effort proved no such thing with respect to VJ forces operating in Kosovo.

Henry Shelton, the chairman of the JCS, described it as "an over-whelming success." ¹¹

With all due respect for the unmatched professionalism of those allied aircrews who, against difficult odds, actually carried out the air effort and made it succeed in the end, it is hard to accept such glowing characterizations as the proper conclusions to be drawn from Allied Force. In fact, many of them are at marked odds with the views of those senior professionals who, one would think, would be most familiar with air power and its limitations. Shortly before the bombing effort began, the four U.S. service chiefs uniformly doubted, in testimony before the Senate Armed Services Committee, whether air strikes by themselves would succeed in compelling Milosevic to yield. 12 Indeed, the Air Force chief of staff, General Michael Ryan, admitted less than a week later: "I don't know if we can do it without ground troops."13 After Allied Force was over, the former commander of NATO forces during Operation Deliberate Force, Admiral Leighton Smith, remarked that the Kosovo experience should go down as "possibly the worst way we employed our military forces in history." Smith added that telling the enemy beforehand what you are not going to do is "the absolutely dumbest thing you can do." 14 Former Air Force chief of staff General Ronald Fogleman likewise observed that "just because it comes out reasonably well, at least in the eyes of the administration, doesn't mean it was conducted properly. The application of air power was flawed." Finally, the air component commander, USAF Lieutenant General Michael Short, declared that "as an airman, I'd have done this a whole lot differently than I was allowed to do. We could have done this differently. We should have done this differently."15

¹¹Secretary of Defense William S. Cohen and General Henry H. Shelton, "Joint Statement on the Kosovo After-Action Review," testimony before the Senate Armed Services Committee, Washington, D.C., October 14, 1999.

¹²Bradley Graham, "Joint Chiefs Doubted Air Strategy," *Washington Post*, April 5, 1999.

 $^{^{13}}$ Quoted in "Verbatim Special: The Balkan War," Air Force Magazine, June 1999, p. 47.

¹⁴"Reporters' Notebook," *Defense Week*, July 19, 1999, p. 4.

¹⁵William Drozdiak, "Allies Need Upgrade, General Says," Washington Post, June 20, 1999

Indeed, few Allied Force participants were more surprised by the sudden capitulation of Milosevic than the majority of the alliance's most senior airmen. 16 By the end of May, most USAF generals had concluded that NATO would be unable to find and destroy any more dispersed VJ troops and equipment without incurring more unintended civilian casualties. ¹⁷ General Short had reluctantly concluded that NATO's strategy, at its existing level of intensity, was unlikely to break Milosevic's will and that there was a clear need to ramp up the bombing effort if the alliance was to prevail. 18 True enough, on the eve of the cease-fire, General Ryan predicted that once the air effort began seeking strategic rather than merely battlefield effects. Milosevic would wake up to the realization that NATO was taking his country apart on the installment plan and that his ultimate defeat was "inevitable." The Air Force chief hastened to add, however, that Allied Force had not begun in "the way that America normally would apply air power," implying his belief that there was a more sensible way of going about it. ¹⁹ As a testament to widespread doubts that the air war was anywhere close to achieving its objectives, planning was under way for a continuation of offensive air operations against Yugoslavia through December or longer if necessary—although it remains doubtful whether popular support on either side of the Atlantic would have sustained operations for that long.

In sum, Operation Allied Force was a mixed experience for the United States and NATO. Although it represented a successful application of air power in the end, it also was a less-than-exemplary ex-

 $^{^{16}\}mathrm{Most}$ others as well were caught off guard by the sudden ending of the Kosovo crisis. See Lieutenant General Bernard E. Trainor, USMC (Ret.), "The Council on Foreign Relations Report on the Kosovo Air Campaign: A Digest of the Roundtable on the Air Campaign in the Balkans," Council on Foreign Relations, New York, July 27, 2000. One notable exception was USAF Brigadier General Daniel J. Leaf, commander of the 31st Air Expeditionary Wing at Aviano Air Base, Italy, who confidently told his aircrews on the eye of Milosevic's capitulation that he could "smell an impending NATO victory in the air" (conversation with the author in Washington, D.C., November 16, 2000).

 $^{^{17}}$ John F. Harris and Bradley Graham, "Clinton Is Reassessing Sufficiency of Air War," Washington Post, June 3, 1999.

 $^{^{18}}$ William M. Arkin, "Limited Warfare in Kosovo Not Working," Seattle Times, May 22,

¹⁹General Michael E. Ryan, "Air Power Is Working in Kosovo," Washington Post, June 4, 1999.

ercise in strategy and an object lesson in the limitations of alliance warfare. Accordingly, any balanced appraisal of the operation must account not only for its signal accomplishments, but also for its shortcomings in both planning and execution, which came close to making it a disaster for the alliance.

THE ACHIEVEMENTS OF ALLIED FORCE

Admittedly, there is much to be said of a positive nature about NATO's air war for Kosovo. To begin with, it did indeed represent the first time in which air power coerced an enemy leader to yield with no friendly land combat action whatsoever.²⁰ In that respect, the air effort's conduct and results well bore out a subsequent observation by Australian air power historian Alan Stephens that "modern war is concerned more with acceptable political outcomes than with seizing and holding ground."²¹

It hardly follows from this, of course, that air power can now "win wars alone" or that the air-only strategy ultimately adopted by the Clinton administration and NATO's political leaders was the wisest choice available to them. Yet the fact that air power prevailed on its own despite the multiple drawbacks of a reluctant administration, a divided Congress, an indifferent public, a potentially fractious alliance, a determined enemy, and, not least, the absence of a credible NATO strategy surely testified that the air weapon has come a long way in recent years in its *relative* combat leverage compared to other, more traditional force elements. Thanks to the marked improvements in precision attack and battlespace awareness, unintended damage to civilian structures and noncombatant fatalities were kept to a minimum, even as air power plainly demonstrated its coercive potential.

²⁰It bears noting here that the December 1972 bombing of Hanoi was also an example of successful coercive bombing, albeit with a very limited objective and in the context of a much larger war that ended in defeat for the United States. For more on this, see Wayne Thompson, *To Hanoi and Back: The U.S. Air Force and North Vietnam, 1966–1973*, Washington, D.C., Smithsonian Institute Press, 2000, pp. 255–280.

²¹Alan Stephens, *Kosovo, or the Future of War*, Paper Number 77, Air Power Studies Center, Royal Australian Air Force, Fairbairn, Australia, August 1999, p. 21.

In contrast to Desert Storm, the air war's attempts at denial did not bear much fruit in the end. Allied air attacks against dispersed and hidden enemy forces were largely ineffective, in considerable part because of the decision made by NATO's leaders at the outset to forgo even the threat of a ground invasion. Hence, Serb atrocities against the Kosovar Albanians increased even as NATO air operations intensified. Yet ironically, in contrast to the coalition's ultimately unsuccessful efforts to coerce Saddam Hussein into submission, punishment did seem to work against Milosevic, disconfirming the common adage that air power can beat up on an adversary indefinitely but rarely can induce him to change his mind.

Although these and other operational and tactical achievements were notable in and of themselves and offered ample grist for the Kosovo "lessons learned" mill, the most important accomplishments of Allied Force occurred at the strategic level and had to do with the performance of the alliance as a combat collective. First, notwithstanding the charges of some critics to the contrary, NATO clearly prevailed over Milosevic in the end. In the early aftermath of the air war, more than a few observers hastened to suggest that NATO's bombing had actually caused precisely what it had sought to prevent. Political scientist Michael Mandelbaum, for example, portrayed Allied Force as "a military success and political failure," charging that while it admittedly forced a Serb withdrawal from Kosovo, the broader consequences were the opposite of what NATO's chiefs had intended because the Kosovar Albanians "emerged from the war considerably worse off than they had been before."22 Another charge voiced by some was that as Allied Force wore on, NATO watered down the demands it had initially levied on Milosevic at Rambouillet. As early as the air war's 12th day, this charge noted, NATO merely stipulated that Kosovo must be under the protection of an

 $^{^{22}\}mathrm{Michael}$ Mandelbaum, "A Perfect Failure: NATO's War Against Yugoslavia," Foreign Affairs, September/October 1999, p. 2. That charge was based on the fact that prior to the air war's start on March 24, 1999, only some 2,500 civilian innocents had died in the Serb-Albanian civil war, whereas during the 11-week bombing effort, an estimated 10,000 civilians were killed by marauding bands of Serbs unleashed by Milosevic in direct response to Allied Force.

"international" security force, whereas at Rambouillet, it had insisted on that presence being a NATO force. ²³

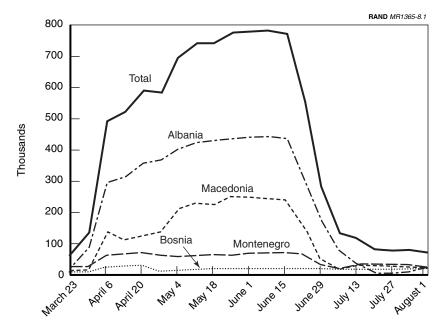
There is no denying that the Serb ethnic cleansing push accelerated after Operation Allied Force began. It is even likely that the air effort was a major, if not determining, factor behind that acceleration. Yet it seems equally likely that some form of Operation Horseshoe, as the ethnic cleansing campaign was code-named, would have been unleashed by Milosevic in any event during the spring or summer of 1999. Indeed, what a Serb general was later said by SACEUR to have forecast as a "hot spring" in which "the problem of Kosovo . . . will definitely be solved" commenced more that a week before the start of Allied Force, when VJ and MUP strength in and around Kosovo was increased by 42,000 troops and some 1,000 heavy weapons—even as the Rambouillet talks were under way.²⁴ Administration defenders are on solid ground in insisting that the ethnic cleansing had already begun and that had NATO not finally acted when it did, upward of a million Kosovar refugees may well have been left stranded in Albania, Macedonia, and Montenegro, with no hope of returning home.25

Although NATO's air strikes were unable to halt Milosevic's ethnic cleansing campaign before it had been essentially completed, they did succeed in completely reversing its effects in the early aftermath of the cease-fire. Within two weeks of the air war's conclusion, more than 600,000 of the nearly 800,000 ethnic Albanian and other refugees had returned home. By the end of July, barely one month after the cease-fire, only some 50,000 displaced Kosovar Albanians still awaited repatriation (see Figure 8.1). By any reasonable measure, Milosevic's bowing to NATO reflected a defeat on his part, and his accession to the cease-fire left him worse off than he would have been had he accepted NATO's conditions at Rambouillet. Under the

²³Robert Hewson, "Operation Allied Force: The First 30 Days," World Air Power Journal, Fall 1999, p. 24.

 $^{^{24}\}mbox{``Briefing}$ by SACEUR General Wesley Clark," Brussels, NATO Headquarters, April 13, 1999.

²⁵See, for example, the riposte to Mandelbaum by the Clinton administration's deputy national security adviser, James B. Steinberg, "A Perfect Polemic: Blind to Reality on Kosovo," *Foreign Affairs*, November/December 1999, pp. 128–133.



SOURCE: UN High Commissioner for Refugees, "Kosovo Crisis Update," March 31, 1999.

Figure 8.1—Refugee Flow

terms of Rambouillet, Serbia would have been permitted to keep 5,000 of its "security forces" in Kosovo. Thanks to the settlement ultimately reached before the cease-fire, however, there are now none. Moreover, on the eve of Operation Allied Force, Milosevic had insisted as a point of principle that not a single foreign troop would be allowed to set foot on Kosovo soil. Today, with some 42,000 KFOR soldiers from 39 countries performing daily peacekeeping functions, Kosovo is an international protectorate safeguarded both by the UN and NATO, rendering any continued Serb claim to sovereignty over the province a polite fiction. At bottom, as NATO's Secretary General, Javier Solana, declared in a retrospective commentary on the experience, the alliance "achieved every one of its goals" in forcing a

Serb withdrawal from Kosovo.²⁶ Whether or not one chooses to call that outcome a "victory" entails what Karl Mueller has characterized as "a semantic exercise that should only really matter to social scientists seeking to code the event for data analysis."²⁷

Second, NATO showed that it could operate successfully under pressure as an alliance, even in the face of constant hesitancy and reluctance on the part of many of the member-states' political leaders. For all the air war's fits and starts and the manifold frustrations they caused, the alliance earned justified credit for having done remarkably well in a uniquely challenging situation. In seeing Allied Force to a successful conclusion, NATO did something that it had been neither created nor configured to do. Indeed, it might well have been easier for Washington and SACEUR to elicit NAC approval to grant border-crossing authority at the brink of a NATO-Warsaw Pact showdown during the height of the cold war than to get 19 post-cold war players on board for an offensive operation conducted to address a problem that threatened no member's most vital security interests. As General Clark later recalled, the "ultimate proof" of the air war's success was that NATO realized its "ability to maintain alliance cohesion despite all the pressures of fighting a conflict, at the same time bringing in new members, and then going into Kosovo itself on an extended and uncertain campaign—uncertain in that there [was] no fixed exit date."28

Reflecting on the air war experience a year later, Admiral James Ellis, the commander of the U.S. contribution to Allied Force, observed that during the final days leading up to March 24, it was a question not of *how* the bombing effort would be conducted so much as *whether* it would take place at all. Before Rambouillet, the challenge had been to compel Milosevic to do something. Afterward, it became to compel him to *stop* doing something. Ellis speculated that had the allies known from the outset that they were signing up for a 78-day campaign, they might easily have declined the opportunity forth-

 $^{26 \}rm Javier$ Solana, "NATO's Success in Kosovo," Foreign Affairs, November/December 1999, p. 114.

²⁷Karl Mueller, "Deus ex Machina? Coercive Air Power in Bosnia and Kosovo," unpublished paper, School of Advanced Air Power Studies, Maxwell AFB, Alabama, November 7, 1999, p. 6.

²⁸"Wesley Clark Looks Back," *National Journal*, February 26, 2000, p. 612.

with. Unlike the ad hoc group of nations that fought Desert Storm as a solidly united front, NATO was not a coalition of the willing but rather a loose defensive alliance of 19 democracies. They were all strongly inclined to march to different drummers, and all had varying commitments to grappling—at least militarily—with humanitarian crises in which they had no clear national security stake.²⁹

As the bombing entered its third month without a clear end in sight, Ellis feared that allied cohesion might collapse within three weeks unless something of a game-changing nature occurred, such as a drastic move by Milosevic to alter the stakes or a firm U.S. decision to accede to a ground-invasion option. Offsetting that fear, however, was his belief that the allies were finally beginning to recognize and accept the need to come to terms with some thorny operational issues such as granting approval to attack electrical power and other key infrastructure targets. That took time, Ellis said, but the fact that it finally occurred constituted a signal that the alliance was slowly learning how to do what needed to be done.

Finally, for all the criticism that was directed against some of the less steadfast NATO members for their rear-guard resistance and questionable loyalty while the air war was under way, even the Greek government held firm to the very end, despite the fact that more than 90 percent of the Greek population supported the Serbs rather than the Kosovar Albanians—and held frequent large-scale street demonstrations to show that support. True enough, there remain many unknowns about the outlook for NATO's steadfastness in any future confrontation along Europe's eastern periphery. Yet NATO was able to maintain the one quality that was essential for the success of Allied

²⁹Interview with Admiral James O. Ellis, USN, commander in chief, Allied Forces, Southern Europe, Naples, Italy, May 30, 2000. This is not to say, however, that the allies had no intrinsic stake at all. Italy had a stake in preventing further depredations by Milosevic because of the refugee problem they created. Greece had a major stake in what happened to the Serbs because of a largely sympathetic population. Germany also found itself being inundated with refugees. Hungary had good reason to worry about the Hungarian population still inside Serbia. All of the NATO countries had an intrinsic interest in stability in Europe, and Milosevic was, if nothing else, a destabilizer of the first order. I am grateful to Alan Gropman of the Industrial College of the Armed Forces, Washington, D.C., for reminding me of these important facts.

 $^{^{30}}$ Air Commodore A. G. B. Vallance, RAF, chief of staff, NATO Reaction Forces (Air) Staff, Kalkar, Germany, "Did We Really Have a Good War? Myths in the Making," unpublished manuscript, no date, p. 2.

Force: its cohesion and integrity as a fighting collective. The lion's share of the credit for that, suggested Air Marshal Sir John Day, belongs to NATO Secretary General Solana, who, in what Day called a "brilliant" performance, showed both leadership and courage in the face of continuous U.S. pushing and an equally continuous reluctance on the part of many allies to go along.³¹

THE AIR WAR'S FAILINGS

Despite these accomplishments, enough discomfiting surprises emanated from the Allied Force experience to suggest that instead of basking in the glow of air power's largely single-handed successful performance, air warfare professionals should give careful thought to the hard work that still needs to be done to realize air power's fullest potential in joint warfare. As in the case of the various positive outcomes noted above, many of these surprises entailed shortfalls at the tactical and operational levels. As previous chapters have documented in detail, the targeting process was inefficient to a fault, command and control arrangements were excessively complicated, and enemy IADS challenges indicated much unfinished work for SEAD planners. In addition, elusive enemy ground forces belied the oft-cited claim of airmen that air power has arrived at the threshold of being able to find, fix, track, target, and engage any object on the surface of the earth.³²

The biggest failures of Allied Force likewise occurred in the realm of strategy and execution. First, despite its successful outcome and through no fault of allied airmen, the bombing effort was clearly a suboptimal application of air power. The incremental plan chosen by NATO's leaders risked squandering much of the capital that had been built up in air power's account ever since its ringing success in

 $^{^{31}}$ Interview with Air Marshal Sir John Day, RAF, UK Ministry of Defense director of operations in Allied Force, RAF Innsworth, United Kingdom, July 25, 2000.

³²These and other surprises should stand as a sobering reminder that the comparatively seamless and unfettered successes achieved by allied air power during Operation Desert Storm were most likely the exception rather than the rule for future joint and combined operations—both the operating area and the circumstances surrounding the 1991 Gulf War were unique. For more on this point, see Air Vice Marshal Tony Mason, RAF (Ret.), *Air Power: A Centennial Appraisal*, London, Brassey's, 1994, pp. 140–158.

Desert Storm nearly a decade before. General Clark's early comment that NATO would "grind away" at Milosevic rather than hammer him hard and with determination attested powerfully to the watereddown nature of the strikes.³³ By meting out those strikes with such hesitancy, NATO's leaders remained blind to the fact that air power's very strengths can become weaknesses if the air weapon is used in a way that undermines its credibility.³⁴ Almost without question, the first month of underachievement in the air war convinced Milosevic that he could ride out the NATO assault.

Indeed, the way Operation Allied Force commenced violated two of the most enduring axioms of military practice: the importance of achieving surprise and the criticality of keeping the enemy unclear as to one's intentions. The acceptance by NATO's leaders of a strategy that preemptively ruled out a ground threat and envisaged only gradually escalating air strikes to inflict pain was a guaranteed recipe for downstream trouble, even though it was the only strategy that, at the time, seemed politically workable. For U.S. defense leaders to have suggested afterward that NATO's attacks against fielded enemy ground troops "forced [those troops] to remain largely hidden from view . . . and made them ineffective as a tactical maneuver force" and that its SEAD operations forced Milosevic to "husband his antiaircraft missile defenses to sustain his challenge [to NATO air operations]" was to make a virtue of necessity on two counts.³⁵ First, it was the absence of a credible NATO ground threat that enabled Milosevic's troops to disperse and hide, making it that much more difficult for NATO's aircrews to find and attack them. The ineffectiveness of those troops as a tactical maneuver force was quite beside the point, considering that tactical maneuver was not required for the ethnic cleansing those troops managed to sustain quite handily throughout most of the air war's duration. Second, it would have been more honest to say that the Serb tactic of carefully conserving antiaircraft missile defenses throughout Allied Force made those

³³Eric Schmitt, "Weak Serb Defense Puzzles NATO," New York Times, March 26, 1999.

³⁴For a fuller development of this point, see Daniel L. Byman, Matthew C. Waxman, and Eric Larson, Air Power as a Coercive Instrument, Santa Monica, California, RAND, MR-1061-AF, 1999. See also Grant T. Hammond, "Myths of the Air War Over Serbia: Some 'Lessons' Not to Learn," *Aerospace Power Journal*, Winter 2000, pp. 78–86.

³⁵Cohen and Shelton, "Joint Statement."

defenses a continuing threat to NATO's freedom to operate in Yugoslav airspace, undermining the effectiveness of many sorties as a result.

In fairness to the U.S. and NATO officials most responsible for air operations planning, many of the differences between Allied Force and the more satisfying Desert Storm experience were beyond the control of the allies, and they should be duly noted in any critique of the way the former was conducted. To begin with, as discussed earlier, bad weather was the rule, not the exception. Second, variegated and forested terrain limited the effectiveness of many sensors. Third, Serb SAM operators were more proficient and tactically astute than those of Iraq. Fourth, alliance complications were greater by far in Allied Force than were the largely inconsequential intracoalition differences during the Gulf War. Finally, because the goal of Allied Force was more to compel than to destroy, it was naturally more difficult for senior decisionmakers to measure and assess the air war's daily progress, since there was no feedback mechanism to indicate how well the bombing was advancing toward coercing Milosevic to comply with NATO's demands. It was largely for that reason that most Allied Force planners were surprised when he finally decided to capitulate.

That said, the most important question with respect to Allied Force has to do less with platform or systems performance than with the more basic strategy choices that NATO's leaders made and what those choices may suggest about earlier lessons forgotten—not only from Desert Storm and Deliberate Force but also from Vietnam. Had Milosevic been content to hunker down and wait out NATO's bombing effort, he could easily have challenged the long-term cohesion and staying power of the alliance. Fortunately for the success of Allied Force, by opting instead to accelerate his ethnic cleansing of Kosovo, he not only united the West in revulsion but also left NATO with no alternative but to dig in for the long haul, both to secure an outcome that would enable the repatriation of nearly a million displaced Kosovars and to ensure its continued credibility as a military alliance.

Because of the almost universal assumption among NATO's leaders that the operation would last no more than two to four days, the first 30 days of the air war were badly underresourced. Among the results

of this erroneous assumption were erratic procedures for target nomination and review, too few combat aircraft on hand for conducting both night and day operations, and pressures from SACEUR for simultaneous attacks not only on fixed infrastructure targets but also on fielded VJ forces. Relatedly, there was an inadequate airspace management plan and no flexible targeting cell in the CAOC for servicing SACEUR's sudden demands to attack VI forces in the KEZ. All of these problems, it bears stressing, were a reflection *not* on NATO's air power or its mechanisms for using air power per se, but rather on the strategy choices that were made (or, perhaps more correctly, forgone) by NATO's political leaders.

To be sure, allied capabilities for detecting and engaging fleeting enemy ground-force targets improved perceptibly as the weather grew more agreeable with approaching summer and as the KLA became more active. Nevertheless, persistent problems with the flexible targeting effort spotlighted further work that needs to be done. The CAOC went into the operation without an on-hand cadre of experienced target planners accustomed to working together harmoniously. Accordingly, General Short was forced to resort to a "pickup team" during the first month of operations against VJ forces in Kosovo. The fusion cell also frequently lacked ready access to allsource reconnaissance information. At first, data from special operations forces and the Army's TPQ-36 and TPQ-37 firefinder radars in Albania were not provided to the CAOC. Indeed, there was an absence of allied ground-force representation in the CAOC until the air war's very end. Other needs that became apparent included regularized and centralized mensuration of target coordinates as new target candidates were detected and became available for prompt servicing.

Beyond that, the very nature of Operation Allied Force and the manner in which it was conducted from the highest levels both in Washington and in Brussels placed unique stresses on the JFACC's ability to command and control allied air operations. For example, General Short and his staff had to contend on an unrelenting basis with rapid shifts in political priorities and SACEUR guidance, as well as with the myriad pressures occasioned by a random and nonsystematic flow of assets to the theater, ranging from combat aircraft to staff augmentees in the CAOC. All of these problems emanated from a lack of consensus among the top decisionmakers on both sides of the Atlantic as to what the air effort's military goals were at any given moment and what it would take to "prevail." The de facto "no friendly loss" rule, stringent collateral damage constraints, and the absence of a NATO ground threat to force VJ troops to concentrate and thus make them easier targets further limited the rational employment of available in-theater assets and placed a premium on accurate information and the use of measures that took a disconcertingly long time to plan, carry out, and evaluate. One realization driven home by these and other shortcomings was the need for planners in the targeting cell to train together routinely in peacetime *before* a contingency requires them to react at peak efficiency from the very start.

GRADUALISM AND ITS IMPLICATIONS

The greatest frustration of Operation Allied Force was its slow start and equally slow escalation. A close second entailed the uniquely stringent rules of engagement that limited the effectiveness of many combat sorties. Indeed, the dominance of political inhibitions was a signal feature of the air war from start to finish. Because it was an operation performed essentially for humanitarian purposes, neither the United States nor any of the European members of NATO saw their security interests threatened by ongoing events in Yugoslavia. Because the perceived stakes were not high, at least at the outset, any early commitment by NATO to a ground offensive was all but out of the question. Moreover, both the anticipated length of the bombing effort and the menu of targets attacked were bound to be matters of often heated contention.

On top of that, the avoidance of noncombatant fatalities among Yugoslavia's civilian population was rightly of paramount concern to NATO's leaders, further aggravating the complications caused by poor target-area weather throughout much of the air war. As USEUCOM's director of operations, USAF Major General Ronald Keys, later noted, while there was no single target whose elimination might have won the war, there was a profusion of targets that could potentially have *lost* the war had they been struck, either intentionally or inadvertently. In the presence of factors like these that could have split the alliance at any time, NATO's unity was a sine qua non

 $^{^{36}}$ I am indebted to my RAND colleagues James Schneider, Myron Hura, and Gary McLeod for these on-target summary observations.

for the success of Allied Force. Not surprisingly, the Serbs were aware of that fact and were frequently able to exploit it.³⁷

Acceptance of these realities, however, hardly eased the discomfiture among air warfare professionals over the fact that NATO's selfimposed restraints were forcing them to fight with one hand tied behind their backs. One analyst, reporting the results of interviews conducted in late April with some two dozen senior active and retired Air Force generals, reported a collective sense of "disappointment that air power is being so poorly employed [and] frustration over the false promise of a perfect war and zero casualties." His interviews revealed a deep-seated concern that "with far too much political micromanagement but without a clear strategy and the aid of ground forces, the air war . . . is destined to fail." Worst of all, the generals complained, the United States and NATO did not take advantage of the shock effect of air power. Said retired General Charles Horner: "We are training [the Serbs] to live with air attacks." Said another Air Force general: "Air planners are not planning the air operation. They are being issued targets each day for the next day's operations, too late to do rational planning."38

There was no less disaffection among air warfare professionals at the working level. As one U.S. pilot flying combat sorties complained in an email message that made its way to public light: "This has been a farce from the start. We have violated every principle of campaign air power I can think of." The pilot hastened to add that "overzealous air power advocates have, since Desert Storm, sold us as something we are not. Air power can do a lot of things, [but] it cannot change the mind of a dictator who has his people's tacit support." Nevertheless, he concluded, "it is not the USAF's fault that the air campaign is not going as well as Desert Storm. Hitting 5–8 targets a night, with sequential [as opposed to] parallel operations, is not the way to prosecute a campaign."39

 $^{^{37}\}mathrm{Cited}$ in Colonel Steve Pitotti, USAF, "Global Environments, Threats, and Military Strategy (GETM) Update," Air Armament Summit 2000 briefing, 2000.

 $^{^{38}}$ William M. Arkin, "Inside the Air Force, Officers Are Frustrated About the Air War," Washington Post, April 25, 1999.

³⁹Rowan Scarborough, "Officers Criticize Air War Strategy," Washington Times, May 10, 1999.

The UK Ministry of Defense's director of operations in Allied Force denied that there was ever a hard-and-fast rule that NATO must not lose an aircraft under any circumstances. 40 Yet NATO's leaders had powerful incentives to avoid any circumstances that might result in friendly aircrews being killed in action or taken prisoner of war, since the continued cohesion of the alliance was the latter's center of gravity and since any such losses would have been precisely the sorts of untoward events most likely to undermine it. Indeed, if there was any unwritten "prime directive" that guided NATO's strategy throughout the course of Allied Force, it was the preservation of its own solidity, especially during the air war's critical early weeks. In light of that concern. General Short admitted toward the end of May that zero losses was a primary goal in fact if not in name.⁴¹ Not only would a split in the alliance have undermined the air war's effort against Belgrade, it would have raised fundamental questions about the future viability of NATO as a military alliance. It naturally followed that an incremental bombing effort and least-commondenominator targeting had to be accepted until it became clearer throughout the alliance that NATO was committed for the long haul. 42

 $^{^{40}}$ Interview with Air Marshal Sir John Day, RAF, UK Ministry of Defense director of operations in Allied Force, RAF Innsworth, United Kingdom, July 25, 2000.

⁴¹William Drozdiak, "Air War Commander Says Kosovo Victory Near," *Washington Post*, May 24, 1999. Clark himself later indicated that his chief "measure of merit" in keeping Allied Force on track was "not to lose aircraft, minimize the loss of aircraft." He further stated that this exacting desideratum "drove our decisions on tactics, targets, and which airplanes could participate," but that it was motivated by a "larger political rationale: if we wanted to keep this campaign going indefinitely, we had to protect our air fleet. Nothing would hurt us more with public opinion than headlines that screamed, 'NATO LOSES TEN AIRPLANES IN TWO DAYS.'" General Wesley K. Clark, *Waging Modern War: Bosnia, Kosovo, and the Future of Combat*, New York, Public Affairs, 2001, p. 183.

⁴²It bears noting that the zero-loss issue, however seriously it may have been regarded at the highest leadership levels, had little day-to-day impact on actual combat operations. As an F-15E instructor Electronic Warfare Officer (EWO) who flew multiple combat missions with the 494th Fighter Squadron recalled from first-hand experience: "The issue of the 'no-losses rule' did not filter down to the aircrew level, since we always plan with that goal in mind. We were briefed that there were no 'high-priority' targets prior to the opening of hostilities, but that ended up having little effect on the risk level that we were willing to accept. The concrete effects of the 'no-loss rule' were the 15,000-ft floor and a number of unreasonable ROE restrictions. However, outside the immediate tactical constraints imposed by the ROE, the prevailing high-level attitude had no effect on tactical operations. We were aware of the priority placed on

Although the manner in which Allied Force was conducted fell short of the ideal use of air power, it suggests that gradualism may be here to stay if U.S. leaders ever again intend to fight wars for marginal or amorphous interests with as disparate a set of allies as NATO. As the vice chairman of the JCS at the time, USAF General Joseph Ralston, noted after the air effort ended, air warfare professionals will continue to insist, and rightly so, that a massive application of air power will be more effective than gradualism. Yet, Ralston added, "when the political and tactical constraints imposed on air use are extensive and pervasive—and that trend seems more rather than less likely then gradualism may be perceived as the only option."43 General Jumper likewise intimated that the United States may have little choice but to accept the burdens of an incremental approach as an unavoidable cost of working with shaky allies and domestic support in the future: "It is the politics of the moment that will dictate what we can do.... If the limits of that consensus mean gradualism, then we're going to have to find a way to deal with a phased air campaign. Efficiency may be second."44

Insofar as gradualism promises to be the wave of the future, it suggests that airmen will need to discipline their natural urge to bridle whenever politicians hamper the application of a doctrinally pure campaign strategy and to recognize and accept instead that political considerations, after all, determine—or should determine—the way in which campaigns and wars are fought. This does not mean that military leaders should surrender to political pressures without first making their best case for using force in the most effective and costminimizing way. It does, however, stand as an important reminder

minimizing losses, but the effect on the mission was overrated. There were no cases that I am aware of where the aircrew said, 'Well, this looks a little hairy, and the priority is not to lose an airplane, so I won't do it.' We were more likely to abort an attack for collateral damage concerns than we were to abort for survivability issues. As would be expected, aircrews pressed to the target in the face of serious opposition." Major Michael Pietrucha, USAF, personal communication to the author, July 9, 2001.

 $^{^{43}}$ "Ralston Sees Potential for More Wars of Gradual Escalation," $\it Inside$ the Pentagon, September 16, 1999, p. 1.

^{44&}quot;Washington Outlook," *Aviation Week and Space Technology*, August 23, 1999, p. 27. It hardly follows, of course, that gradualism and coalitions must invariably be synonymous. They certainly were not in Desert Storm in 1991. Clearly, the extent to which gradualist strategies will prove unavoidable in the future will depend heavily on both the shared stakes for would-be coalition partners and the skill of their leaders in setting the direction and tone of coalition conduct.

that war is ultimately about politics and that civilian control of the military is an inherent part of the democratic tradition. It follows that although airmen and other warfighters are duty-bound to try to persuade their civilian superiors of the merits of their recommendations, they also have a duty to live with the hands they are dealt and to bend every effort to make the most of them in an imperfect world. It also follows that civilian leaders at the highest levels have an equal obligation to try to stack the deck in such a manner that the military has the best possible hand to play and the fullest possible freedom to play it to the best of its ability. This means expending the energy and political capital needed to develop and enforce a strategy that maximizes the probability of military success. In Allied Force, that was not done by the vast majority of the top civilian leaders on either side of the Atlantic. 46

On the plus side, the air war's successful outcome despite its many frustrations suggested that U.S. air power may now have become capable enough, at least in some circumstances, to underwrite a strategy of incremental escalation irrespective of the latter's inherent inefficiencies. What made the gradualism of Allied Force more bearable than that of the earlier war in Vietnam is that NATO's advantages in stealth, precision standoff attack, and electronic warfare meant that it could fight a one-sided war against Milosevic with near-impunity and achieve the desired result, even if not in the most ideal way. That was not an option when U.S. air power was a less developed tool than it is today.

⁴⁵On this point, Air Vice Marshal Mason remarked that he had not "spent the past 25 years trying to persuade unbelievers of the efficacy of air power only to finish up whining because political circumstances made operations difficult." Personal communication to the author, October 22, 1999. In a similar spirit, the leader of USAFE's post–Allied Force munitions effectiveness investigation in Kosovo later suggested that airmen should "consider a politically restricted target list like the weather: complain about it, but deal with it." Colonel Brian McDonald, USAF, briefing at RAND, Santa Monica, California, December 14, 1999.

 $^{^{46}}$ It further follows that airmen, for their part, need to learn not only how to conduct gradual campaigns more effectively, but also how better to explain convincingly to politicians the value of using mass and shock early and the greater strategic effectiveness of effects-based targeting.

⁴⁷See Colonel Phillip S. Meilinger, USAF, "Gradual Escalation: NATO's Kosovo Air Campaign, Though Decried as a Strategy, May Be the Future of War," *Armed Forces Journal International*, October 1999, p. 18.

On this point, Admiral Ellis, a career fighter pilot himself, was no less disturbed by the air war's lethargic pace than was his air component commander, General Short, or any other airmen on down the line. However, mindful of the long-standing political and bureaucratic rule of thumb that "if a problem has no solution, it is no longer a problem but a fact," he recognized that ideal-world solutions were unworkable in the Allied Force setting and that flexibility was required in applying air doctrine in a difficult situation. As it turned out, NATO conducted its bombing effort in a way that was not maximally efficient, yet that worked in the end to foil Serb strategy, which was to wait out the alliance and strive mightily to fragment it. Because the escalation was gradual over time, the coalition succeeded in holding together. Because NATO used highly conservative tactics, it lost no aircrews and civilian casualties and collateral damage were kept to a minimum. In effect, a compromise was struck in which the air war was intense enough to maintain constant pressure on Milosevic yet measured enough to keep NATO from falling apart. Either the loss of friendly lives beyond token numbers or an especially gruesome spectacle of collateral damage could have been more than enough to incline at least some key allies to call it quits. Noting further that NATO fought in this case to establish conditions rather than to "win" in the classic sense, Ellis added that a campaign strategy that would have allowed Desert Storm-like intensity and scale of target attacks to be employed was simply never in the cards.

By the same token, RAF Air Commodore Andrew Vallance pointed out that because a key attraction of air power to civilian decision-makers is its adaptability for accommodating different situations in different ways as needed, "the purist 'one size fits all' approach to air doctrine needs to be moderated. Existing air doctrine is fine for high-intensity conflicts, but more subtle operational doctrines are needed in the complex world of peace support."⁴⁸ Echoing this point, Karl Mueller observed that "sometimes strategists will be called upon to execute gradually escalatory air campaigns whether they approve of the concept or not, and thus they should develop some expertise in the art form even if they abhor it."⁴⁹ With the air

 $^{^{48}}$ Air Commodore A. G. B. Vallance, RAF, "After Kosovo: Implications of Operation Allied Force for Air Power Development," unpublished paper, p. 4.

⁴⁹Mueller, "Deus ex Machina?" p. 16.

weapon now largely perfected for such canonical situations as halting massed armored assaults, it needs to be further refined for handling messier, less predictable, and more challenging combat situations featuring elusive or hidden enemy ground forces, restrictive rules of engagement, disagreeable weather, the enemy use of human shields, lawyers in the targeting loop as a matter of standard practice, and diverse allies with their own political agendas, all of which were characteristic features of the Kosovo crisis. Moreover, although NATO's political leaders arguably set the bar too high with unrealistic expectations about collateral damage avoidance, it seems clear that the Western democracies have long since passed the point where they can contemplate using air power, or any force, for that matter. in as unrestrained a way as was characteristic of World War II bombing. Admiral Ellis noted that NATO barely averted legal consequences prompted by the collateral damage incidents that occurred in Allied Force. This implies that along with new precision-attack capability goes new responsibility, and air warfare professionals must now understand that they will be held accountable.⁵⁰

On this point, one can fairly suggest that both SACEUR and his JFACC were equally prone throughout Allied Force to remain wedded to excessively parochial views of their preferred target priorities, based on implicit faith in the inherent correctness of their respective services' doctrinal teachings. They might more effectively have approached Milosevic instead as a unique rather than generic opponent, conducted a serious analysis of his distinctive vulnerabilities, and then tailored a campaign plan aimed at attacking those vulnerabilities directly, irrespective of canonical air or land warfare solutions for all seasons. A year after the air war, in a measured reflection on the recurrent tension that afflicted the interaction of Clark and Short, Admiral Ellis suggested that the failure of *all* the services to advance beyond their propensity to teach only pristine, service-oriented doctrines at their respective war colleges reflected a serious "cultures" problem and that the services badly need to plan for and

⁵⁰This includes being held increasingly accountable for their own combat losses. The Allied Force SEAD experience showed that in crises where less-than-vital U.S. interests are at stake, near-zero attrition of friendly aircraft and their aircrews will be a high, and possibly determining, priority governing operational tactics.

accommodate the unexpected and the unconventional, both of which were daily facts of life during Operation Allied Force.⁵¹

Finally, the probability that coalition operations in the future will be the rule rather than the exception suggests a need, to the fullest extent practicable, to work out basic ground rules before a campaign begins, so that operators, once empowered, can implement the agreed-upon plan with a minimum of political friction. As it was, Allied Force attested not only to the strategy legitimation that comes from the force of numbers provided by working through a coalition, but also to the limitations of committee planning and leastcommon-denominator targeting. General Short commented that the need for 19 approvals of target nominations was "counterproductive" and that an appropriate conclusion was that "before you drop the first bomb or fire the first shot, we need to lock the political leaders up in a room and have them decide what the rules of engagement will be so they can provide the military with the proper guidance and latitude needed to prosecute the war."52 As it was, Short later said in his PBS interview, the rules continuously ebbed and flowed in reaction to events over the air war's 78 days: "You can go to downtown Belgrade, oh my God, you've hit the Chinese embassy, now there's a five-mile circle going around downtown Belgrade into which you cannot go." As a result, he complained, strikers

 $^{^{51}}$ Conversation with Admiral James Ellis, USN, Headquarters Allied Forces Southern Europe, Naples, Italy, May 30, 2000.

⁵²William Drozdiak, "Allies Need Upgrade, General Says." As sensible as this suggestion may have sounded after the fact, however, one must ask how workable it would have been in actual practice. Wars characteristically feature dynamics that push participants beyond anything imaginable at the outset. Setting clear going-in rules is easy and feasible enough for something short and relatively straightforward, like Operation Deliberate Force and Operation El Dorado Canyon, the joint USAF-Navy raid on Libya in 1986. Expecting them in larger and more open-ended operations, however, means counting on a predictability of events that does not exist in real life. The fact is that there was a consensus at the start of Allied Force about what was acceptable and what everyone was willing to do, and that was for 91 targets and two nights of bombing. NATO's cardinal error was not its failure to reach a consensus before firing the first shot; it was its refusal to be honest up front about what it would do if its assumptions about Milosevic's resolve proved false. I thank Dr. Daniel Harrington, Office of History, Hq USAFE, for having shared this insightful observation with me. I would add that had NATO's leaders done better at attending to that responsibility, they would have gone a long way toward satisfying General Short's expressed concern.

often ended up "bombing fire hydrants and stoplights because there just weren't targets of great value left that weren't in a sanctuary." 53

THE COST OF THE MISSING GROUND THREAT

One of the most important realizations to emerge from Allied Force at the operational and strategic levels was that a ground component to joint campaign strategies may be essential, at least in some cases, for enabling air power to deliver to its fullest potential. The commander of Air Combat Command, General Richard Hawley, was one of many senior airmen who freely admitted that the a priori decision by the Clinton administration and NATO's political leaders not to employ ground forces had undercut the effectiveness of allied air operations: "When you don't have that synergy, things take longer and they're harder, and that's what you're seeing in this conflict."

General Jumper later concluded similarly that the imperative of attacking fielded enemy forces without the shaping presence of a NATO ground threat had produced "major challenges," including creating a faster flexible targeting cycle; putting a laser designator on Predator; creating new target development processes within the CAOC; creating real-time communications links between finders, assessors, and shooters; and developing more rapid real-time retargeting procedures for the B-2s, the B-1s, the B-52s, and F-15Es carrying the AGM-130.⁵⁵

Amplifying on the fallacy of having started the air effort without a credible ground threat, General Short noted that "this conflict was unlike others in that we did not have a ground element to fix the enemy, to make him predictable, and to give us information as to where the enemy might be." Short went on to point out, however, that although NATO had not been formally allied with the KLA, the fact

 $^{^{53}}$ Interview with Lieutenant General Michael Short, USAF, PBS *Frontline*, "War in Europe," February 22, 2000.

⁵⁴Bradley Graham, "General Says U.S. Readiness Is Ailing," *Washington Post*, April 30, 1999

 $^{^{55}}$ General John Jumper, USAF, "Oral Histories Accomplished in Conjunction with Operation Allied Force/Noble Anvil."

⁵⁶Drozdiak, "Allies Need Upgrade, General Says."

that the latter had begun to operate with some success in the end "made the Yugoslav army come out and fight and try to blunt their offensive. . . . And once they moved, or fired their artillery, our strikers learned where they were and could go in for the kill."⁵⁷ Had VJ forces in Kosovo faced an imminent NATO ground invasion, or even a credible threat of such an invasion later, they would have been obliged to move troops and supplies over bridges that NATO aircraft could have dropped. They also would have been compelled to concentrate and maneuver in ways that would have made it easier for NATO to find and attack them.

Earlier, White House national security adviser Samuel Berger maintained that taking ground forces off the table at the outset had been the right thing to do because anything else would have inevitably prompted an immediate public debate both in the United States and among the allies, which could have split the alliance and seriously impeded the overall air effort.⁵⁸ Yet there was a huge difference between acknowledging that a land offensive could be fraught with danger, on the one hand, and ruling out such an offensive categorically before the fact, on the other. The former would have been demanding enough even under the best of circumstances because of basing, airlift, and logistics problems. The latter, however, was a colossal strategic mistake, in that it gave Milosevic the freedom to act against the Kosovar Albanians and the power to determine when the war would be over. The opportunity costs incurred by NATO's anemic start of Allied Force without an accompanying ground threat included a failure to exploit air power's shock potential and to instill in Milosevic an early fear of worse consequences yet to come; the encouragement it gave VJ troops to disperse and hide while they had time; the virtual carte blanche it gave Milosevic for accelerated atrocities in Kosovo; and the relinquishment of the power of initiative to the enemy.

As for the oft-noted concern over the prospect of sustaining an unbearable level of friendly casualties had NATO opted to back up the air war with a ground element, there most likely would have been no

⁵⁷Ibid.

 $^{^{58}}$ Doyle McManus, "Clinton's Massive Ground Invasion That Almost Was," *Los Angeles Times*, June 9, 2000.

need actually to *commit* NATO troops to battle in the end. The mere fact of a serious Desert Shield–like deployment of NATO ground troops along the Albanian and Macedonian borders would have made their VJ counterparts more easily targetable by allied air power. Had such a deployment commenced in earnest, it also might have helped to deter, or at least lessen, the ethnic cleansing of Kosovo by giving VJ troops a more serious concern to worry about. In both cases, it could have enabled a quicker end to the war.

Even had Milosevic remained unyielding to the point where an opposed NATO ground-force entry would have been unavoidable sooner or later, continued air preparation of the battlefield might have been sufficiently effective that the VJ's residual strength would not have presented a significant challenge to NATO land forces. The impending improvement of summer weather and the further establishment of NATO air dominance would have enabled more effective NATO air performance against VJ targets, especially had the KLA succeeded in maintaining enough pressure to force VJ units to bunch up and move.

Indeed, well before Allied Force ended, there was a gathering sense among some observers that Serbia's ground forces were being given more credit than they deserved as an excuse for ruling out a NATO land-invasion option. As one former U.S. Army officer pointed out, Milosevic's army was a small conscript-based force with an active component of only some 115,000 troops who relied on antiquated Soviet equipment, mainly the 1950s-vintage T-55 tank. Air strikes during the first few nights of Allied Force had already rendered Yugoslavia's small air force a non-factor in any potential NATO ground push. The VJ's petroleum and other stocks for sustainment had also been rapidly depleted by the bombing, leaving the Serbs with, at best, only a minimal capacity to wage conventional war against a serious ground opponent. In contrast, the modern and well-equipped NATO ground forces arguably possessed enough combat power "to make mincemeat of the Yugoslav army." ⁵⁹

Be that as it may, the problems created by NATO's having ruled out a ground option before the fact suggest an important corrective to the

⁵⁹Andrew J. Bacevich, "Target Belgrade: Why a Ground War Would Be a Rout," *National Review*, May 3, 1999, p. 29.

seemingly unending argument between airmen and land combatants over the relative merits of air power versus "boots on the ground." Although Operation Allied Force reconfirmed that friendly ground forces no longer need to be inexorably committed to combat early, it also reconfirmed that air power in many cases cannot perform to its fullest potential without the presence of a credible ground component in the campaign strategy. The fact is that air power alone was not well suited to defeating VJ forces in the field. Once most of the combat returns were in, it became clear that few allied kills were accomplished against dispersed and hidden VJ units in the KEZ. Not only that, allied air power had been unable to protect the Kosovar Albanians from Serb terror tactics, a problem that was further exacerbated by the stringent rules of engagement aimed at minimizing collateral damage and avoiding any NATO loss of life. As former Air Force chief of staff General Merrill McPeak instructively elaborated on this point, "in a major blunder, the use of ground troops was ruled out from the beginning. I know of no airman—not a single one who welcomed this development. Nobody said, 'Hey, finally, our own private war. Just what we've always wanted!' It certainly would have been smarter to retain all the options. . . . Signaling to Belgrade our extreme reluctance to fight on the ground made it much less likely that the bombing would succeed, exploring the limits of air power as a military and diplomatic instrument."60

TOWARD A "REPORT CARD" FOR ALLIED FORCE

As for what airmen and other observers should take away from Allied Force by way of lessons indicated and points worth pondering, the commander of the U.S. military contribution, Admiral Ellis, offered a good start when he declared in his after-action briefing to Pentagon and NATO officials that luck played the chief role in ensuring the air

⁶⁰General Merrill A. McPeak, USAF (Ret.), "The Kosovo Result: The Facts Speak for Themselves," Armed Forces Journal International, September 1999, p. 64. In a similar vein, the chief of staff of the RAF later faulted NATO's decision to rule out a ground option from the start of the air war as "a strategic mistake" that enabled Serb forces to forgo preparing defensive positions, hide their tanks and artillery and make maximum use of deception against NATO attack efforts, and conduct their ethnic cleansing of Kosovo with impunity. Michael Evans, "Ground War 'Error,'" London Times, March 24, 2000.

war's success.⁶¹ Ellis charged that NATO's leaders "called this one absolutely wrong" and that their failure to anticipate what might occur once their initial strategy of hope failed occasioned most of the untoward consequences that ensued thereafter.⁶² These included the hasty activation of a joint task force, a race to find suitable targets, an absence of coherent campaign planning, and lost opportunities caused by the failure to think through unpleasant excursions from what had been expected. Ellis concluded that the imperatives of consensus politics within NATO made for an "incremental war" rather than for "decisive operations," that excessive concern over collateral damage created "sanctuaries and opportunities for the adversary—which were successfully exploited," and that the lack of a credible NATO ground threat "probably prolonged the air campaign."63 It was only because Milosevic made a blunder no less towering than NATO's preclusion of a ground option that the war had the largely positive outcome that it did.

Indeed, that NATO prevailed in the end with only two aircraft lost and no combat fatalities sustained surely reflected good fortune at least as much as the professionalism of its aircrews and their commanders. General Jumper explained afterward that "we set the bar fairly high when we fly more than 30,000 combat sorties and we don't lose one pilot. It makes it look as if air power is indeed risk free and too easy a choice to make." Amplifying on the same point, retired RAF Air Vice Marshal Tony Mason observed that seeking to minimize one's losses is both admirable and proper up to a point, yet it can lead to self-deterrence when efforts to escape the costs of war are

⁶¹Amplifying on his suggestion that luck was the key player, Ellis pointed out how much worse matters would have been for the alliance had NATO experienced any one of a number of untoward developments: an enemy attack on its troops deployed in theater with ground forces or tactical ballistic missiles; the possibility of even a few NATO aircrews being killed in action or captured as POWs; the continuation of the fighting into the winter; the depletion of U.S. precision munitions stocks; the weakening or evaporation of public support; an allied ground invasion becoming the only option; or a decision by France or Italy to withdraw from further participation.

⁶²Revealingly, barely a week into Allied Force, one senior Clinton administration official, when asked what NATO's strategy would be should Phase III of the air war fail to persuade Milosevic to admit defeat, replied: "There is no Phase IV." Quoted in John Broder, "In Grim Week, Pep Talk from the President," *New York Times*, April 1, 1999.

 $^{^{63}}$ Elaine M. Grossman, "For U.S. Commander in Kosovo, Luck Played Role in Wartime Success," *Inside the Pentagon*, September 9, 1999, p. 1.

pursued to a moral fault. Although force protection "must be a major concern for any force commander," Mason added, "my own view is that if Saint George's first priority with tackling dragons had been force protection, I don't think he would now be the patron saint of England." ⁶⁴

The Kosovo experience further suggested some needed changes in both investment strategy and campaign planning. The combination of marginal weather and the unprecedented stress placed on avoiding collateral damage made for numerous days between March 24 and mid-May when entire ATOs had to be canceled and when only cruise missiles and the B-2, with its through-the-weather JDAM capability, could be used. That spoke powerfully for broadening the ability of other aircraft to deliver accurate munitions irrespective of weather, as well as for ensuring that adequate stocks of such munitions are on hand to see the next campaign to completion. The extended stretch of bad weather underscored the limitations of LGBs and confirmed the value of GPS-guided weapons like JDAM that can bomb accurately through the weather.

Not surprisingly, the munitions used in Allied Force generally performed as advertised. The operation's results, however, confirmed the need for a larger U.S. inventory of precision-guided munitions (especially those capable of all-weather target attack), as well as greater accuracy and more standoff attack capability. At the same time, it indicated a continued operational utility for both unguided general-purpose bombs and cluster munitions for engaging soft military area targets deployed in the open. Other areas in which allied weapons performance showed a need for further improvement include interoperability across platforms, more multispectral sensors, higher-gain optical sensors for UAVs, more data-link interoperability, a wider range of bomb sizes, and weapons capable of conducting "auto-BDA." Still other force capability needs highlighted by the

⁶⁴Comments at an Air Force Association Eaker Institute colloquy, "Operation Allied Force: Strategy, Execution, Implications," held at the Ronald Reagan International Trade Center, Washington, D.C., August 16, 1999.

⁶⁵These were among numerous other conclusions suggested by Major General Ronald Keys, USAF, director of operations (J-3), U.S. European Command, cited in Colonel Steve Pitotti, USAF, "Global Environments, Threats, and Military Strategy (GETM) Update," Air Armament Summit 2000 briefing, Eglin AFB, Florida, 2000.

Allied Force experience include better means for locating moving targets, better discrimination of real targets from decoys, and a way of engaging those targets with smart submunitions rather than with more-costly PGMs and cruise missiles. $^{66}\,$ One airman later commented frankly that in being tasked by Clark to go after dispersed and hidden VJ forces, U.S. air power "was being asked to be a 21st century tactical air force . . . and the truth is, we're not very good at it," at least yet. $^{67}\,$

As for the ultimate wisdom of the allied decision to proceed with the air war in the first place, the United States and NATO displayed an ability in this case to apply coercion successfully through air power from a poorly prepared battlefield at a remarkably low cost in noncombatant fatalities caused by direct collateral damage. ⁶⁸ Yet there is a danger that making a habit of such displays by accepting Allied Force as a model for future interventions could easily lead to an erosion of the U.S. claim to global leadership. ⁶⁹ On the contrary, Allied Force should have underscored the fact that one of the most acute challenges facing U.S. policymakers in the age of a single superpower entails deciding when, and in what manner, to intervene in humanitarian crises that do not yet impinge directly on U.S. security interests.

ON THE USES AND ABUSES OF AIR POWER

Viewed in hindsight, the most remarkable thing about Operation Allied Force was not that it defeated Milosevic in the end, but rather

 $^{^{66}\}mbox{Work}$ on this is being performed by Alan Vick of RAND.

 $^{^{67}}$ Elaine M. Grossman, "U.S. Military Debates Link Between Kosovo Air War, Stated Objectives," *Inside the Pentagon*, April 20, 2000, p. 6.

⁶⁸A heated argument arose after the war ended between defenders and critics of the Clinton administration's strategy for Kosovo over whether the approach taken, despite its low cost in noncombatant lives lost to *direct* collateral damage, nonetheless produced an unconscionably high loss of civilian innocents to the Serbian ethnic cleansing campaign which it allegedly accelerated. For a snapshot summary of the positions taken on both sides, see Christopher Layne and Benjamin Schwarz, "Kosovo II: For the Record," *The National Interest*, Fall 1999, pp. 9–15, and Ivo Daalder, "NATO and Kosovo," *The National Interest*, Winter 1999/2000, pp. 113–117.

 $^{^{69}\}mathrm{I}$ am grateful to Lieutenant General Bradley Hosmer, USAF (Ret.), for bringing this point to my attention.

that air power prevailed despite a U.S. leadership that was unwilling to take major risks and an alliance that held together only with often paralyzing drag. Fortunately, the Clinton administration did a creditable job of keeping the allies together in the end, albeit at the cost of what Brent Scowcroft called "a bad strategy" that raised basic questions about the limits of alliance warfare and about whether the United States should, in the future, settle instead for coalitions of the willing, at least in less than the cataclysmic showdowns of the sort that NATO was initially created to handle. One can only wonder what greater efficiencies might have been registered by a more assertive campaign approach had the U.S. government been willing to play a more proactive role in leading from the front and setting both the direction and pace for NATO's more hesitant allies.

Lesson One from both Vietnam and Desert Storm should have been that one must not commit air power in "penny packets," as the British say, to play less-than-determined games with the risk calculus of the other side. Although it can be surgically precise when precision is called for, air power is, at bottom, a blunt instrument designed to break things and kill people in pursuit of clear and militarily achievable objectives. Not without reason have air warfare professionals repeatedly insisted since Vietnam that if all one wishes to do is to "send a message," call Western Union. On this point, Eliot Cohen summed it up well five years before the Kosovo crisis erupted when he compared air power's lately acquired seductiveness to modern teenage romance in its seeming propensity to offer political leaders a sense of "gratification without commitment." 72

 $^{^{70}}$ John F. Harris, "Berger's Caution Has Shaped Role of U.S. in War," *Washington Post*, May 16, 1999.

⁷¹In a measured indictment of the Clinton administration's comportment in this regard, two Brookings Institution analysts wrote that "what was missing . . . was less allied will than a demonstrated American ability and willingness to lead a joint effort. NATO works best when Washington knows what it wants done and leads the effort to get the alliance there. In the runup to the Kosovo war, both elements were tragically lacking. . . . Although it is impossible to know whether the allies would have gone along with a more robust strategy, including early use of ground forces, the United States never made the case. U.S. policy presumed the allies' rejection, just as it presumed congressional opposition to the use of ground forces." Ivo H. Daalder and Michael E. O'Hanlon, *Winning Ugly: NATO's War to Save Kosovo*, Washington, D.C., Brookings Institution, 2000, pp. 98, 222.

 $^{^{72}{\}rm Eliot}$ A. Cohen, "The Mystique of U.S. Air Power," Foreign Affairs, January/February 1994, p. 109.

To admit that gradualism of the sort applied in Allied Force may be the wave of the future for any U.S. involvement in coalition warfare in the years ahead is hardly to accept that it is any more justifiable from a military point of view for that reason alone. Quite to the contrary, the incrementalism of NATO's air war for Kosovo, right up to its very end, involved a potential price that went far beyond the loss of valuable aircraft, munitions, and other expendables for questionable gain. It risked frittering away the hard-earned reputation for effectiveness that U.S. air power had finally earned for itself in Desert Storm after more than three years of unqualified misuse over North Vietnam a generation earlier. For all his disagreement with so many other arguments put forward, to no avail, on the proper uses of air power by his air component commander, General Short, even General Clark emphasized after the air war ended that despite understandable pressures for a gradualist approach both from Washington and among the NATO allies, "once the threshold is crossed to employ force, then force should be employed as quickly and decisively as possible. The more rapidly it can be done, the greater the likelihood of success."73

As the Gulf War experience showed, and as both Deliberate Force and Allied Force ultimately reaffirmed, U.S. air power as it has evolved since the mid-1970s can do remarkable things when employed with determination in support of a campaign whose intent is not in doubt. Yet to conjure up the specter of "air strikes," NATO or otherwise, in an effort to project an appearance of "doing something" without a prior weighing of intended effects or likely consequences is to run the risk of getting bogged down in an operation with no plausible theory of success. After years of false promises by its most outspoken prophets, air power has become an unprecedentedly capable instrument of force employment in joint warfare. Even in the best of circumstances, however, it can never be more effective than the strategy it is intended to support.

 $^{^{73}}$ Joseph Fitchett, "Clark Recalls 'Lessons' of Kosovo," *International Herald Tribune*, May 3, 2000.