
Targeting and Proportionality during the NATO Bombing Campaign against Yugoslavia

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Abstract

The 1999 NATO bombing campaign against the Federal Republic of Yugoslavia relied upon modern precision weaponry and purported to pay due regard to contemporary legal standards, in particular to the requirement to limit incidental civilian casualties. There are no such things as error-free wars or casualty-free wars. It appears, however, that NATO classified a wider range of objects as military objectives than has traditionally been the case, in particular the RTS broadcasting station headquarters in Belgrade. It also appears that some earlier bombing campaigns (the 1972 'Linebacker 2' campaign against North Vietnam which was conducted at the dawn of the era of precision weapons is an example) were conducted paying equal regard to the requirement to limit incidental civilian casualties.

1 Overview of the Bombing Campaign

The North Atlantic Treaty Organization (NATO) member states conducted a bombing campaign referred to as Operation Allied Force against the Federal Republic of Yugoslavia (FRY) from 24 March to 9 June 1999. During the bombing campaign, NATO aircraft flew 38,004 sorties, including 10,484 strike sorties. During these sorties, 23,614 air munitions were released.¹ It has been reported that NATO aircraft dropped a total of 6,303 tons of munitions. Of the over 23,000 bombs and missiles used during the operation, 35 per cent were precision-guided.² NATO lost two aircraft due to combat and in both cases the pilots were recovered. The loss rate for aircraft due

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¹ Figures from NATO quoted in UK Ministry of Defence, *Kosovo: An Account of the Crisis* (updated to 21 December 1999).

² *Washington Post*, 21 September 1999, A1, cited in A.H. Cordesman, *The Lessons and Non-Lessons of the Air and Missile Campaign in Kosovo* (1999) 21.

to combat was less than the expected accident rate in demanding peacetime training sorties.³

US Secretary of Defense William S. Cohen and General Henry H. Shelton, Chairman of the Joint Chiefs of Staff, gave a joint statement on the Kosovo After Action Review before the US Senate Armed Services Committee on 14 October 1999, which indicated:

At the outset of the air campaign, NATO set specific strategic objectives for its use of force in Kosovo that later served as the basis for its stated conditions to Milosevic for stopping the bombing. These objectives were to:

- Demonstrate the seriousness of NATO's opposition to Belgrade's aggression in the Balkans;
- Deter Milosevic from continuing and escalating his attacks on helpless civilians and create conditions to reverse his ethnic cleansing; and
- Damage Serbia's capacity to wage war against Kosovo in the future or spread the war to neighbors by diminishing or degrading its ability to wage military operations . . .

Phases of the Campaign. Operation Allied Force was originally planned to be prosecuted in five phases under NATO's operational plan, the development of which began in the summer of 1998. Phase 0 was the deployment of air assets into the European theater. Phase 1 would establish air superiority over Kosovo and degrade command and control over the whole of the FRY. Phase 2 would attack military targets in Kosovo and those FRY forces south of 44 degrees north latitude, which were providing reinforcement to Serbian forces into Kosovo. This was to allow targeting of forces not only in Kosovo, but also in the FRY south of Belgrade. Phase 3 would expand air operations against a wide range of high-value military and security force targets throughout the FRY. Phase 4 would redeploy forces as required. A limited air response relying predominantly on cruise missiles to strike selected targets throughout the FRY was developed as a stand-alone operation, and was integrated into Phase 1. Within a few days of the start of NATO's campaign, alliance aircraft were striking both strategic and tactical targets throughout Serbia, as well as working to suppress and disrupt the FRY's integrated air defence system.

At the NATO Summit in Washington on April 23, 1999, alliance leaders decided to further intensify the air campaign by expanding the target set to include military-industrial infrastructure, media, and other strategic targets . . .⁴

The NATO Internet report, 'Kosovo One Year On', described the targets as:

The air campaign set out to weaken Serb military capabilities, both strategically and tactically. Strikes on tactical targets, such as artillery and field headquarters, had a more immediate effect in disrupting the ethnic cleansing of Kosovo. Strikes against strategic targets, such as government ministries and refineries, had long term and broader impact on the Serb military machine.

The bulk of NATO's effort against tactical targets was aimed at military facilities, fielded forces, heavy weapons, and military vehicles and formations in Kosovo and southern Serbia . . .

Strategic targets included Serb air defences, command and control facilities, Yugoslav military (VJ) and police (MUP) forces headquarters, and supply routes.⁵

³ Cordesman, *supra* note 2, at 24.

⁴ Cohen and Shelton, 'Joint Statement on Kosovo After Action Review in the US Mission to NATO', *Security Issues Digest*, 14 October 1999, at 6.

⁵ 'Kosovo One Year On', www.nato.int/kosovo/rep2000, 21 March 2000.

The choice of targets during Operation Allied Force must be viewed within the context of contemporary theories for the use of aerospace power. One of the most influential theories is the 'Five Strategic Rings' theory championed by Colonel John A. Warden, USAF (retd):

The theory builds a framework for the use of aerospace power. Each ring represents a different facet of a nation's society: political leadership, economic systems, supporting infrastructure, population and military forces. Colonel Warden's innovation lays the foundation for the notion of targeting national infrastructure to attack the enemy from the 'inside out', using airpower to skip over military forces, such as armies in the field, to strike directly at state leadership. Although the theory has been touted by many as the aerospace strategy most appropriate for twenty-first-century warfare, the unspoken-but-known-result is the indirect targeting of the civilian population, euphemistically referred to as 'popular support'.⁶

Proponents of the Five Strategic Rings theory do not suggest that the enemy civilian population should be attacked but they do believe that one of the objectives of war-fighting is to affect adversely civilian support for the enemy war effort.

Although it is relatively easy to put forth a concise statement of the objectives of the bombing campaign and of the military objectives which the air commanders intended to attack, it is much more difficult to determine what actually was attacked and what the impact of the attacks was on FRY decision-makers. It is clear that for political and military reasons the FRY decided to withdraw its forces from Kosovo. One may assign a substantial amount of the credit for this to Operation Allied Force but it is not possible to determine precisely how much because of the potential relevance of other factors, such as Russian political pressure. It is also difficult to assess objectively the physical impact of a bombing campaign. Weapons do not always strike the target they are intended to hit, even when precision-guided weapons are used.⁷ Those dropping the bombs may have an interest in exaggerating their accuracy and their impact on military objectives.

The forces or the state in control on the ground may have an interest in exaggerating collateral casualties and damage to civilian objects. Further, air commanders will usually concede that air forces are better at attacking immovable targets than they are at attacking movable military forces deployed in the field such as tanks or armoured personnel carriers, particularly in terrain with lots of hills and trees. Anthony Cordesman has summarized the US Department of Defense (US DoD) claims of NATO-inflicted damage on strategic and interdiction targets as:

- NATO had destroyed 100 per cent of the FRY's petroleum refining production capability.

⁶ Crawford, 'The Law of Noncombatant Immunity and the Targeting of National Electrical Power Systems', 21 *Fletcher Forum of World Affairs* (1997) 101, at 101–102.

⁷ Reid, 'British Bombs Were Hit and Miss During Kosovo War', *Washington Post*, 16 August 2000, A36. Laser-guided bombs dropped by the RAF had confirmed hit rates of around 65 per cent. Sallot, 'Canadian Pilots Killed Civilians: Commanders', *Toronto Globe and Mail*, 22 May 2000, A1. The Canadian Government acknowledged that 28 per cent of the laser-guided bombs dropped by Canadian pilots missed their targets. 'That means about 100 of the 361 laser-guided bombs exploded somewhere other than on a military target.'

- 65 per cent of Serbian ammunition production capacity was damaged or destroyed, including 50 per cent of its explosive production capacity.
- 40 per cent of the Serbs' armoured vehicle production and repair capacity was damaged or destroyed.
- 70 per cent of aviation equipment assembly and repair capacity was damaged or destroyed.
- NATO had inflicted moderate changes to lines of communication throughout the country. Of the Danube bridges, 70 per cent of road bridges and 50 per cent of the rail bridges were reported destroyed, blocking river traffic between Belgrade and Croatia. In addition, rail capacity was totally interdicted and road throughput was degraded on routes to Montenegro, barring the Serbs' ability to transport fuel from the Barr port facility into Kosovo over rail lines. Regarding the Kosovo corridors, 100 per cent of the rail and over 50 per cent of the road capacity has been interdicted.
- The Serbian national C3 (Command, Control, Communications) operational capability was in a degraded status, with moderate functional damage to over 30 per cent of military and civilian RADREL (Radio Relay) networks.
- The Serbian propaganda machine was severely degraded with 45 per cent of TV broadcast capability non-functional and radio limited to urban areas. Both the Serb Socialist Party headquarters and the presidential residences, which were being used as alternate command posts, sustained severe damage.⁸

It is not practicable to make a reasonably accurate and comprehensive assessment of damage done to immovable objects in the FRY during Operation Allied Force as there is inadequate information available in the public domain. For the most part, FRY assertions of damage to property are insufficiently precise to correlate with NATO claims to have attacked particular military objectives.

Estimates of damage done to FRY forces deployed in Kosovo have varied widely. See Table 1.

	Tanks	Armoured personnel carriers	Artillery and mortars
US DoD estimate, June 1999	120	220	450
Suppressed report, August 1999	14	18	20
Corley Report (recount), September 1999	93	153	389

Note:

All figures are from 'The Kosovo Cover-Up', *Newsweek*, 15 May 2000, 19–24.

Concerning civilian casualty figures, in its report, 'Civilian Deaths in the NATO Air Campaign', Human Rights Watch documented some 500 civilian deaths in 90 separate incidents. It concluded:

that as few as 488 and as many as 527 Yugoslav civilians were killed in the ninety separate incidents in Operation Allied Force... Between 62 and 66 per cent of the total registered civilian deaths occurred in just 12 incidents. These 12 incidents accounted for from 303 to 352

⁸ Cordesman, *supra* note 2, at 97–98.

civilian deaths. These were the only incidents among the ninety documented in which ten or more civilian deaths were confirmed.⁹

Human Rights Watch also found the FRY Ministry of Foreign Affairs publication, 'NATO Crimes in Yugoslavia',¹⁰ to be largely credible on the basis of its own field research and correlation with other sources. A review of this publication indicates that it provides an estimated total of approximately 495 civilians killed and 820 civilians wounded in specific documented instances. It appears that a figure similar to both publications would be in the range of 500 civilians killed.

A comparison of the ratio of civilian deaths per ton of bombs dropped during earlier bombing attacks or campaigns reveals the data shown in Table 2.

Target	Date(s)	Bomb tonnage	Civilian deaths	Deaths per ton of bombs
Guernica	26 April 1937	40.5	1,654	40.83
Great Britain	Battle of Britain (June–December 1940)	40,885	23,002	0.56
Coventry	14 November 1940	533	568	1.06
Hamburg	24–30 July 1943	5,128	42,600	8.03
Remscheid	30–31 July 1943	860	1,120	1.30
Darmstadt	11 September 1944	979	8,433	8.61
Dresden	14–15 February 1945	7,100	25,000	3.52
Tokyo	9–10 March 1945	1,655	83,793	50.33
Osaka	13–14 March 1945	1,732	3,988	2.30
Linebacker II	18–29 December 1972	20,237	1,623	0.08
Allied Force	24 March–9 June 1999	6,303	500	0.08

Note: All figures, except those from Operation Allied Force, are from the table in Parks, 'Air War and the Law of War', 32 *Air Force Law Review* (1990) 1 at 154.

One might observe that the ratio of civilian deaths per ton of bombs is substantially similar for both the US Linebacker II campaign over North Vietnam in 1972 and for Operation Allied Force.

2 Targeting

Military commanders are obligated to distinguish between civilian objects and military objectives and to direct their operations against military objectives. Traditionally, what constitutes a military objective has been determined by reviewing state practice and by paying due regard to existing weapons technology.

During and after the Second World War, air bombardment was a relatively

⁹ Human Rights Watch, *Civilian Deaths in the NATO Air Campaign* (2000) 5.

¹⁰ NATO Crimes in Yugoslavia: Documentary Evidence, 24 March–10 June 1999 (Belgrade, Federal Ministry of Foreign Affairs, 1999).

imprecise weapon of war.¹¹ W. Hays Parks, who has subjected the history of air warfare to the most detailed legal scrutiny, summarized the central features of the law of air bombardment in 1945 in part as follows:

a. The intentional attack of the civilian population generally was regarded as prohibited, in large measure owing to the military inefficiency of such attacks or greater priority of attack of specific targets related to the enemy's war effort. However, collateral injury to the civilian population or damage to civilian objects was the 'price of doing business', i.e. waging war. While there was some belief that such may well have been an afterthought to explain away the inherent inaccuracy of bombing . . .

d. Lawful targets were regarded as: military equipment, units, and bases; economic targets; power sources (coal, oil, electric, hydroelectric); industry (war supporting manufacturing, export and/or import); transportation (equipment, lines of communication, and petroleum, oil, and other lubricants necessary for transportation); command and control; geographic; personnel; military; and civilians taking part in the hostilities, including civilians working in industries directly related to the war effort.¹²

This list of military objectives, rooted in state practice, cannot be ignored. That being said, one must, however, bear in mind both the obvious fact that the Second World War was a total war and that what may constitute a legitimate military objective may vary from conflict to conflict.

Article 52 of Additional Protocol I of 1977 defines material military objectives as follows:

In so far as objects are concerned, military objectives are limited to those objects which by nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.

The Protocol I definition of military objective is the definition generally accepted today. The definition has two elements: the object must make an effective contribution to military action because of its nature, location, purpose or use; and the total or partial destruction, capture or neutralization of the object must offer a definite military advantage in the circumstances ruling at the time. The definition is situation-dependent. A core of objects will be military objectives in virtually any conflict. Other objects may become military objectives in certain conflicts depending upon various factors, including the strategic objectives of the parties to the conflict and the degree to which the conflict approaches total war. This degree of flexibility in classifying objects as military objectives or civilian objects exists with regard to dual-use objects only, that is, objects which can be used both for civilian and military purposes. Unfortunately, all too many objects can be used for both purposes. A school building may be used as a facility for the education of children. It may, hypothetically, also be used as a military barracks. A bridge, a road or a rail line may be used for military or civilian traffic. An automobile factory may be used to provide military or civilian

¹¹ Parks, "Precision" and "Area" Bombing: Who Did Which, and When?, 18 *Journal of Strategic Studies* (1995) 145.

¹² Parks, 'Air War and the Law of War', 32 *Air Force Law Review* (1990) 1, at 55.

vehicles. For that matter, a civilian vehicle may be used to transport military personnel or equipment.

The Protocol I military objective definition was, presumably, intended to, at a minimum, shift targeting decision-makers away from a list-oriented approach to military objectives and towards a situation-dependent, criterion-oriented approach.

Such an approach would usually result in a more limited range of objects being classified as military objectives in a more limited conflict. For example, in a conflict of short duration, such as the 1967 Arab-Israeli Six Day War, the fighting would take place between armed forces operating on a 'come as you are' basis, and attacking an automobile factory which could be retooled to make tanks would be inappropriate and unnecessary. There has been relatively little discussion in the relevant literature of what constitutes a military objective and why, since the adoption of Protocol I in 1977. To the extent a debate has occurred, it has tended to consist of quoting the Protocol I definition, listing the target categories, and affirming that the objects within the categories are or are not legitimate military objectives.

As indicated earlier,¹³ the objects which NATO or the US DoD indicated were intentionally attacked during Operation Allied Force included: military forces; security forces; command and control facilities; the integrated air defence system; military-industrial infrastructure; the media and broadcasting system; supply routes; lines of communications; bridges; government ministries; and refineries. This list does not appear to be substantially narrower than the list of target categories which Hays Parks has suggested were viewed as lawful at the end of the Second World War.¹⁴ Further, it is no narrower than the target categories used during the Gulf conflict:

Leadership; Command, Control, and Communications; Strategic Air Defenses; Airfields; Nuclear, Biological, and Chemical Research and Production; Naval Forces and Port Facilities; Military Storage and Production; Railroads and Bridges, Electrical Power; and Oil Refining and Distribution Facilities. Schwarzkopf added the Republican Guard as a category and Scuds soon emerged as a separate target set. After the beginning of Desert Storm, two more categories appeared: fixed surface-to-air missile sites in the [Kuwait Theatre of Operations] and breaching sites for the ground offensive.¹⁵

Indeed, to the extent the media is identified as a separate target category, Operation Allied Force may represent an attempt to broaden rather than narrow the range of objects regarded as lawful military objectives.

The NATO attack on the headquarters and studios of Serbian state television and radio (RTS) in central Belgrade in the early morning of 23 April 1999, killing at least 16 civilians and injuring a further 16, has perhaps been the most frequently discussed bombing incident. Clearly, RTS was intentionally bombed. The topics of discussion have been: was RTS a legitimate military objective and, if it was, was the incidental death or injury to civilian persons disproportionate? Only the first topic will be addressed here. Broadcasting facilities can be attacked under certain circumstances.

¹³ See *supra*, notes 4 and 5.

¹⁴ Parks, *supra* note 12, at 55.

¹⁵ W. Murray, *Air War in the Persian Gulf* (1995) 32.

The 1954 Hague Cultural Property Convention indicates implicitly that broadcasting stations may be attacked.¹⁶ In 1956, the ICRC drew up a draft list of military objectives that included the installations of broadcasting and television stations provided that they were of fundamental military importance.¹⁷ RTS would be a military objective if it was integrated into the military command, control or communications system. Whether it would be a legitimate military objective in other circumstances is more debatable. If RTS was merely a propaganda outlet, one might query its status as a military objective.¹⁸

Amnesty International, in particular, has indicated its view that RTS was not a legitimate military objective if it was attacked solely on the basis that it was a source of propaganda.¹⁹ It buttresses its position by quoting from the judgment of the International Military Tribunal, which acquitted Hans Fritzsche, a senior official in the Propaganda Ministry of the Third Reich:

It appears that Fritzsche [sic] sometimes made strong statements of a propagandistic nature in his broadcasts. But the Tribunal is not prepared to hold that they were intended to incite the German People to commit atrocities on conquered peoples, and he cannot be held to have been a participant in the crimes charged. His aim was rather to arouse popular sentiment in support of Hitler and the German war effort.²⁰

There is, of course, no necessary relationship between the use of a facility to commit a war crime and the classification of that facility as a military objective. The use of a factory to produce tanks or shells is not a war crime but the factory would be a military objective. One might, however, suggest that a facility which is being used to incite the commission of a serious violation of international humanitarian law or to provide the location for the commission of such an offence may be lawfully attacked even if it did not meet the criteria for a military objective. For example, attacks on the gas chambers at Auschwitz or on the facilities of Radio Mille Collines in Rwanda which were used to incite genocide would, it is suggested, be lawful because of some generalized right to prevent the continuing commission of crimes. The case of *Bankovic and Others v. The Contracting States Also Parties to the North Atlantic Treaty*, now before the European Court of Human Rights, also relates to the RTS bombing.²¹

One is extremely reluctant to classify a media outlet, which is not also used as part of a military command, control and communications network, as a military objective. It is, however, noteworthy that the second objective seized by anti-Milosevic protestors in the recent coup, which put Mr Kostunica in power in the FRY, was the

¹⁶ Article 8.

¹⁷ Y. Sandoz, C. Swinarski and B. Zimmerman (eds.), *Commentary on the Additional Protocol of 8 June 1977 to the Geneva Conventions of 12 August 1949* (1987) 632–633.

¹⁸ Aldrich, 'Yugoslavia's Television Studios as Military Objectives', 1 *International Law Forum* (1999) 149, at 149–150; Meron, 'The Humanization of Humanitarian Law', 94 *AJIL* (2000) 239, at 275.

¹⁹ Amnesty International, 'Collateral Damage' or Unlawful Killings? *Violations of the Laws of War by NATO During Operation Allied Force* (2000) 41–48.

²⁰ IMT Judgment, 41 *AJIL* (1947) 328.

²¹ European Court of Human Rights, *Bankovic and Others v. Contracting States Also Parties to the North Atlantic Treaty* (Applicant's Submission, 2000).

RTS facility which had been bombed earlier by NATO. 'Like NATO, they too saw it as a hated symbol of the regime ... The front part of the TV headquarters, which had escaped attack by NATO, was set alight and looted. Dragoljub Milanovic, RTS's general manager, narrowly avoided being lynched.'²² The media would not usually constitute a legitimate military objective. If the state controls essentially all of the media, and the political leadership directing the war effort uses that media as part of a system to control the civilian population, it is conceivable that media focal points could be regarded as legitimate military objectives. The media in states with a free press would not be a legitimate military objective. It is, to say the least, highly debatable that the media in the FRY, which was state-controlled to a degree, constituted a legitimate military objective even if it was re-labelled as a propaganda source. To be a military objective, it must be more than a symbol of the regime.

NATO's strategic objectives included 'damaging Serbia's capacity to wage war against Kosovo in the future or spread the war to neighbors by diminishing or degrading its ability to wage military operations'.²³ Measured against this broad strategic objective, one might be inclined to regard virtually all of the objects deliberately targeted, with the possible exception of media targets not integrated into the C3 network, as objects which by their nature or use make an effective contribution to military action and whose destruction offers a definite military advantage. Military forces are dependent on petroleum, oil and lubricants, on the use of electricity, and on road, rail and air transport. So, however, is civil society. If six bridges cross a river and the armed forces only require two to function effectively, is it permissible to destroy all six? The answer is probably yes. If a state possesses six petrochemical refineries and the armed forces require the output of two to function effectively, is it permissible to destroy all six? The answer may be yes but it cannot be given unless one is aware of other factors, such as access to petroleum, oil and lubricants imports. At present, there does not appear to be a generally accepted body of facts related to NATO's bombing of so-called military-industrial infrastructure targets. In the absence of such figures, one may only pose questions. For example, NATO has alleged it destroyed 70 per cent of road bridges and 50 per cent of rail bridges over the Danube, blocking river traffic between Belgrade and Croatia.²⁴ Bearing in mind that Croatia and the FRY have not necessarily always maintained friendly relations, one might query the military significance of attacks blocking river traffic between Belgrade and Croatia.

Neither the civilian population nor civilian morale constitute legitimate military objectives.²⁵ This generally accepted legal norm is, at least in part, the result of a defensible legal fiction. In most states, the will to wage military operations is dependent upon popular support. If the civilian population does not support the war effort, the national will to wage war and, usually, the national ability to wage war will be degraded. The United States lost the Vietnam conflict because the American people

²² Steele, 'The Ultimate Sacrifice', *Guardian*, 23 October 2000, at 9.

²³ *Supra*, note 4.

²⁴ Cordesman, *supra* note 2, at 97–98.

²⁵ Parks, 'The Protection of Civilians from Air Warfare', 27 *Israel Yearbook of Human Rights* (1997) 65.

eventually indicated they did not support the war. Quite clearly, taking action, which will adversely affect enemy civilian support for the war, can result in substantial military benefit. That being said, attacking civilians or civilian objects is unacceptable because it is unlawful and morally abhorrent. It would appear, however, that it is lawful to attempt to undermine enemy civilian support for the war effort by other means, including attacks on military objectives. There is no prohibition of attacks on military objectives, which might as a secondary result affect civilian support. As examples, civilian morale might be adversely affected by heavy casualties inflicted on combatants or by having substantial portions of a country occupied by an opponent. These are not unlawful acts.

3 Proportionality

Article 57(2)(ii) and (iii) of Additional Protocol I to the Geneva Conventions obliges parties to:

take all feasible precautions in the choice of means and methods of attack with a view of avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects; [and to] refrain from deciding to launch any attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.

Non-state parties are, at a minimum, obligated by customary law to direct their attacks exclusively against military objectives and to take the principle of proportionality into account when deciding whether or not to attack military objectives. Quite clearly, the participants in Operation Allied Force paid considerable heed to the requirement to limit death or injury to civilians. Indeed, even Anthony Cordesman, an analyst who did not advert at all to legal rules, concluded that the ‘war in Kosovo showed that minimizing collateral damage has become a critical new aspect of modern war’.²⁶ He went on to draw lessons from the Kosovo experience:

The first is that the US military would almost certainly be far better off if its briefings and public relations stressed the risks and uncertainties of war, stated that losses and collateral damage were inevitable, and educated the media, the public (and politicians) in the friction of war. It is far better to be self-critical and pessimistic, and create realistic expectations, than to treat war as an advertising campaign.

The second is that minimizing collateral damage, military casualties and losses, civilian casualties, and even enemy casualties is now a major part of virtually all military action short of all-out war. At a minimum, this requires major improvements in targeting where a massive and comprehensive analysis is needed to create a target base tailored to minimize the risk of collateral damage — ideally before military action — and then constantly update and revise it

...

The third is the need to treat targeting in its full political context and to give the risk of collateral damage the proper priority in intelligence analysis and operational planning . . .²⁷

²⁶ Cordesman, *supra* note 2, at 77.

²⁷ *Ibid.*, at 77–78.

The questions which remain unresolved, once one decides to apply the principle of proportionality, include the following:

- 1 What are the relative values to be assigned to the military advantage gained and the injury to non-combatants and/or the damage to civilian objects?
- 2 What do you include or exclude in totalling your sums?
- 3 What is the standard of measurement in time or space?
- 4 To what extent is a military commander obligated to expose his own forces to danger in order to limit civilian casualties or damage to civilian objects?

The answers to these questions are not simple. It may be necessary to resolve them on a case-by-case basis, and the answers may differ depending on the background and values of the decision-maker. It is unlikely that a human rights lawyer and an experienced combat commander would assign the same relative values to military advantage and to injury to non-combatants. Further, it is unlikely that military commanders with different doctrinal backgrounds and differing degrees of combat experience or national military histories would always agree in close cases. Although there will be room for argument in close cases, there will be many cases where reasonable military commanders, with the assistance of their legal advisers, will agree that the injury to non-combatants or the damage to civilian objects was clearly disproportionate to the military advantage gained.

Determining the proper standard of measurement in time or space (geographical extent) for applying the proportionality equation is also difficult. As a baseline, any deliberate attack on civilian persons or objects, occurring at any time, is unlawful, even if it is perceived as conferring a military advantage. Further, the standard of measurement must be one that is practicable to use in advance and it must be possible to determine whether the proportionality requirement is being met at various stages in the conflict. One cannot, for example, assert that it will only be possible to determine whether or not military activity complied with the proportionality principle at the end of the war or when a lengthy campaign is over. At the same time, one cannot always assess proportionality on a bullet-by-bullet basis or even on the basis of attacks on individual military objectives.

Civilian deaths or injuries and damage or destruction of civilian objects occurred as a result of Operation Allied Force. There is no indication civilians were deliberately attacked. Civilians were killed or injured while what were regarded as military objectives were attacked. These casualties occurred for a variety of reasons, including:

- 1 weapons hit the wrong object because of advance intelligence errors (such as the Chinese Embassy bombing on 8 May 1999²⁸);
- 2 weapons hit the wrong object because of weapon malfunction (such as the bombing of the market and hospital at Nis on 7 May 1999²⁹);

²⁸ Amnesty International, *supra* note 19, at 54–56; International Criminal Tribunal for the Former Yugoslavia (ICTY), 'Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia', 8 June 2000, 39 ILM (2000) 1257, at 1280–1281.

²⁹ Amnesty International, *supra* note 19, at 50–53.

- 3 weapons hit the object aimed at (such as the bombing of RTS on 23 April 1999³⁰);
- 4 weapons hit the wrong object because of enemy intervention (no example known, but would include aircraft being shot down or missiles deflected by counter measures); and
- 5 weapons hit the object aimed at but presence of civilians was, apparently, not recognized (such as the bombing of the Grdelica railroad bridge on 12 April 1999³¹ or the bombing of the refugee convoy near Djakovica on 14 April 1999³²).

It is suggested that category (4), involving enemy intervention, should not be assessed against the attacking party when considering the proportionality issue. All of the other reasons advanced to explain civilian casualties do not provide any form of justification.

The advance intelligence error which precipitated the erroneous bombing of the Chinese Embassy appears to have been unique during Operation Allied Force. As such, it probably does not raise a proportionality issue. If there had been a pattern of such incidents, however, it is possible proportionality would be an issue and responsibility for excesses during the operation as a whole could be imputed to higher level decision-makers. As a general statement, one can predict that a certain percentage of any weapon will malfunction and hit the wrong object. In determining whether disproportionate losses to civilians have been caused by weapons malfunction, it is submitted one must have regard to more than what happens during one attack. It is suggested that the standard for assessing proportionality related to weapons malfunction should be what happened throughout the FRY during a significant period of time, perhaps the entire period of Operation Allied Force. A shorter geographic and temporal span might be appropriate if weapons malfunction or malfunctions of a particular type of weapon occur in a significant percentage of cases and result in substantial civilian casualties. It is suggested that the appropriate geographical and temporal scale for assessing proportionality for incidents involving attacks where weapons were aimed at particular military objectives may be much more restrictive, particularly if precision-guided munitions were used. For example, one should be able to assess the military advantage gained by the bombing of RTS on 23 April 1999 against the collateral civilian casualties and damage in isolation.

When incidents such as the bombing of the passenger train on the Grdelica bridge or the bombing of the Djakovica refugee convoy occur, one may conclude that civilian casualties clearly are disproportionate in the particular incident. Assuming, as is not unreasonable, that the civilian casualties were not caused intentionally, what then?

Those who decide upon attacks have an obligation to take all practicable

³⁰ Human Rights Watch, *supra* note 9, at 26–27; Amnesty International, *supra* note 19, at 41–48; ICTY OTP Report, *supra* note 28, at 1277–1280.

³¹ Amnesty International, *supra* note 19, at 30–33; ICTY OTP Report, *supra* note 28, at 1273–1275.

³² Human Rights Watch, *supra* note 9, at 22–23; Amnesty International, *supra* note 19, at 33–41; ICTY OTP Report, *supra* note 28, at 1275–1277.

precautions in the choice of means and methods to avoid, or at least minimize, collateral casualties. NATO was criticized for directing its aircraft to fly above 15,000 feet early in the conflict as it was alleged that this would not permit the aircrew to adequately distinguish between military and civilian objects on the ground. Quite clearly, the attacking aircrew did not adequately distinguish military from civilian personnel in the Djakovica convoy bombing. Does a failure in a particular incident or in a relatively small number of incidents indicate senior commanders failed to fulfil their obligations? It is suggested that the duty to take precautionary measures is not absolute. It is a duty to act in good faith to take practicable measures, and persons acting in good faith may make mistakes.

NATO did alter its Rules of Engagement on a number of occasions during the conflict in order to reduce the risk to civilians:

- 1 it relaxed the height restriction of 15,000 feet which had been imposed to protect aircraft and pilots from FRY air defences after the refugee convoy attacks in April and also required visual confirmation that civilians were not present;
- 2 the US (alone) stopped using cluster bombs after an attack on Nis on 7 May; and
- 3 after the 30 May attack on the Varvarin bridge in which several civilians were killed, NATO stopped attacking certain objectives, such as bridges, when civilians were likely to be in the vicinity.³³ Changes in the Rules of Engagement need not be regarded as evidence of culpability. Such changes may also reflect a continuing good faith endeavour to make practical changes to comply with legal obligations.

Determining the extent to which a military commander is obligated to expose his own forces to danger in order to limit civilian casualties or damage to civilian objects is very difficult. Strictly speaking, resolution of the proportionality equation requires a determination of the relative worth of military advantage gained by one side and the civilian casualties or damage to civilian objectives incurred in areas in the hands of the other side. A willingness to accept some own-side casualties in order to limit civilian casualties may indicate a greater desire to ensure compliance with the principle of proportionality. Military commanders do, however, also have a duty to limit casualties to their own forces.

Although own side military casualties are not relevant to the proportionality equation, it is a fact that NATO did not incur any combat casualties during Operation Allied Force just as it is a fact that a significant number of FRY civilians were killed. These facts have resulted in assertions that NATO valued its military personnel more than FRY civilians. A.P.V. Rogers, former Director of the British Army Legal Services, has suggested the following approach to balancing competing interests:

If the target is sufficiently important, higher commanders may be prepared to accept a greater degree of risk to the aircraft crew to ensure that the target is properly identified and accurately attacked. No-risk warfare is unheard of. Risks may be taken, for example, to rescue pilots who have been shot down or in deploying forces on reconnaissance or target identification missions in enemy-held territory. However, if the target is assessed as not being worth that risk and a

³³ Amnesty International, *supra* note 19, at 16–17.

minimum operational altitude is set for their protection, the aircrew involved in the operation will have to make their own assessment of the risks involved in verifying and attacking the assigned target. If their assessment is that (a) the risk to them of getting close enough to the target to identify it properly is too high, (b) that there is a real danger of incidental death, injury or damage to civilians or civilian objects because of lack of verification of the target, and (c) they or friendly forces are not in immediate danger if the attack is not carried out, there is no need for them to put themselves at risk to verify the target. Quite simply, the attack should not be carried out.³⁴

4 Conclusion

Since the end of the Second World War, a body of treaty law applicable to air war has developed and is contained for the most part in Additional Protocol I; technological developments have substantially increased weapon accuracy; and, at least in some parts of the world, a much greater consciousness of the importance of the individual and of human rights has emerged. One might reasonably expect that when wealthy democracies such as the NATO states engaged in a conspicuously limited war for humanitarian purposes that civilian casualties and damage to civilian objects will be reduced to an absolute minimum. Following Operation Allied Force, one might query whether this high expectation can be met.

The NATO bombing campaign against the FRY was not remotely similar to the strategic bombing campaigns of the Second World War. Civilian casualties were relatively limited. Some civilian casualties are inevitable in any conflict where fighting, including bombing, occurs in areas where civilians are present. There is no evidence that NATO deliberately targeted civilians. To some extent, the availability of precision-guided munitions may, however, have resulted in an extension of target lists. There is no indication the media has been regarded as a target category or a legitimate military objective in earlier international conflicts. It is also disconcerting to note that the ratio of civilian deaths per ton of bombs dropped, a very crude indicator of regard for collateral casualties, is the same for Operation Allied Force in 1999 as for Linebacker II over North Vietnam in 1972 at the dawn of the era of precision-guided munitions.³⁵

³⁴ Rogers, 'Zero-Casualty Warfare', 82 *International Review of the Red Cross* (2000) 165, at 179.

³⁵ See Table 2, *supra* at 493.