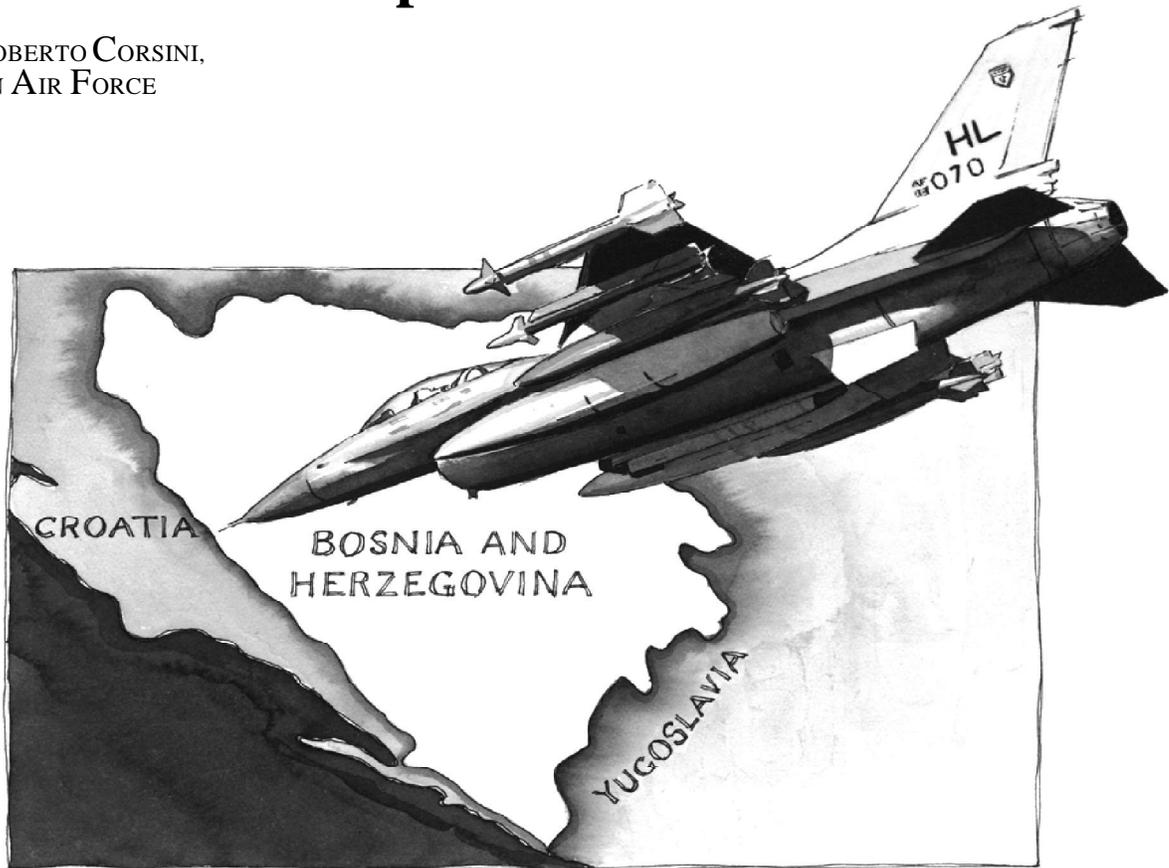


The Balkan War What Role for Airpower?

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THE FIRST thought that came to mind at the outbreak of the war in Bosnia was that its capital city, Sarajevo, has been a theater of important events in this century. It was there on 28 June 1914 that Archduke Francis Ferdinand, heir to the Austro-Hungarian throne, was assassinated while on a state visit. The assassination was the spark that touched off World War I. Believing the assassination to be of Serbian origin, Austro-Hungarian officials sent an ultimatum to Serbia with a list of demands. When the Serbian government refused to accept all the demands of the ultimatum, Austria-Hungary declared a state of war against Serbia.¹

Since the primary objective of nations at the time was to establish a balance of power through a system of alliances, the Austro-Hungarian initiative was seen as a threat to global stability, which was a sufficient reason for provoking a world war between the two power blocks.

In the end, the Austro-Hungarian empire was dissolved, while Serbia and Bosnia still exist. That fact seems to raise the issue of the paradox of power: Big countries lose small wars. Indeed, World War I was not a small war, but it began with the Austro-Hungarian objective of defeating a small country.

Even if it is possible to find some similarities between the situation in Bosnia today and on the eve of World War I, the current international political situation is completely different. The balance of power is no longer at stake. On the other hand, the risk of widening the crisis with the involvement of other countries is no less than it was in 1914. Hence, there is a need to look at the Bosnian crisis with particular attention and shrewdness.

The main problem with unconventional wars such as the Bosnian conflict is that in most cases the political objectives are not clear or exactly defined. Each situation is different and unique, and, in many cases,

conventional military powers are not capable of dealing with those situations. Insurgency, guerrilla warfare, terrorism, and sometimes operations other than war (OOTW) are different forms of violence with the real difference between them and war being only a problem of terminology, definitions, or political opportunity. When the situation (threat) and the national or multinational objectives are not properly addressed, the tasks, duties, limits, and rules of engagement (ROE) for soldiers are hard to understand and to follow, especially when those rules change during the operations. When tasks are not clear, training, readiness, equipment, procedures, and strategy probably are not adequate. In such situations, it is even difficult to find appropriate definitions to understand the situation, causing confusion among the decision makers and consequently leading to the misuse of force (military power). Without any doubt, the transformation of the international environment has produced an evolution in the way states and nations see and understand the use of force. In my opinion, that does not mean that conventional wars such as the Gulf War will never occur again; it just means that the scenario is becoming more and more complex.

Even if the primary mission of the armed forces is, and probably will remain, that of fighting and winning wars (conventional), there is no doubt that there will be a wider and wider spectrum of possible situations in which the armed forces could be employed. There is therefore a need for the armed forces to be prepared for many different situations (conventional and unconventional) and to adequately develop their tools, tactics, training, and doctrine in that direction.

This article examines the differences that characterize the conflict in Bosnia in order to understand whether it is just an episode or whether it represents a trend for future wars. After presenting a background that describes the evolution of the crisis/war in Bosnia and Herzegovina, it examines the main operations carried out by the North Atlantic Treaty Organization (NATO) forces. It then looks at some relevant aspects of airpower in this and similar situations. Finally, it touches on some aspects regarding the need and the importance of "jointness" in such operations (doctrine, tactics, training, and so forth).

Background

The former Federal Republic of Yugoslavia was formed at the end of World War I (4 December 1918) from several Balkan states, regions, and territories. Some of those states were already independent (Serbia

and Montenegro); others were previously administered, jointly or independently, by Austria and Hungary (Bosnia, Herzegovina, Croatia, Slovenia, Vojvodina, and Kosovo); and some of them had been under Ottoman Turkish rule until the nineteenth century.² Yugoslavia was not a nation-state but a country composed of six "constituent nations"—Slovenes, Croats, Serbs, Macedonians, Muslims (in the political sense), and Montenegrins—with different cultures, traditions, religion, and ethnology.³

Despite the several struggles among these states during the period between the two world wars, the cohesion in the Federal Republic at the end of World War II was strengthened by the work and the charisma of Tito (Josip Broz), the Yugoslavian prime minister. But after Tito's death in 1980, it was suddenly clear that the multiple nationalities and the old rancor against Serbian dominance had not disappeared. On the contrary, they were still present and more vivid than before because of the political dominance of Serbia over the other states in the period after World War II.⁴

In the 1980s, ethnic Albanians in Kosovo started demonstrations against Belgrade, the capital city of Serbia. In June 1991, Croatia and Slovenia declared their independence. The Serbian army first tried unsuccessfully to keep Slovenia in line with one month of fighting and then Croatia with a war that lasted six months (1992). In December 1991, Bosnia and Herzegovina declared their independence from Yugoslavia.

In the attempt to carve out some enclaves for themselves, the Serbian minority (Bosnian Serbs), with the help of the large Serbian army (Belgrade), took the offensive with the aim of creating a Great Serbia from territory occupied by Muslims in Bosnia-Herzegovina. To a lesser degree, Croatia also had plans for annexing the territory of Bosnia-Herzegovina.

The European Community itself was partly responsible for the wars in the Balkans by prematurely recognizing the independence of Slovenia and Croatia before arrangements were made to protect the Serbian minority.⁵ That gave an opportunity for Serbia to occupy parts of Croatia and Bosnia-Herzegovina and to indulge in the ethnic cleansing of areas to be resettled by Serbs.

Since 1992, the United Nations (UN), supported by the European Community (Western European Union—WEU) and NATO, has played an active role in trying to halt the war in Bosnia-Herzegovina. Naval operations such as Maritime Monitor (UN) and Sharp Vigilance (WEU), merged later into Sharp Guard (NATO), were the international community's attempts

to enforce the embargo against the former Yugoslavia in the Adriatic Sea (United Nations Security Council Resolutions 713 and 757).

But an embargo, as already demonstrated in other situations (Iraq and Libya, for example), doesn't produce any remarkable result, at least not in the short or medium run, especially when it is enforced against lesser-developed countries. As a matter of fact, after the embargo was enforced, the situation in Bosnia-Herzegovina deteriorated to a point that the UN Security Council (UNSC) established a no-fly zone over Bosnia-Herzegovina to preclude flight activity not authorized by the UN (UNSC Resolution 781, 9 October 1992). Notwithstanding Operation Sky Monitor, conducted with NATO airborne warning and control system (AWACS) aircraft, there were numerous confirmed violations of the no-fly zone, especially by the Bosnian Serb air force against the Muslim enclaves (military and civilian targets). Thus, the UNSC gave NATO, which in the meanwhile agreed to support UN resolutions, the authorization and the mandate to enforce the no-fly zone (Operation Deny Flight). The mission was, and still is because it has not changed in the meanwhile, that of conducting combat air patrols (CAP) and air policing to enforce compliance with UNSC Resolution 781 over the territory of Bosnia-Herzegovina.

At the same time, the UN has created a standing International Conference on the former Yugoslavia to negotiate an overall peace settlement. In January 1993, the Vance-Owen peace plan attempted to secure Bosnian sovereignty with a decentralized government composed of 10 provinces, but it didn't work as well as a second Vance-Owen peace plan and the Owen-Stoltenberg plan that attempted to create a confederation in Bosnia-Herzegovina from three exclusive ministates.⁶

Despite all the efforts of the international community (Vance-Owen and Owen-Stoltenberg peace plans, economic sanctions, mediation for a cease-fire by former US president Jimmy Carter, and the military measures already taken), a solution to the Bosnia-Herzegovina crisis/war is still far from being found.

The Different War

The Bosnia-Herzegovina crisis/war is more complex than many other situations for two main reasons: (1) there are more than two parties involved (all against each other); (2) there is no geographic line that divides the different factions. At the same time, it is both a conventional war and an unconventional war (civil war,

ethnic war, religious war) and a humanitarian relief operation.

Actually, in Bosnia-Herzegovina the ethnic distribution is more mixed than elsewhere in Yugoslavia. In the same geographic region, there are, on opposite sides, two main ethnic groups (Bosnian Serbs and Bosnian Muslims) and minorities (Bosnian Croats, Croat Muslims, Chetniks, and Albanians), all of whom field partisans and rebels). Also, the neighbors have an active role in the ongoing war: the Serbs (Belgrade), the Croats (Zagreb), and even supporters from a number of different countries (for example, Muslim fundamentalists from Iran). All the people involved have different objectives (annexation of territory, religion, destabilization, adventure, money, and so forth).

A quite similar situation can be found also in Croatia and in Macedonia. So far, there is no war in these two states because the Croatian Serbs are involved in the Bosnia War, while the presence of the United Nations Protection Force (UNPROFOR) in Macedonia has been successful in preventing another conflict. Moreover, there was a need to prevent conflict from spreading southward and possibly embroiling two NATO allies.⁷ But the instability of the situation makes it quite likely that there will be war in these two states. In this regard, Secretary of State Warren Christopher, explaining the reason why the US has become actively engaged in Bosnia-Herzegovina (1993), stated that "if one did not try to solve the problem in Bosnia, you may well have the entire Balkans involved. . . and it could draw in Greece and Turkey."⁸ In the middle of all this mess, there is the UNPROFOR, which has the objective of restoring peace, and more and more NATO forces that are becoming more involved.

Looking at this century, it is possible to identify two eras of distinct international relationships between states: (1) the bipolar system (during the cold war) and (2) the unipolar or multipolar system (at present). This change of the international order has also produced a change in the way the use of force is seen in solving economic, ideological, or ethnic problems. The vacuum created with the dissolution of one of the two superpowers (USSR)—a vacuum not covered by the remaining superpower—has de facto opened the way to a proliferation of small wars. But even if small wars probably do not represent an immediate threat for most Western countries, prolonged small wars can jeopardize the international order. In this respect, the Bosnian War is just one of a number of examples (Chechnya could be another one), but Bosnia has unique characteristics.

NATO was given the authorization and mandate to enforce the no-fly zone. In order to carry out the 24-hour combat air patrols (CAP) required by Operation Deny Flight, many different assets with different roles/missions are employed.



The Bosnian War offers what we can consider a good example of “4th generation war”: regional and niche warfare,⁹ war that is unconventional, infrastate, protracted, and low tech. As a matter of fact, what we are witnessing in Bosnia is, at the same time, a “first-wave” war form¹⁰: a fight among ill-armed, ill-trained, ill-organized, and undisciplined irregulars (agrarian age); a “second-wave” war form¹¹: mass production, mass destruction armaments, levée en masse (industrial age); a “third-wave” war form¹²: high-tech, precision guided missiles (PGM), low collateral damage, and other features that are not possible to identify in the previous “waves.”

All the typical destabilizing factors are present in Bosnia-Herzegovina: (1) strong ethnic, regional, and factional strife and virulent nationalism exist side by side; (2) religious extremism (present in the same area are Catholics and Orthodox Christians, Muslims, and Jews); and (3) disease and famine that cause migration of refugees. In this situation, the “enemy” is less vul-

nerable to traditional power (conventional warfare). That traditional power is itself less effective since there is an increment of political interference even at tactical level. For instance, the political authority can dictate the rules of engagement (ROEs) without paying much attention to the military concerns.

NATO Commitment

NATO in the Bosnia-Herzegovina War is playing the role of the UN military force. So far, it is engaged in two different operations: Deny Flight and Sharp Guard. Moreover, NATO has planned an operation able to enforce the peace plan whether or not it will be accepted by all of the factions in the struggle (Operation Disciplined Guard). Finally, NATO is planning an operation to support the withdrawal of all the UNPROFOR from former Yugoslavia in case of the failure of all the efforts for a peaceful resolution of the crisis/war (Operation Disciplined Effort).

For all operations, the main body of the command and control chain is the NATO command and control (C²) structure; nevertheless, the basic structure has been modified in order to interact with the UN authority that retains the power to authorize and veto all military interventions. As a matter of fact, when enforcing the no-fly zone, NATO can decide to intervene autonomously, notwithstanding the connections between the OPCON/TACON authorities (NATO and the UN), especially for CAS/CAP (close air support/CAP, or push CAS). This has proved to be a major downside of the whole system.

Following is a description of some of the aspects of all of these operations, including such things as the concept of operations, risk assessments, assets employed, operational downsides, and other relevant aspects.

Operation Deny Flight

The concept of operations is as follows:

- NATO will conduct air operations to prevent any flight not authorized by the UN inside or outside of Bosnia-Herzegovina by establishing CAP stations under the control of NATO airborne early warning (NAEW) aircraft.
- CAP aircraft will normally operate from air operating bases in Italy and from aircraft carriers.
- CAP aircraft will police the no-fly zone in the area of operations.
- Aircraft not authorized by the UN entering/approaching the no-fly zone will be interrogated, intercepted, escorted, monitored, turned away or engaged if necessary in accordance with the approved ROE.

Operational control has been transferred from the Supreme Allied Commander, Europe (SACEUR) to the Commander in Chief, Southern Europe (CINCSOUTH), the theater mission commander. From them it is delegated to the regional air commander (COMAIRSOUTH) for the land-based assets, and to the regional strike forces commander (COMSTRIKEFORSSOUTH) for the carrier-based assets. Tactical control is the same for all the assets (land-based and carrier-based). It is exercised by the commander of Fifth Allied Tactical Air Force (COMFIVEATAF), who runs all operations from the Combined Air Operations Center (CAOC) in the

commander's headquarters in Italy. The two regional operations centers (ROC) that normally exercise tactical control in that specific area have turned back their responsibility to COMFIVEATAF. Now they provide support for air traffic control, search and rescue operations (SAR), and air defense activity on Italian territory and over the Adriatic Sea.

In order to carry out a 24-hour CAP operation, different assets with different roles/missions are employed. In particular, the following assets (land and carrier-based) are involved:

- All-weather interceptors (AWX) and clear-weather interceptors (CWI).
- Tankers (air-to-air refueling).
- NAEW (AWACS).
- Suppression of enemy air defense (SEAD) assets.
- Combat search and rescue (CSAR).
- Reconnaissance assets.

The overall assessment of the risk given to this operation is from medium to low. Older-generation surface-to-air missiles (SAM) pose a low threat to CAP aircraft operating at high altitudes (above 15,000 feet). The risk increases during medium- to low-altitude intercepts as aircraft become vulnerable to anti-aircraft artillery (AAA) and handheld SAMs.

In spite of the operation's effectiveness against tactical aircraft, which has been considered good, the number of violations of the no-fly zone that go undisputed still is considerable, mainly because of operational limitations and political concerns. From an operational point of view, even if the weapon systems employed are really sophisticated, it is still difficult to detect and intercept low-speed, low-signature aircraft and helicopters flying close to the ground. The weather also continues to represent a limitation. Moreover, since the geographic boundaries are very close and the distances relatively short, it is quite difficult to react in time to any of those violations.

But the political concerns are even more serious for the following reasons: (1) retaliation against the UN patrols, humanitarian relief convoys, or flights within Bosnia-Herzegovina can be expected; (2) the possibility that the Serbs in Bosnia-Herzegovina will fire SAMs and AAA against CAP aircraft enforcing the no-fly zone is more likely; (3) there is a likely possibility that the Serbs will hamper UN efforts to conduct their operations into Bosnia-Herzegovina; and (4)

the different perceptions of the Bosnia-Herzegovina War among the international community can be exploited by the Serbs, or by the Muslims blaming the Serbs.

In this regard, there are different assessments even inside NATO. Having different views inside the same organization can be considered deplorable—for example, showing a more friendly attitude for one party (for instance the Bosnian Muslims)—but in such a situation where the UN and NATO must be neutral, it is an even bigger mistake.

All these concerns and limitations, well known by NATO before accepting the enforcement of the no-fly zone, have caused trouble for the UN and NATO. The AAA has been used against humanitarian flights, and the SAMs have been used to shoot down both humanitarian relief flights and CAS/CAP flights. Several times humanitarian operations have been hampered and the UNPROFOR have suffered ambushes and violence. Those actions against the UN and NATO have been conducted not only by the Bosnian Serbs (as may be expected), but also by the Croats, the Chetniks, and even by the Bosnian Muslims, all for different reasons (to protest against the embargo, to blame their opponents, and so on).

In spite of the fact that four Bosnian-Serb aircraft have been shot down, the violations of UNSC Resolution 781 continue. From a military and political point of view, therefore, Operation Deny Flight has been quite unsuccessful and certainly not cost-effective. Deny Flight is a very expensive operation in terms of flight hours, logistical support, and attrition (so far, at least six NATO aircraft have been lost during transfer flights). To assure 24-hour CAP operations, a large number of assets (tactical fighter, tanker, NAEW, and combat search and rescue [CSAR] aircraft) and flight hours are required. A force of more than 160 NATO military aircraft continue to fly 80 to 100 sorties a day over Bosnia-Herzegovina. The daily Bosnian military flying operations involve more than 4,500 personnel from 12 countries.¹³ From the beginning of Operation Deny Flight, such a large number of hours have been flown that it is not affordable for some participant nations. On the other hand, Operation Deny Flight represents the only concrete answer that the international community (NATO) has been able to find in order to protect the civilian population from the ongoing aggression.

CAS/CAP (support CAS or push CAS)

The CAS/CAP mission is part of Operation Deny Flight (phase III, step 4). The concept of operations is as follows:

- When requested by the UN authority through an air operations coordination center (AOCC), CAS assets may be employed in Bosnia-Herzegovina to support UNPROFOR.
- All CAS operations are limited to the degree, intensity, and duration necessary to achieve the specific objective with the minimum collateral damage that is militarily feasible, avoiding any damage to friendly forces (UNPROFOR).
- All CAS missions must be conducted under the control of a forward air controller (FAC) on the ground or airborne; weapons can be released only when the target has been positively identified by the aircraft crew and after the FAC clearance.

Unlike enforcement of the no-fly zone, CAS interventions cannot be decided by NATO autonomously. From the UN-designated ground commander, the request goes to the COMUNPROFOR (responsible to the secretary general of the UN) in the AOCC (in former Yugoslavia), and from the AOCC it goes to the NATO C²-CAOC (in Italy).

The following land- and carrier-based assets are involved for CAS/CAPs:

- Visual flight rules (VFR) and all-weather attack aircraft.
- Tankers (air-to-air refueling).
- NAEW (AWACS).
- Suppression of enemy air defense (SEAD) assets.
- CSAR aircraft.
- Reconnaissance assets.
- Electronics-jamming aircraft.

Despite all the efforts to create a communication connectivity between NATO and the UN authorities that is suitable for near-real-time passing of information, the solution that has been found is too complicated and intricate to meet the operational needs. In other words, in the time the request is processed, the threat disappears. On the other hand, all NATO allies agreed that the United Nations must retain the final

say on whether or not air strikes are launched by NATO planes and when they will be launched.¹⁴

Another important operational limitation is that CAS/CAPs cannot be conducted at night or in poor weather conditions. That is because it is absolutely mandatory to have a positive (visual) identification of the target in order to avoid collateral damage or damage to friendly forces. Of course, these limitations can be exploited by the "enemy" forces.

As an overall assessment, other than to show our will by reacting in some way, CAS/CAP operations with those limitations have a very limited operational value. Moreover, the possibility of Serbian retaliation against the UNPROFOR is even more likely than in the enforcement of the no-fly zone. For that reason (the fear of Serbian reprisals against peacekeepers) the UN commanders have been reluctant to approve anything other than limited strikes.¹⁵

Operation Sharp Guard

On 29 May 1993, the Supreme Headquarters, Allied Powers, Europe (SHAPE), worried about a possible (even if quite unlikely) surface threat against the navy units (NATO and WEU) enforcing the embargo in the Adriatic, requested the availability of air assets from NATO countries for an operation called Sharp Guard. This 24-hour operation has been carried out by land- and carrier-based tactical fighter-bombers and maritime patrol aircraft (MPA) equipped with air-to-surface weapons. The command and control chain is the NATO C² (CAOC-FIVEATAF), with the only difference being that the scramble of the land-based assets is technically ordered by the competent ROC.

For this operation, the term *Surface CAP* (SUCAP) has been adopted because the tactical fighter bombers are normally on quick readiness alert (QRA) on the ground. Of course, this is an operational limitation, but, on the other hand, a CAS/CAP for 24 hours to meet this requirement would have been unaffordable and not cost-effective.

Even if this is a 24-hour operation, there are many doubts about the effectiveness and the opportunity of using air assets against a surface threat during night or poor weather conditions, or even in daylight. The Adriatic Sea is relatively small and the concentration of friendly ships is very high. Most of the SUCAP assets are equipped with standoff weapons. For obvious reasons, NATO does not foresee the overflight of targets. The likely targets are small coastguard cutters and speedboats, but their high speeds and low signatures

make them inappropriate targets for costly standoff missiles. In such an environment, the launching of a standoff missile against a radar signal, confirmed as an enemy by a friendly ship, could be ineffective and probably quite dangerous.

Operation Disciplined Guard

Operation Disciplined Guard, or peace plan, is already defined and will be implemented, with the consensus of the UN and NATO authorities, as soon as the peace conditions are accepted by all the parties involved in the Bosnia-Herzegovina War. It foresees four different phases during which NATO forces will be deployed in the contingency area to restore normal operations (peace). The plan foresees deploying troops and logistical support to staging bases in Italy. The initial operations (deployment of the first units) will be conducted by air operations, then troops and logistical support will be transferred via sea and surface (railroad). So far, the plan has been implemented only in regard to the predisposition of the staging areas for hosting the large number of personnel and the huge amount of logistical support.

For this operation, no one foresees any combat operations or the involvement of air assets other than air-lift missions.

Operation Disciplined Effort

After the failure of all the efforts to establish peace in Bosnia-Herzegovina, many nations participating in the UNPROFOR operations have started to discuss the possibility of a quick withdrawal of their troops from the former Yugoslavia. These discussions concern considerations of cost, the risks involved, and the effectiveness of the mission.

NATO is now planning an operation to support and protect the UNPROFOR troops during the possible withdrawal (Operation Disciplined Effort). The so-called "exit point" represents the most vulnerable aspect of this operation. As former US Secretary of State Lawrence Eagleburger stated, "If you have a clear exit point in a place like Bosnia, it is like telling the parties that when our people get killed we will leave. And that is exactly what the opponents of our presence would like. Instead of reducing the danger to our forces, it invites attack."¹⁶

This plan foresees two possible environments: permissive or hostile. It foresees four phases to be accomplished in about six months. In the first phase, the forces

involved will be deployed in Italy and will operate under NATO command and control. The second phase is dedicated to specific training in order to execute the operation. In the third phase, the forces will be deployed in the area of operation. In the fourth phase, NATO forces will support and protect the UNPROFOR withdrawal.

Even if the withdrawal operations should start in a permissive environment, a quick change to deep hostility towards the UN troops is considered quite likely. Therefore, the disposition of NATO troops must be appropriate for the worst eventuality. Actually, involved in this operation will be three brigades in Bosnia (UNPROFOR troops converted); one brigade in Croatia (UNPROFOR troops converted); one brigade on ship ready to intervene (US Marines); three brigades in strategic reserve on Italian territory; about 130 tactical and support aircraft for SAR and CSAR operations; and about 130 attack helicopters and three carrier groups in the Adriatic Sea.

As an overall assessment from military and political points of view, the NATO involvement in the Bosnia-Herzegovina crisis/war has not produced any remarkable result so far. Moreover, what the Balkan crisis highlighted was that NATO had a function that it has not yet been able to fulfill in the 1990s and also that the other potential peacekeeping forces (UN, WEU) have been unable to fill this need.¹⁷

Bosnia can be considered also as an arena outside the borders of NATO for an all-European action, but the WEU patrols in the Adriatic revealed demonstrably that the union has neither the political will nor the military resources to conduct a policy independent of NATO. Nevertheless, NATO and WEU intervention in the Balkan crisis represents the only concrete answer that the international community has been able to find.

Airpower Doctrine

The US National Security Strategy of Engagement and Enlargement stresses three primary objectives: (1) enhance security, (2) promote domestic prosperity, (3) advance democracy. These objectives put a priority for national security on assisting failed states.¹⁸ That is the scenario of unconventional wars and OOTW. The implication for the US armed forces is that they need to be prepared for those contingencies as well as for conventional wars. Operations and missions for these contingencies are addressed in the doctrines of the Army,¹⁹ Navy,²⁰ and Marine Corps.²¹ As matter of fact, Navy

doctrine specifically addresses the Bosnian War as an example of peacekeeping operations.²² Air Force doctrine addresses the issue in a marginal way without mentioning any specific role for airpower.²³

Air Force Manual (AFM) 1-1, published in March 1992, can be considered without any doubt an outstanding document when regarding conventional wars. Indeed, AFM 1-1 provides a sound doctrinal basis for conventional theater conflicts such as Desert Storm in which new technology, techniques, and tactics represent the evolution of the airpower coming from the experience of the Vietnam War. This new version of Air Force doctrine, to some degree, does recognize that technology has changed the nature of war. The doctrine that is based on theory and experience sometimes is driven by technology rather than by vision. That is commonly considered a mistake,²⁴ but when new technology is ahead of its doctrine, an updating of the doctrine is absolutely inevitable. If new technology has changed the war, the nature of war itself has also changed (different forms and rules). For a better understanding of this point, it is enough to simply compare the Gulf War with the Bosnian War.

AFM 1-1 takes into consideration only conventional wars, which penalizes the Air Force when it is called to plan and assess possible scenarios and the spectrum of intervention in wars such as the one in Bosnia-Herzegovina. If theory must look far into the future, there is no need of great vision to understand that scenarios such as the one in Bosnia-Herzegovina will proliferate in the future.

The British army is presently seeking to develop a tactical doctrine based on the Bosnia experience in order to reflect new operational realities.²⁵ In this first step, the operational and strategic levels of operation are not addressed, but it still is a step in the right direction.

Airpower Role and Mission

Notwithstanding the political failure of the NATO mission in Bosnia, the experience provides some "lessons learned" that can be useful for similar situations in the future and even for validating doctrine at the tactical and operational levels.

The lessons learned for airpower can be grouped in three distinct areas: (1) what has proved to be valuable and useful, (2) what must be avoided, (3) what needs to be improved or better exploited.

In spite of some concerns about the cost-effectiveness of maintaining aircraft in CAP for



The Balkan War has dramatically shown us that our airlift fleet will now be called upon to operation in hostile or potentially hostile areas. Crew tactics, training, and doctrine must address when and how to use airlift assets in such scenarios.

24 hours a day and for 365 days a year to deny certain armed forces the use of combatant aircraft, the system has proven to be effective. On 28 February 1994, F-16 fighters under AWACS control downed four J-1 Jastreb²⁶ aircraft that were attacking ground targets inside the no-fly zone.²⁷ In this mission, F-16s have proved to be adequate for such situations. The AWACS, as in the Gulf War, has provided surveillance and targeting information essential for enforcing no-fly zones.

The will to support at any cost the Army and Navy and the need to see or look for a role and a mission for airpower in any situation can be responsible for a misuse of airpower itself. That is the case of the air support for the Navy in the Adriatic Sea against an unlikely threat (Operation Sharp Guard) and the request for close air support in Bosnia-Herzegovina for 24 hours a day. In both situations, the clear and sure identification of the target is paramount. It cannot be accomplished in poor weather conditions or during the night. Moreover, the conditions for a so-called surgical air strike that could solve a contingency situation (defense or support to the UNPROFOR), or that could help to win a victory at minimal cost, are not present in the former Yugoslavia. The heavily armed Serbs can defeat an invader, as did the Chetniks and partisans in World War II.²⁸ Finally, the surgical air strikes can be seen by Bosnian-Serbs as the preparations for direct

military intervention, therefore resulting in an immediate escalation in fighting, with significant civilian casualties.

On the other hand, whether or not CAS/CAPs have demonstrated operational limitations in particular situations, they have validated the Air Force role for this mission. In the long debate between the Air Force and Army about the effectiveness of using aircraft or attack helicopters for the CAS mission, the present trend, even if unconfessed, is to believe that attack helicopters probably are more adequate and suitable for this requirement. That could be true in a conventional war in which there are well-defined lines such as the fire support coordination line (FSCL), the forward edge of battle area (FEBA), and so on. In that situation, the friendly troops have their helicopters close to the enemy troops. But in contests such as the one in Bosnia-Herzegovina, where the friendly troops are spread out in many small spots surrounded by potential enemies, the aircraft are without any doubt more appropriate for such CAS missions.

What must be absolutely avoided in the future are the complications of the command and control system (C²). NATO, as it has demonstrated with the creation of a new command and control structure (CAOC), cannot rely on structures already in place for all the contingencies. Moreover, NATO C² cannot be mixed with

other C² structures (UN). When NATO accepts the mandate from the UN, the ROE must be clear and the authority to implement those ROE must be delegated by the UN to the NATO C². Other solutions can only lower the operational effectiveness.

In such situations, as generally is the case in peacekeeping operations, command and control arrangements find many objections and opposition from the participating states. All states are reluctant to place their troops under UN command. Gen John Shalikashvili, the chairman of the Joint Chiefs of Staff, stressed that "US troops participating in international peacekeeping will still report ultimately through their US chain of command, even though they may be deployed under the 'operational control' of a foreign commander leading a UN or NATO coalition." He emphasized in September 1993, however, that "the US views such operational control authority as limited and only acceptable under specific conditions for short periods of time."²⁹ It means that a significant improvement in the command and control chain which represents the most delicate area, is even more difficult to find than is a solution to the problem of transferring the authority from the UN to NATO. Progress can be made in the following areas to improve the effectiveness of airpower in contests such as OOTW and unconventional war.

J-STARS

The joint surveillance target attack radar system (J-STARS) is an airborne system intended to provide joint Air Force and Army management of the battle area. In other words, J-STARS does for the ground battle what AWACS does for the air battle. The capability to provide near-real-time battlefield surveillance and targeting information for both the Air Force (surgical strikes) and the Army (UNPROFOR in this case) is essential also in contests such as the one in Bosnia-Herzegovina

After its Bosnia-Herzegovina experience, NATO is interested in the acquisition of J-STARS assets.³⁰ The aircraft would be as much a political instrument as a military asset in NATO's peacekeeping role. J-STARS data on troop movement violations or shifts of weapons from storage areas would be reported to the appropriate international bodies such as the UN. In this way, there will be no need for 14-hour CAS/CAP since push CAS could be ordered more in advance.

Nonlethal Weapons

In unconventional war and OOTW, the collateral damage to the economic and social infrastructure—as well as casualties to noncombatants, the civilian population, and peacekeeping forces—must be limited to the maximum degree. In this contest, the right avenue to follow is to develop weapons, munitions, and nonlethal or disabling systems capable of avoiding or minimizing the loss of life and associated damage.³¹

Airlift Fleet

The airlift fleet (tactical and strategic) is now called on to operate in different scenarios. Unlike the cold war period, when the fleet operated inside and between friendly countries only, it is now called on to carry out airlift for humanitarian and relief operations inside hostile or potentially hostile countries. There is a need, therefore, to make the airlift fleet more survivable in operations such as those conducted in Bosnia.³² Not only tactical aircraft are involved in those operations (C-130s, for example), but also strategic assets such as C-5s and C-141s. All these assets need self-defense devices; the crews need special training, for example, in such matters as how to be less exposed to AAA and handheld SAMs during takeoff and landing; and doctrine must address the airlift issue in the proper way (when and how to use airlift assets in such scenarios).

Joint Doctrine and Joint Operations

If jointness has ever represented the challenge for all the armed forces in the world, budget reductions have turned this challenge into a survival issue. Its capabilities and effectiveness can be maintained only with multiservice synergy.

Each service has come a long way to make joint force a reality, but the real difficulty remains in the area of command and control and in joint doctrine. Since the chairman of the Joint Chiefs of Staff was committed in 1986 to develop a doctrine for the joint employment of the armed forces, many joint publications are now available (*Joint Warfare of the US Armed Forces, Unified Action Armed Forces, Doctrine for Joint Operations, Doctrine for Planning Joint Operations*, etc.).³³ The problem with all these publications is that they are not always in compliance or coordinated with those of the other services. For this reason, multiservice interoperability has never been achieved.

While multiservice interoperability is a problem at home, the multinational and multiservice interoperability with NATO allies is even further away. In spite of this fact, the United States should increasingly expect to operate with ad hoc coalitions rather than alliances.³⁴ Of course, the other NATO countries suffer from the same problems.

Moreover, the NATO joint doctrine itself is not applicable. NATO naval doctrine for operations in brown water is not coordinated with NATO air force doctrine, and NATO joint doctrine is not coordinated with either document. The three documents use different terms, definitions, and procedures. For instance, the same area of responsibility for air defense operations can fall simultaneously under carrier group and air force responsibility. And that is precisely the case concerning the Adriatic Sea in the Bosnian War. Only because there is no air threat has the problem never been raised.

In joint operations, the role of the joint force air component commander (JFACC) is considered indispensable. But since the JFACC is more than a coordinator, its presence can sometimes be seen as a command that violates unity of command and interferes with the theater commander's role.³⁵ In situations such as the Bosnia War, there is no need for a JFACC. Rather than exploiting structures already in place, it seems that any situation needs "ad hoc" structures. That was the case in the Gulf War, but it is also the case in the Bosnian War (CAOC in Italy and AOCC in the former Yugoslavia). That may mean that it is better to maintain the maximum flexibility rather than to focus on specific structures.

Conclusion

Since NATO accepted the mandate to enforce UNSC Resolution 781, 66,917 Deny Flight sorties³⁶ (close-air-support and no-fly zone missions) have been flown, but not any of the political and military objectives have been achieved. At this point, despite all the efforts of the international community (UN) to protect the rights of the minorities, the Serbs have won the war in Bosnia.³⁷

As the Austro-Hungarian empire became the Balkan's victim in 1918, NATO could be Yugoslavia's next victim (not only because the military success in Bosnia is under discussion, but also because the relations among some allies are in danger). The relations between Greece and Turkey have worsened, but other disagreements are growing inside and outside the alli-

ance. The reluctance to launch air strikes because of the fear of Serbian reprisals against UN peacekeepers has caused friction with some NATO allies, particularly the US, who believes that if Serbian violations go unpunished, the alliance's credibility will be at stake.³⁸ It is useful to notice that Russia has already signed a new military-cooperation agreement with the government of Serbia, to become effective when sanctions are lifted.³⁹

Even if what is going on in Bosnia will not shape the world of tomorrow,⁴⁰ we can expect small regional conflicts (niche wars) to spread abroad with a significant impact on the armed forces of those countries that want to be engaged in peacemaking and peacekeeping operations. In this regard, the United States, because of its strategy of enlargement and engagement, is in a "pole position." In my opinion, it is not only a matter of budget but also of what shape (size and force capabilities) to give to the armed forces. That is a problem of doctrine, procedures, weapons, and, despite different notable opinions,⁴¹ it is a problem of specific training.

Trying to find a role for airpower at any cost could be a mistake, especially when collateral political or military (tactical and strategic) implications are not well considered. The use of air assets in Operation Sharp Guard to protect NATO and WEU ships in the Adriatic Sea (an environment where there is no way to use stand-off weapons without danger for the friendly forces) is an unnecessary and useless forcing that shows, at the least, a lack of doctrine.

Operation Deny Flight has shown the capabilities of allies to fight a "third-wave"⁴² war form, but what are the political and military outcomes when the enemy is only able to fight wars such as "first- and second-wave" forms? There are opinions that the NATO's decision on the use of airpower (air strikes) substantially eased the pressure on Sarajevo, prevented the fall of Gorazde, and provided the foundation for last spring's agreement between the Bosnian Muslims and Bosnian Croats to end their conflict in spring 1994.⁴³ In my opinion, nothing is further from reality. Every time the Serbs, as well as the other minorities, declare to accept something (peace plans, ultimatums, agreements, cease-fires, and so on), it is just because they need some rest or breath to reorganize their troops or to get and exploit the international consensus. That has happened every time and will occur again. The Serbs are not scared by air strikes at all. They know very well that a few air strikes against a bunch of old tanks could not affect their military capabilities; they

are only smoke in the eyes of the international community that wants to do something to prevent the ethnic cleansing, the massive refugee flows, and so on. On the other hand, the fear of retaliations against the UNPROFOR is a heavy binding factor for NATO air strikes.

Moreover, the "dual key" command system in Bosnia requires both UN and NATO commanders to approve any military action by NATO forces.⁴⁴ This complication is against the principle of unity of command, a principle that finds more reasons in CAS operations where the need of a command and control system suitable for near-real-time passing of information is essential.

What Deny Flight has proved in a positive prospective is: (1) close air support still remains a mission for the Air Force (in such environments attack helicopters make less sense); (2) the weapon system F-16 is sophisticated enough and appropriate for the requirement; and (3) timely and accurate information represents the real power, the challenge for the future (AWACS, J-STARS, and satellites).

Whether the war is an expression of the Society,⁴⁵ the transformation of the Society is the main cause of the transformation of war. The Bosnian War represents a good example of this transformation—a war where the Clausewitzian concept of trinity doesn't have much sense. That doesn't mean that conventional wars (third-wave wars or previous) will not occur any longer, the point is that the armed forces have to expect to be employed in very different contingencies.

The message coming from Bosnia-Herzegovina for the Air Force is that there is a need of: (1) an updated doctrine; (2) specific training; (3) high-tech weapon systems; (4) an advanced and integrated command and control system; (5) a more sophisticated information system; and (6) improved self-defense systems (passive and active) for airlift fleet (both tactical and strategic).

Notes

1. Larry H. Addington, *The Patterns of War since the Eighteenth Century* (Bloomington, Ind.: Indiana University Press, 1984), 123.

2. "Yugoslavia: Introductory Survey," *The Europa World Year Book 1994* (London: Europa Publications Limited, 1994), 3346–51.

3. Susan L. Woodward, "Conflict in Former Yugoslavia," *Great Decisions* (Ripon, Wis.: Ripon Community Printers, 1994), 3–14.

4. "Yugoslavia: Introductory Survey," 3346–51.

5. Lawrence S. Kaplan, "NATO in the 1990s: An American Perspective," *Paradigms: The Kent Journal of Interna-*

tional Relations 7, no. 2 (Winter 1993): 13. The article mentions the recognition of the independence of Croatia, but the same thing happened to Slovenia.

6. Woodward, 3–14.

7. Mats R. Berdal, "Fateful Encounter: The United States and UN Peacekeeping," *Survival* 36, no. 1 (Spring 1994): 38.

8. *Ibid.*, 36–37.

9. Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the Twenty-first Century* (Boston: Little, Brown & Company, 1993), 89.

10. *Ibid.*, 33–37.

11. *Ibid.*, 38–43.

12. *Ibid.*, 64–85.

13. Craig Couvalt, "Joint-STARS visit tied to NATO surveillance needs," *Aviation Week & Space Technology*, 3 October 1994, 30.

14. Charles Aldinger, "Beefed-up Enforcement of Resolutions is Sought," *Washington Times*, 30 September 1994, 17.

15. *Ibid.*

16. Berdal, 39.

17. Kaplan, 16.

18. Hans Binnendijk and Patrick Clawson, "Assessing US Strategic Priorities," *Joint Forces Quarterly*, November 1994, 15.

19. Field Manual (FM) 100-5, *Operations*, chapter 2, "Operations Other than War," 14 June 1993, 2-0.

20. Naval Doctrine Publication 1, *Naval Warfare*, chapter 2, "Naval Operations—Other Than War," 28 March 1994, 21.

21. Fleet Marine Forces Manual (FMFM-1), *Warfighting*, 6 March 1989. Indeed, the issue is only marginally touched on in chapter 2, "The Spectrum of Conflict," 21.

22. Naval Doctrine Publication 1 states that naval doctrine in the peacekeeping operations in the former Yugoslavia and Adriatic Sea is as follows:

Supporting United Nations Security Council resolutions, NATO Standing Naval Forces and other US and Western European Union naval forces in a cooperative effort joint to form combined task forces. In the Adriatic Sea, destroyers, frigates, attack submarine, and support ships from 11 nations conduct maritime patrols for Operation Sharp Guard. In the airspace over the Republic of Bosnia-Herzegovina, five nations support Operation Deny Flight - enforcing a No-Fly Zone with shore and carrier-based fighter and attack aircraft. (Page 23)

23. Air Force Manual (AFM) 1-1, *Basic Aerospace Doctrine of the United States Air Force*, March 1992, vol. 1, chap. 1, par. 1-5b, 3. Peacekeeping functions, support for insurgencies and counterinsurgencies, and combating terrorism often involve activities short of war. American military forces may be called on to perform specific peacekeeping functions.

24. Gen Henry H. ("Hap") Arnold at the end of World War II said, "Any air force which does not keep its doctrines

ahead of its equipment, and its vision far into the future, can only delude the nation into a false sense of security." Quoted in Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 2, 1907-1960 (Maxwell AFB, Ala.: Air University Press, 1989), 180.

25. Berdal, 44.

26. The J-1 Jastreb is a light single-seat attack aircraft with limitations in maximum speed, range, and payload. It can be compared to the US AT-37, but with less performance and more limitations (avionics, pressurization, etc.).

27. Department of the Air Force, *Air Force Issues Book 1994* (Washington, D.C.: Government Printing Office, 1994), 2.

28. Kaplan, 13-14.

29. Berdal, 41.

30. Couvalt, 30.

31. *Air Force Issues Book 1994*, 11.

32. *Ibid.*, 21.

33. *Joint Doctrine Capstone and Keystone Primer* (Washington, D.C.: Joint Chiefs of Staff, 15 July 1995).

34. Binnedijk and Clawson, 17.

35. J. L. Whitlow, "Who's in Charge?" *Joint Forces Quarterly*, July 1994, 64-70.

36. Gen. George Joulwan, SACEUR/CINC EUCOM,

address to the Air War College, Maxwell AFB, Ala., 11 April 1995.

37. Sen Orrin Hatch, "Strategic Misfires over Bosnia's Plight," *Washington Times*, 7 December 1994, 21. The article reports that Defense Secretary William Perry has announced that, despite the efforts of the international community, the Serbs have won the war in Bosnia.

38. Aldinger, 17.

39. William Pfaff, "Yugoslavia's Next Victim: NATO," *Baltimore Sun*, 6 March 1995, 7.

40. Gen John Shalikashvili, chief, Joint Chiefs of Staff, address to the Air War College, Maxwell AFB, Ala., 16 March 1995.

41. *Ibid.* In his address, General Shalikashvili said that it is enough to be well trained for the primary mission (fight and win conventional wars) since no special training is required.

42. Alvin and Heidi Toffler, 64-80.

43. Anthony Lake, "American Power and American Diplomacy," address at Harvard University, Cambridge, Massachusetts, 21 October 1994.

44. "US Commander Speaks on New Role for NATO on Its Southern Flank," *Christian Science Monitor*, 14 March 1995, 7.

45. Alvin and Heidi Toffler.

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