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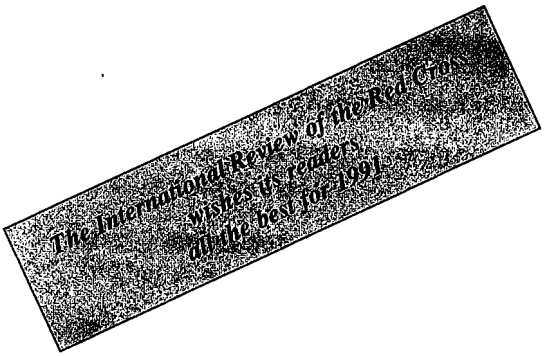

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OF THE RED CROSS

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ARTICLES SUBMITTED FOR PUBLICATION IN THE *INTERNATIONAL REVIEW OF THE RED CROSS*

The *International Review of the Red Cross* invites readers to submit articles relating to the various humanitarian concerns of the International Red Cross and Red Crescent Movement. These will be considered for publication on the basis of merit and space.

- Manuscripts will be accepted in *French*, *English*, *Spanish*, *Arabic* or *German*. They should be typed, double-spaced, and no longer than 25 pages.

- Footnote numbers should appear superscript in the main text, and footnotes should be typed, double-spaced, and grouped at the end of the article.

- Bibliographical references should include at least the following details: a) for books, the authors's initials and surname (in that order), book title (underlined), place of publication, publishers and year of publication (in that order), and page number(s) referred to (p. or pp.); (b) for articles, the author's initials and surname, articles title in inverted commas, title of periodical (underlined), place of publication, periodical date, volume and issue number, and page number(s) referred to (p. or pp.). The titles of articles, books and periodicals should be given in the original language of publication.

- Unpublished manuscripts will not be returned.

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- Manuscripts, correspondence and requests for permission to reproduce texts appearing in the *Review* should be addressed to the editor.

Articles, studies, and other signed texts from non-ICRC sources published in the *Review* reflect the views of the author alone and not necessarily those of the ICRC.

TENTH ANNIVERSARY OF THE CONVENTION ON INHUMANE WEAPONS

Introduction

by

Javier Pérez de Cuéllar
Secretary-General of the United Nations Organization

Throughout history, although the major civilizations never succeeded in abolishing war, they did attempt to devise certain rules of conduct to minimize the suffering it caused. To that end, the Greeks banned the use of poisoned weapons and the contamination of springs and wells. From the Romans we have obtained the adage Hostes dum vulnerati fratres – *"Enemies, when wounded, are our brothers." Likewise, Judaism and Christianity preach their message of compassion and forgiveness. The Indian epic poem by Mahabharata tells us that it was forbidden to harm a vanquished enemy – or one who was* hors de combat – *or to kill women, children and the elderly. The Koran, the sacred book of Islam, condemns attacks on non-belligerents and the use of excessive measures, such as fire and flooding, against the enemy. Similarly, African traditions will not countenance the killing of women, children and old people in time of war or attacking the enemy from the rear.*

Such efforts were eventually to lead to the codification of modern international humanitarian law applicable in armed conflict. Thus the 1868 Declaration of St. Petersburg stipulated that nations should not employ arms which aggravate the sufferings of the wounded or render their death inevitable.

When the dumdum bullet was invented a few years later, it was considered contrary to the 1868 Declaration. The Hague Conference in 1899 therefore banned its use. The 1899 and 1907 Conferences at The Hague adopted conventions which also restricted the use of submarine contact mines and prohibited the use of poison or poisoned

weapons as well as the use of projectiles diffusing asphyxiating or deleterious gases.

An outright ban on a certain kind of weapon, such as the dumdum bullet, may be considered as an armaments control measure. Thus the Hague Conventions might be said to highlight the connection between humanitarian law and disarmament.

However, it has frequently been asserted that war is inhuman because of its concomitant effects. The devastation brought about by two World Wars led to the emergence of the principle of renouncing war as a means of resolving conflicts between States. Consequently, after the First World War, the Member States of the League of Nations tried to guarantee international peace and security by accepting a mutual obligation not to resort to war. Although this attempt failed, the determination of States to save succeeding generations from the scourge of war led to the founding of the United Nations Organization at the end of the Second World War.

* * *

The United Nations Charter obliges its Member States to refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State. However, just like the Covenant of the League of Nations, this Charter envisages the possibility of violations in the form of military aggression. It therefore retains the right of individual or collective self-defence and provides for mechanisms to maintain or restore international peace and security whenever peace has been disrupted or an act of agression has occurred.

The successive creation of two international organizations by no means implies that humanitarian law can be consigned to oblivion. Events since 1945 have proved this: about 350 armed conflicts — some of them still going on — have led to more than 20 million casualties. Consequently, in line with the humanitarian tradition largely established by the Red Cross, it has become increasingly imperative to restrict as much as possible the sufferings caused by war. The Geneva Conventions for the protection of the victims of war were adopted in 1949 and were supplemented and updated in 1977 by two Additional Protocols. Although these agreements contributed to the advancement of humanitarian law, it was felt that their provisions were not specific enough in view of subsequent arms developments. Hence an attempt was made to prohibit or restrict the use of certain conventional weapons which were deemed to be particularly inhuman. This led to

the adoption by the United Nations of the 1980 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, *which is sometimes known as the "Convention on Inhumane Weapons".*

Evidently, no weapon may be termed "humane". However, their effects do differ considerably in terms of the extent or seriousness of the injuries inflicted, the geographical range and the user's ability to control such weapons. This realization led to the Convention on Inhumane Weapons whose tenth anniversary we are celebrating this year.

Despite all the upheavals which have occurred since the Convention was adopted, it has retained all its relevance and validity. Designed as an "open-ended treaty", with scope for further protocols to be added to those included when it was adopted, there is no risk of future events rendering it obsolete.

The authors of the Convention thus foresaw the need to adapt the Convention to changing circumstances.

* * *

This tenth anniversary of the Convention has assumed even greater significance in the light of current world events. Let us hope that the general improvement in international relations, as well as peoples' ever-increasing aversion to war, will lead to the Convention being adopted worldwide and to stringent compliance with it.

The merits of the Convention are described in great detail in this issue of the Review. *I should simply like to stress here that the Convention plays a primordial role in upholding that fundamental principle of international law which states that the right of Parties to an armed conflict to choose methods or means of warfare is not unlimited.*

Ever since its foundation, the ICRC has been closely associated with the development of international law in connection with armed conflicts. In line with this tradition the ICRC acted as a catalyst in bringing about the adoption of the Convention on Inhumane Weapons. Two studies, one by the UN in 1972 and the other by the ICRC in 1973, together with the conferences of government experts on certain conventional weapons which were convened in 1974 and 1976 under the aegis of the ICRC, set in motion the process which led to the United Nations General Assembly convening a Conference on Certain Conventional Weapons and later to the adoption of the Convention on Inhumane Weapons.

As depositary of the Convention and Secretary-General of the United Nations it is an honour for me to pay tribute to the remarkable work of the ICRC in helping to achieve this historic agreement. I sincerely hope that the United Nations Organization will continue to enjoy the invaluable co-operation of the ICRC in developing and disseminating humanitarian law. [1]

Javier Pérez de Cuéllar
Secretary-General
of the United Nations Organization

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[1] Translated into English by the ICRC.

THE QUESTION OF PROHIBITING OR RESTRICTING THE USE OF CERTAIN CONVENTIONAL WEAPONS

by Yves Sandoz

Law and war make poor bedfellows — particularly since the adoption of the Charter of the United Nations — and it is to be hoped that one day the former will prevail definitively over the latter. The United Nations Secretary-General has done the *Review* the honour of contributing a paper to this special issue devoted to prohibitions or restrictions on the use of certain conventional weapons. *(See p. 469).* In his message he reminds us that war has not yet been completely subjugated by the law and that every effort remains to be made in that direction. Alas, war — and hence the law of war — are still very topical subjects at the moment.

Within the law of war, or more specifically within international humanitarian law applicable during armed conflicts (hereinafter referred to as IHL), restrictions imposed for humanitarian reasons on the conduct of hostilities, especially prohibitions or restrictions on the use of certain weapons, are a particularly sensitive issue. The main reason for difficulties in this respect is the fact that abiding by such regulations may directly influence the outcome of an armed conflict. Thus it is indispensable that the rules be drafted in conjunction with the people who have to apply them, that is, those in charge of armed forces, who might otherwise remain unaware of them. W. Hays Parks in particular stresses this point in his article on the drafting of Protocol III of the 1980 Convention (the Protocol on incendiary weapons). *(See p. 535).*

The drafting of the 1977 Protocols additional to the 1949 Geneva Conventions also provided an opportunity to take another look at matters connected with the prohibition of weapons and to clarify the relationship between IHL and disarmament.

Prohibitions or restrictions on the use of specific weapons of mass destruction were not re-examined during the Conference on the reaffirmation and development of IHL. States felt that, in view of the importance of such weapons in maintaining the balance of power, their use could not be considered separately from production, possession and stockpiling. However, this omission obviously does not mean that their use is not governed by the general rules and principles of IHL.

As regards conventional weapons, it was clear from the outset that the reaffirmation and development of the basic rules governing methods and means of combat did not automatically impose prohibitions or restrictions on the use of specific weapons. It was essential to consider each type of weapon in the light of those rules. Later it was agreed that a comparative study could be carried out in the framework of a diplomatic conference on IHL; in response to a request by the 1974-1977 Diplomatic Conference, two *ad-hoc* meetings of experts were convened by the ICRC for that purpose. It was decided, however, that the basic IHL Conventions should not include specific regulations on those weapons; instead they should be the subject of separate treaties which should be drafted and formally adopted under the auspices of the United Nations.

This clear separation of subjects also made it possible to define more precisely the respective functions of the ICRC and the UN in such matters. As Maurice Aubert, one of the ICRC's Vice-Presidents, points out, the ICRC wishes fully to discharge the mandate "to work for the faithful application" of IHL that is assigned to it by the Statutes of the International Red Cross and Red Crescent Movement. *(See p. 477).* This differentiation of roles during the 1974-1977 Diplomatic Conference was vital to ensure that the ICRC's formal competence with regard to methods and means of combat would not be disputed, the risk of this happening being all the greater in that the institution has no recognized material competence in the matter. Indeed, through its activities the ICRC has acquired a fund of experience in the fields of detention, emergency relief and war medicine, but the same does not apply when it comes to weapons.

So it must be made clear that the ICRC is not itself going to test weapons with a view to issuing or refusing "humanitarian certificates". The ICRC is not in a position to do so, and both governments and the public at large would take a dim view of such activities. On the other hand, as Louise Doswald-Beck and Gérald C. Cauderay point out, the ICRC must ensure that States respect their obligations relating to the conduct of hostilities, notably the obligation imposed by Article 36 of Additional Protocol I to determine a new weapon's legality under IHL

before adopting it. *(See p. 565).* In this connection, the ICRC has organized a series of meetings of experts to draw the attention of States to the legality or otherwise of using anti-personnel laser weapons in particular.

Similarly, States must be encouraged to ponder, like Denise Plattner, on the customary nature of certain rules, and especially to consider whether part or all of the 1980 Convention and its three Protocols are merely an interpretation, in concrete terms, of the provisions of 1977 Protocol I relating to methods and means of combat, or whether they add elements which go beyond this interpretation. *(See p. 551).*

As almost all the articles in this issue of the *Review* point out, it is vital to continue examining the applicability to non-international armed conflicts of the rules governing the conduct of hostilities. As far as treaty law is concerned, such applicability was ruled out in respect of the 1980 Convention and its three Protocols, but strictly for reasons connected with the preservation of national sovereignty. In this connection no one mentioned the military necessity in non-international conflicts of using methods and means of warfare which are prohibited in international armed conflicts.

This question therefore calls for thorough examination from the standpoint of IHL, and perhaps also from the standpoint of human rights.

In the context of IHL, the applicability to all conflicts of the rules governing international conflicts — whether by interpretation or natural extension or as part of international custom — requires further study and clarification. The proceedings of the XIVth Round Table of the International Institute of Humanitarian Law in San Remo in September 1989, reported in the September-October issue of the *Review*, pointed the way in this respect.

A close examination of the concept of military necessity in relation to non-international armed conflicts could also throw light on the question. This concept is all too often perceived simply as the right of the military to do what they have to in order to win, whereas it also implies the obligation to do no more than is strictly necessary. No war confers an unlimited right to kill, and if the suffering caused by certain weapons is deemed to be superfluous, their use cannot be justified under any circumstances.

The same principle applies when the matter is considered from the standpoint of human rights. Why should the special exceptions to the right to life and health that are admitted in time of conflict be greater in internal than in international conflicts?

The ICRC is duty bound to fulfil to the maximum its mandate as guardian of IHL, by seeking to ensure through its field activities that the law is applied, by promoting the instruments of IHL, by clarifying its provisions when necessary, and by encouraging States to take appropriate measures for its implementation. As regards the sensitive issue of prohibiting or restricting the use of certain weapons, the ICRC's role is essentially to remind States not only of their responsibility to comply with IHL but also of their moral responsibility.

When children are blown up by mines during non-international armed conflicts, the relevant legal provisions can — and indeed must — be examined and if necessary taken back to the drawing-board. But, morally speaking, States must be asked whether they grant themselves the right, in internal conflicts, to use methods against their own citizens which they have agreed to forgo in international armed conflicts. If they do, they should say so and take responsibility for the consequences.

For the ICRC, promoting humanitarian standards also means contending with hypocrisy and, when the need arises, making its indignation known.

Yves Sandoz
Director
Principles, Law
and Relations with the Movement

ICRC

Yves Sandoz was born in 1944 in Neuchâtel, Switzerland. He obtained a law degree in 1967 and a doctorate in law in 1974, both from the University of Neuchâtel, and was an ICRC delegate between 1968 and 1972 in Nigeria, Israel, Bangladesh and Yemen.
Since 1975, Mr. Sandoz has been at ICRC headquarters, where his current position is that of Director and Head of the Department of Principles, Law and Relations with the Movement. He is also very active in the teaching of international humanitarian law, in particular at the International Institute of Human Rights in Strasbourg and at the Hague Academy of International Law. He is one of the authors of the Commentary on the 1977 Protocols additional to the 1949 Geneva Conventions and has written many works on international humanitarian law and penal law, several of which have been published as articles in the *International Review of the Red Cross.*

The International Committee of the Red Cross and the problem of excessively injurious or indiscriminate weapons

by Maurice Aubert

I. PROHIBITIONS OR RESTRICTIONS ON THE USE OF CERTAIN WEAPONS VERSUS MILITARY NECESSITY

It is a truism to say that technical progress is not always beneficial to mankind because it also leads to the development of more sophisticated – i.e. more deadly – weapons. Any attempts to prohibit or restrict their use on the basis of international agreements come up against major obstacles. Even if only to ensure their own national security, States try to equip their armies with the most up-to-date weapons and, if possible, ones more sophisticated than those in a potential enemy's arsenal. But using a certain type of weapon cannot be justified if it runs counter to the general principles of law and humanity.

Our remarks do not refer to particularly devastating and indiscriminate weapons such as atomic, bacteriological and chemical weapons; rather it limits itself to conventional weapons.[1] To date, a ban on such weapons has been accepted only for those which, in view of the disparity between their military effectiveness and the degree of superfluous injury and unnecessary suffering they cause, are without any real interest as means of combat (i.e. dum-dum bullets, non-detectable fragments, exploding booby-traps in the form of harmless-looking objects). As regards militarily effective weapons

[1] In French the expression *"armes conventionnelles"* was also used but the term *"armes classiques"* was adopted during the United Nations Conference of 10 October 1980 on Prohibitions or Restrictions of Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects.

(incendiary devices and mines), we cannot but hope that their use will be confined as far as possible to the actual combatants so as to avoid indiscriminate harm to civilians, civilian objects and the environment.

The States claim that they must not diminish their armies' firepower means that any prohibition or limitation on the use of arms will be accepted only if military necessity is taken into account. However, there must be limits to the necessities of war, as already stated in the preamble to the 1868 Declaration of St. Petersburg prohibiting the use of certain projectiles in wartime.[2]

The new rules limiting methods of warfare present problems as regards assessing a given situation, conducting hostilities and monitoring how orders are carried out, in that the said rules must be respected to avoid harming the population and damaging civilian objects to an extent that would be excessive in relation to the military advantage anticipated from an attack.[3]

The law of armed conflicts will thus always be a compromise between military necessity and humanitarian requirements. Nevertheless this does not mean that we should not persist in our efforts to provide greater protection for civilians and lessen cruelty between combatants.

II. PROMOTING INTERNATIONAL HUMANITARIAN LAW: ONE OF THE ICRC'S TASKS

Ever since the Convention for the Amelioration of the Condition of the Wounded in Armies in the Field was adopted in 1864, the ICRC has worked steadily to promote international humanitarian law, in accordance with the mandate repeatedly reaffirmed by the international community.[4] In this domain the signing of the four Geneva Conventions

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[2] "*... the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy;*
"*... for this purpose it is sufficient to disable the greatest possible number of men;*
"*... this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable;*
"*... the employment of such arms would, therefore, be contrary to the laws of humanity*".

[3] The expression "attack" means acts of violence against the adversary, whether in offence or in defence (Protocol I additional to the Geneva Conventions, Article 49, paragraph 1).

[4] – "Protection of the civilian population against the dangers of indiscriminate warfare" – Resolution XXVIII of the Twentieth International Conference of the Red

was a major achievement. However, if protection for the wounded, the shipwrecked and especially the civilian population is to be rendered more effective (prevention being better than cure), it must also include limitations on methods and means of combat. In this respect Additional Protocol I of 1977 marked considerable progress. Yet further progress still had to be made along the lines initiated by the Law of The Hague in order to increase the effectiveness of these provisions and take modern means of warfare into account.

As the Fourth Geneva Convention provides inadequate protection for civilians against the effects of hostilities, in September 1956 the ICRC drew up "Draft Rules for the Limitation of the Dangers Incurred by the Civilian Population in Time of War", which expressly prohibited the use of weapons whose harmful effects could be uncontrollable. They were presented to the Nineteenth International Conference of the Red Cross in 1957, which asked the ICRC to submit them to governments. But before these new rules could be implemented, a sufficient number of States had to become party to the 1949 Geneva Conventions. The issue was again raised in Vienna in 1965 during the Twentieth International Conference of the Red Cross, which in Resolution XXVIII stated that *"indiscriminate warfare constitutes a danger to the civilian population"* and that *"the right of the parties to a conflict to adopt means of injuring the enemy is not unlimited"*. The International Conference on Human Rights (Tehran, 1968) expressed the same concerns and, in its Resolution 2444 (XXIII), the United Nations General Assembly concurred with the principles laid down by these Conferences. In its Report on the Reaffirmation and Development of the Laws and Customs Applicable in Armed Conflicts which it submitted to the Twenty-first International Conference of the Red Cross (Istanbul, 1969), the ICRC concluded that – under international humanitarian law – *"belligerents should refrain from using weapons*:

- *of a nature to cause unnecessary suffering;*
- *which on account of their imprecision or their effects harm civilian populations and combatants without distinction;*

Cross (Vienna, 1965), *International Red Cross Handbook* (hereinafter referred to as the *Handbook)*, 12th edition, Geneva, 1983, p. 626.
– Resolution of the United Nations General Assembly relative to the respect for human rights in armed conflict – Resolution 2444/XXIII, 1968, *Handbook, op. cit.* p. 396.
– "Programme of action of the Red Cross as a factor of peace" adopted by the World Red Cross Conference on Peace (Bucharest, 1977)", *Handbook, op. cit.* p. 570 ff.
– "Conventional weapons" – Resolution IX of the Twenty-fourth International Conference of the Red Cross (Manila, 1981, *Handbook, op. cit.* pp. 633-634.

– *whose consequences escape from the control of those employing them, in space or time".*

The Conference requested the ICRC *"on the basis of its report to pursue actively its efforts in this regard".*

Along similar lines, the United Nations took an important initiative as regards modern weapons: in Resolution 2852 (XXVI), the General Assembly requested the Secretary-General to draw up a report on napalm and other incendiary weapons and all their other aspects should they be employed; this report was submitted to the Twenty-seventh General Assembly (A/8803). Shortly afterwards, the Stockholm International Peace Research Institute published a report on this subject.

In 1971 and 1972 the ICRC convened a Conference of Government Experts on the reaffirmation and development of international humanitarian law applicable in armed conflicts. During its second session, the representatives of nineteen governments asked the ICRC "to consult with experts on the question of the use of such conventional weapons as may cause unnecessary suffering or be indiscriminate in their effect". This consultation, which took place in Geneva in 1973, issued a purely descriptive report[5] which made no specific proposals designed to prohibit or restrict the use of such weapons. The urgent nature of the issue prompted the ICRC to undertake such a study, since at that time it was not included in any planned international legislation.

Although the subject was discussed at length both during the preparatory work and throughout the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts (1974-1977) (hereinafter referred to as the CDDH), no formal prohibition on specific weapons is to be found in the 1977 Protocols additional to the Geneva Conventions. Additional Protocol I does not go beyond the general principle prohibiting the use of weapons and methods of warfare of a nature to cause superfluous injury or unnecessary suffering.[6]

Nevertheless, the participants in the Diplomatic Conference encouraged the ICRC to pursue its efforts with regard to conventional weapons. At the request of the Twenty-second International Conference of the Red Cross (Tehran, 1973, Resolution XIV), the ICRC convened the first session of the Conference of Government Experts

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[5] *Weapons that may cause unnecessary suffering or have indiscriminate effects – Report on the work of experts,* published by the ICRC in 1973.

[6] Additional Protocol I, Article 35.

on weapons that may cause unnecessary suffering or have indiscriminate effects (Lucerne, 1974).[7] As a result of the widespread consensus which was reached and which was supported by the *ad hoc* committee during the second session of the CDDH, another meeting of the Conference of Government Experts, on the use of certain conventional weapons, was held in Lugano in 1976.[8] Various conventional weapons were studied during this Conference (incendiary weapons, delayed-action weapons including mines, treacherous weapons, small-calibre projectiles, blast and fragmentation weapons).

During the general debate at the second session, one expert commented that, to his mind, humanitarian law was to little avail if it did not embody rules on the use of weapons or specific conventional weapons.[9] Another expert felt that there should be realism on both sides and that, while humanitarianism ought to be tempered by national security considerations, the latter ought to allow some leeway for the former.[10] Some experts, while not denying in principle the practical advantages of totally banning certain weapons, expressed the opinion that perhaps for the time being this was not possible and that progress, therefore, was most likely to be achieved if the Conference were to concentrate its efforts on restrictions of their use.[11] Jean Pictet, who was then Vice-President of the ICRC, thought that relatively minor results which met with general agreement were far better than projects which were worthless in practice.[12] There was support for the contention that the principle of universality would be of paramount importance for agreements purporting to ban or restrict the use of certain conventional weapons.[13]

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[7] Conference of Government Experts on the Use of Certain Conventional Weapons (Lucerne, 24 September–18 October 1974) – *Report*, published by the ICRC in 1975.

[8] Conference of Government Experts on the Use of Certain Conventional Weapons (second session, Lugano, 28 January–26 February 1976) – *Report*, published by the ICRC in 1976.

As regards the progress and results of the two conferences of experts, see also Frédéric de Mulinen, "A propos de la Conférence de Lucerne et Lugano sur l'emploi de certaines armes conventionelles" in *Annales d'études internationales 1977, Droit humanitaire et protection de l'homme* (only in French), Volume 8, p. 111 ff.

[9] Lugano Conference, *Report*, p. 5.

[10] *Ibid.*, p. 6.

[11] *Ibid.*, p. 7.

[12] *Ibid.*, p. 78.

[13] *Ibid.*, p. 7.

In his final statement, the Chairman of the Conference stressed *"that the ICRC views with growing alarm the news of weapons whose ravages go far beyond the requirements of military action"*. He said that he was convinced that a diplomatic instrument on weapons would, one day, be a reality and added that the *"ICRC certainly hopes so, for it is important that restrictions be imposed in this sphere in order to reduce both the number and the suffering of civilian victims of war"*.[14]

The report of the Working Sub-Group on General and Legal Questions examined the form that agreements to implement the work of the Conference should take and what relation they should have to other international agreements and, in particular, to the Geneva Conventions of 1949.[15]

The fact that the wording, with some editorial changes, of Articles 23, paragraph 1, sub-paragraph (e), of the 1907 Hague Regulations was incorporated into Additional Protocol I, Article 35, paragraph 2, under the heading "Basic Rules" does not resolve the problem of how specific weapons are to be used. Consequently, after lengthy and arduous efforts, Resolution 22 was adopted by the CDDH recommending that a Conference of Governments should be convened no later than 1979 with a view to reaching "agreements on prohibitions or restrictions on the use of specific conventional weapons". The General Assembly of the United Nations supported their recommendation.[16] This led to the 1980 United Nations Conference on Prohibitions or Restrictions of Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (hereinafter referred to as the 1980 Conference).[17] In a final statement, during the second preparatory meeting for the 1980 Conference, the ICRC stressed that a distinction must be made between weapons whose use is *essential* for State security and those which might merely be militarily *useful*.

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[14] *Ibid.*, p. 100.

[15] *Ibid.*, p. 141.

[16] Resolutions 32/152 of 19 December 1977, 33/70 of 28 September 1978 and 34 of 11 December 1979.

[17] See Yves Sandoz, "Prohibitions or Restrictions on the Use of Certain Conventional Weapons – United Nations Conference on Prohibitions or Restrictions of Use of Certain Conventional Weapons, Final Act", offprint from the *International Review of the Red Cross (IRRC)* No. 220, January-February 1981.

In the first case, security concerns outweigh humanitarian arguments. Conversely, in the second case such arguments are completely valid, because to claim that the use of a weapon which is merely of military utility (and thus not essential) cannot possibly be prohibited or restricted would mean that only useless weapons would be listed for such measures. The Conference bore this recommendation in mind when it reached an agreement on the prohibition or restrictions on the use of certain types of weapons which are not indispensable to State security.

III. THE UNITED NATIONS CONFERENCE ON PROHIBITIONS OR RESTRICTIONS OF USE OF CERTAIN CONVENTIONAL WEAPONS

The purpose of international humanitarian law is to render less pointlessly cruel armed conflicts which could not be avoided. It therefore seeks to impose humanitarian rules which, in order to be acceptable to the belligerents, must restrict the methods and means of warfare only within certain limits.[18] Traditionally, humanitarian law deals only with the effects of conflicts on certain categories of people who are not participating directly in the fighting. In its strict sense, humanitarian law – also known as the Law of Geneva – is separate from another branch of the law of war, i.e. the Law of The Hague[19], which specifically regulates the conduct of hostilities. The branch of humanitarian law which the ICRC has traditionally endeavoured to promote and develop was confined, before the 1977 codification, to the Law of Geneva. Because of its specific sphere of application, which affords neither advantages nor disadvantages on the battlefield, the conditions of application of humanitarian law are very broad; in particular, it is not dependent on any concomitant principle of reciprocity.

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[18] "The words 'methods and means' include weapons in the widest sense, as well as the way in which they are used." – *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, eds. Yves Sandoz, Christophe Swinarski and Bruno Zimmermann, ICRC, Martinus Nijhoff Publishers, Geneva, 1987, p. 398. We employ the term "means" as regards the weapons themselves and the term "methods" as to how they are used tactically.

[19] The "Law of Geneva" and the "Law of The Hague" are referred to as such because they were the cities where the main efforts were made to codify these particular branches of law.

Whereas, from 1974 to 1977, States codified the Law of Geneva for the second time since the Second World War, the Law of The Hague remained unaltered, the UN International Law Commission –a body responsible for developing and codifying international law– having decided in 1949 to exclude the law of war from its subjects for codification.[20] It was reasoned that *"Since the Charter has outlawed war, there could in fact no longer be any question of the law of war [...]"*.[21] Consequently, the United Nations ceased to involve itself in the law of war for many years. But conflicts unfortunately do still exist; the ever-increasing sophistication of modern weaponry has rendered the 1907 Hague Regulations inadequate in today's world.

The ravages caused among civilians by the use of indiscriminate means and methods of warfare thus made it imperative to update certain rules governing modern methods and means of combat and, as we have shown, the CDDH sought to do so. However, although the principles of international humanitarian law were reaffirmed and developed in the 1977 Protocols, it was not the task of a conference on the development of that law to discuss the effects of certain weapons in detail with a view to banning or restricting their use.[22] This explains why the 1980 Convention was placed under the auspices of the United Nations, although the groundwork had been laid during the Conferences in Lucerne and Lugano. Taking a realistic viewpoint therefore, the United Nations Conference promulgated legal instruments prohibiting or restricting the use of certain weapons while leaving the way open for future developments. It adopted one Convention, three Protocols on various types of weapons and a Resolution on small-calibre weapon systems.

1. The Convention

The preamble to the 1980 Convention recalls the general principles of the protection of the civilian population against the effects

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[20] *Yearbook of the International Law Commission,* 1949, Vol. I, p. 53.

[21] George Scelle, in *Yearbook of the International Law Commission,* Vol. I, p. 51, para. 47.

[22] See the remarks by France on this question in the *Official Records of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law applicable in Armed Conflicts,* Geneva (1974-1977), Federal Policy Department, Berne, 1978, Vol. VI, p. 101 (CDDH/SR. 39, para. 55).

of hostilities and the prohibition on the employment of methods and means of warfare likely to cause superfluous injury or unnecessary suffering or to cause severe damage to the natural environment.

The Convention and its Protocols apply in the situations referred to in Article 2 common to the Geneva Conventions and to any situation described in Article 1, paragraph 4, of Protocol I additional to these Conventions.[23]

Therefore the 1980 Convention, and those of its Protocols by which a Contracting State has consented to be bound, also apply to wars of liberation:

(a) where the said State is also a party to Additional Protocol I and an authority representing the liberation movement has undertaken to apply the Geneva Conventions, Additional Protocol I, and the 1980 Convention and its Protocols; or
(b) where the said State is not a party to Additional Protocol I and the authority representing the liberation movement accepts and applies the obligations of the Geneva Conventions and of the 1980 Convention and its Protocols.

The Geneva Conventions, the 1980 Convention and its Protocols accordingly enter into force for the parties to the conflict, which then have the same rights and obligations. The State and the authority representing the liberation movement may also agree to accept and apply the obligations of Additional Protocol I on a reciprocal basis.[24]

Thus, as Sandoz points out,[25] the 1980 Convention provides access to the Geneva Conventions. This demonstrates that, under international humanitarian law, the international character of wars of liberation is not recognized solely under Additional Protocol I. However, we find it illogical that some States should be party to the 1980 Convention without also being party to Additional Protocol I since, as we shall see later, the provisions in Protocol I on the methods and means of warfare define the tactical framework in which the Protocols on weapons must be applied.

Since more than 20 States – at present 31 – had meanwhile ratified or acceded to the Convention and at least two of its Protocols, these agreements entered into force on 2 December 1983. It should be noted that all parties accepted the three Protocols except for two

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[23] 1980 Convention, Article 1.

[24] 1980 Convention, Article 7, para. 4.

[25] Sandoz, *op. cit.* (p. 10).

States, which ratified only two Protocols (Benin: I and III; France: I and II). At the time of signing, China, France and Italy made a declaration wherein they regretted that the Convention fails to provide for verification of facts which might be alleged and which might constitute violations of the undertakings subscribed to.

2. The Protocols

These provide for the *prohibition* of certain weapons (non-detectable fragments and certain booby-traps) and *restrictions* on the use of others (mines and incendiary weapons). The prohibition of such means is quite easy to comply with from a military point of view. Compliance with restrictions on the use of certain types of weapons calls for greater efforts, however, since the use of a weapon can be effectively restricted only by also setting limits to the methods of warfare. In the thick of the fighting, such limits may be found unduly constrictive. In view of the complexity of the problem we shall confine ourselves to mentioning the general principles contained in the Protocols.

(a) Protocol on non-detectable fragments (Protocol I)

It is prohibited to use weapons whose fragments in the human body escape detection by X-rays. This medically important provision in no way weakens military capacity. It is useful, however, in that it prevents the future development of such munitions.

(b) Particularly perfidious booby-traps (Protocol II)

It is prohibited in all circumstances to use any booby-trap in the form of an apparently harmless portable object *which contains* explosive *material and detonates* when it is disturbed. The same applies to booby-traps which are attached to a protective emblem such as the red cross or the red crescent, to the wounded or the dead, to medical equipment or to children's toys, etc.[26]

A distinction must be made between the means (imitation toys, pens and lighters) – whose manufacture is implicitly forbidden – and methods which are prohibited (for example, attaching a grenade to a dead body. As such methods are relatively easy to use, precise

[26] 1980 Protocol II, Article 6.

instructions must be given to troops in order to preclude recourse to them during hostilities. Unfortunately, the need for application of these provisions is not merely an academic consideration; all too many civilians, especially children, have been killed or maimed by recent conflicts. Yet such practices have never led to the winnning of even the most minor battle. Let us hope that this prohibition will be respected by all States in the future.

(c) Protocol on prohibitions or restrictions on the use of mines, booby-traps and other devices (Protocol II)

It is prohibited to direct weapons, either in offence, defence or by way of reprisals, against the civilian population as such or against individual civilians. Since their indiscriminate use is prohibited, they must be directed only at a military ojective. Consequently, all feasible precautions must be taken to protect civilians from the effects of these weapons.[27]

- ***Restrictions on the use of mines other than remotely delivered mines, booby-traps and other devices in populated areas***

It is prohibited to use such weapons in any city, town, village or urban area in which combat is not taking place or does not appear to be imminent. This principle applies unless the mines are placed on or in the close vicinity of a military objective belonging to the adverse party or unless measures have been taken to protect the civilian population (the posting of warning signs, the posting of sentries or the provision of fences).[28]

- ***Restrictions on the use of remotely delivered mines***

The use of remotely delivered mines is prohibited unless they are only used within an area which is itself a military objective and unless their location can be recorded or a neutralizing mechanism exists to deactivate them once they no longer serve any military purpose.

Unless circumstances do not permit, advance warning must be given of any delivery of such mines which may affect the civilian population.[29]

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[27] *Ibid.*, Article 3.
[28] *Ibid.*, Article 4.
[29] *Ibid.*, Article 5.

In view of the fact that in measuring the proximity of non-combatants to combatants, the time factor can also come into play, delayed-action weapons tend to be indiscriminate.

- ***Recording and publication of the location of minefields, mines and booby-traps***

The parties to a conflict must record all minefields. These records must be retained so that, after the cessation of hostilities, all necessary measures may be taken to protect civilians. To this end information must, in certain eventualities as regards the forces occupying the territory, be exchanged between the parties and made available to the United Nations Secretary-General. Furthermore, special provisions exist to protect United Nations missions from the effects of minefields.[30]

Although mines are effective in hindering the advance of the enemy, they are particularly dangerous not only for the adversary but also for the party that lays them and for civilians. In order to ensure that each party's own troops and persons responsible for mine clearance can be properly informed and the unfortunately all too frequent accidents avoided, troops must be trained to draw up accurate charts of minefields and to preserve such records even after hostilities have ceased.[31]

In view of the number of civilian victims of mines even years after hostilities have ceased, the importance of the type of international co-operation laid down by the provisions in Protocol II is very clear.

(d) Protocol on prohibitions or restrictions on the use of incendiary weapons (Protocol III)

It is prohibited to use incendiary weapons to attack:
- the civilian population or civilian objects;
- any military objective within a concentration of civilians, from an aircraft;
- any such objective using means other than aircraft unless it is clearly separated from the concentration of civilians and precautions have been taken to avoid harming them. Furthermore, the use of incendiary weapons on forests is forbidden unless these are

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[30] 1980 Protocol II, Articles 7 and 8.

[31] Major (Ret.) J.D.R. Wyatt, "Land mine warfare, recent lessons and future trends", *International Defense Review*, Vol. 22, No. 1, 1989.

being used to conceal combatants or are themselves military objectives.[32]

As China pointed out in its statement when signing this Protocol, it does not contain any provision limiting the use of incendiary weapons against combatants. Such weapons present two main military advantages: firstly, their effectiveness over a wide area since fire will rapidly spread if the environment is suitable (for example, forests) and, secondly, they are cheap and easy to make (for example, Molotov cocktails), which explains why they are frequently used in guerrilla warfare. Incendiary weapons are extremely destructive.

Instinctively, man is afraid of fire. The injuries caused by incendiary weapons (burns and lesions due to the release of toxic gases) are particularly painful and, to be treated, they require greater hospital facilities than is the case for bullet or shrapnel wounds. Might they not be considered as causing unnecessary suffering? Moreover, given the way fire spreads, these weapons might be described as indiscriminate. For these reasons, it would be wise to consider introducing more restrictive provisions during any future conference. In the meantime, States which have acceded to this Protocol must abide very strictly by the minimal rules it has laid down.

(e) Resolution on small-calibre weapon systems

Clearly, in military terms it makes sense to equip infantry with small-calibre weapons because, for the same weight, they can carry more ammunition. To achieve that, projectile velocity must be increased since velocity is more important than mass in obtaining the desired kinetic energy. Hence the synonymous term: high-velocity projectiles. Since such projectiles are so light they tend to yaw and turn sideways on impact, thereby causing particularly dreadful wounds to the human body.[33] Although the 1980 Conference did not succeed in having a Protocol adopted it did pass a Resolution which, recalling the 1899 Hague Declaration prohibiting the use of dum-dum bullets, requested States to carry out further research on the wounding and ballistic effects of small-calibre weapons and appealed to governments to exercise the utmost care in developing such

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[32] 1980 Protocol III, Article 2.

[33] Martin L. Fackler, "Wounding patterns of military rifle bullets", *International Defense Review*, Vol. 22, No. 1, 1989.

weapons so as to avoid an unnecessary escalation of their injurious effects.

IV. RELATIONS WITH ADDITIONAL PROTOCOL I

In its preamble, the 1980 Convention takes as its basis the principle of international law whereby the choice of methods or means of warfare is not unlimited, a principle which is also to be found in Additional Protocol I.

1. Basic rules on the methods and means of warfare

Although Article 35 of Additional Protocol I lays down fundamental principles as to the choice of methods and means of warfare, it does not specify any particular rule prohibiting the use of weapons of a nature to cause superflous injury or unnecessary suffering or severe damage to the environment.[34] It is quite clear however that this provision forms the basis for the 1980 Protocols. Consequently, during the Conference on Conventional Weapons, it was pointed out that the terms used should be identical to those in paragraph 2, Article 35, of Protocol I.[35]

2. General protection against the effects of hostilities

Part IV of Additional Protocol I establishes rules to ensure the protection of the civilian population. It was logical therefore that the Conference should take these into consideration during the course of its work. For example, the Working Group on Incendiary Weapons consulted the articles in Additional Protocol I on the protection of the civilian population (Article 51, para. 2) and on the general protection of civilian objects (Article 52, para. 1).[36] Similarly, the Working

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[34] *Commentary on the Additional Protocols to the Geneva Conventions, op. cit.*, pp. 393-394.

[35] *Report of the Working Group on Land-mines and Booby-traps* of 20 October 1980, p. 8.
See also the *Commentary on the Additional Protocols to the Geneva Conventions, op. cit.*, p. 416.

[36] *Report of the Working Group on Incendiary Weapons* of 1 October 1980, p. 3.

Group on Land-mines and Booby-traps pointed out that paragraph 2 of Article 4, Protocol II, which deals with the delivery or dropping of remotely delivered mines, draws on paragraph 2 of Article 57, Additional Protocol I, which makes provision for precautions in attack.[37]

Furthermore, the definition of a "military objective" in Additional Protocol I[38] has been reproduced in the 1980 Protocols on mines and incendiary weapons.[39] The idea of indiscriminate attacks in Additional Protocol I[40] and that of the "indiscriminate use" of mines[41] do not exactly overlap even though their purpose is the same.[42] Nevertheless, we think it correct to say as a general rule that

- the placement of mines elsewhere than on a military objective[43] and
- attacks by incendiary weapons against objectives located within concentrations of civilians[44] when precautions to protect those civilians have not been taken as laid down in Protocol III constitute indiscriminate attacks prohibited by Additional Protocol I.[45]

3. Protection of the environment

The provisions contained in Article 35, paragraph 3, of Additional Protocol I on the prohibition of methods and means of warfare which may be expected to cause damage to the natural environment and those of the 1980 Convention do not contradict each other, although they are somewhat different in bearing.[46] Additional Protocol I states, moreover, that care should be taken in warfare to protect the natural

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[37] *Report of the Working Group on Land-mines and Booby-traps* of 20 October 1980, p. 7.

[38] Additional Protocol I, Article 52, para. 2.

[39] 1980 Protocol II, Article 2, para. 4 and 1980 Protocol III, Article 1, para. 3.

[40] Additional Protocol I, Article 51, para. 4 (a).

[41] 1980 Protocol II, Article 3, para. 3 (a).

[42] See Col. A.P.V. Rogers, "Mines, Booby-traps and other devices", published in this issue of the *International Review of the Red Cross*, pp. 527-528.

[43] 1980 Protocol II, Article 3.

[44] 1980 Protocol III, Article 2.

[45] Additional Protocol I, Article 51, paras. 4 and 5; Col. A.P.V. Rogers, *op. cit.*, pp. 533-534.

[46] *Commentary on the Additional Protocols to the Geneva Conventions, op. cit.*, p. 414 ff.

environment.[47] The further restrictions contained in Protocol III as regards incendiary weapons come within the context of that provision.

4. The 1980 Convention, an instrument promoting the application of Additional Protocol I

No legal links have been formally established between Additional Protocol I and the 1980 Convention and its Protocols. Yet their purpose is identical, namely to render war less pointlessly cruel and spare civilians. In application, these two legal instruments complement each other from a military point of view, since the precepts contained in Additional Protocol I on the methods and means of warfare and the protection of civilians against the effects of hostilities are given direct application in the restrictions on the choice and use of weapons formulated in the Protocols to the 1980 Convention. To some extent, the latter is but a more tangible expression of the former.

The 1980 Convention does not allow for sanctions against violations of its own rules. Its reference to the Geneva Conventions cannot entail application of the provisions they contain for the prosecution of grave breaches, since these provisions concern only such breaches as are committed within the framework of the said Conventions. Conversely, violations of the rules laid down by the 1980 Protocols do come within the sphere of those rules in Additional Protocol I prohibiting certain methods and means of warfare. Hence, facts constituting breaches under Additional Protocol I will be easier to establish by taking the 1980 Protocols into account. Although the 1980 Convention and its Protocols make no provision for their effective monitoring, this legal shortcoming is indirectly remedied where States are party to Protocol I. Indeed, in supplementing the provisions of the Geneva Conventions on the repression of breaches, Protocol I spells out the acts which constitute grave breaches and lays down the obligation to repress them. Moreover, in order to prosecute offenders more effectively, Protocol I provides for the establishment of an International Fact-Finding Commission competent to enquire into any facts alleged to be a grave breach as defined in the

[47] Additional Protocol I, Article 55.

Geneva Conventions and Additional Protocol I.[48] It is therefore to be hoped that this Commission, whose competence has just been accepted by the requisite number of twenty States, will be set up in the near future.

Thus by also binding themselves to the Convention and its Protocols, States aware of the need to develop international humanitarian law accept increased responsibility for themselves and for the commanders of their armed forces.

V. OUTLOOK FOR THE FUTURE

The 1980 Convention and its Protocols do not represent a final solution in themselves; rather they are merely a step towards making conflicts less stupidly cruel.

1. Applying the principles of the 1980 Convention to non-international armed conflicts: a humanitarian question

Although the Convention applies only to international conflicts or ones considered as such, in a general fashion its preamble refers to *"the principle of international law that the right of the parties to an armed conflict to chose methods or means of warfare is not unlimited"*. It also points out that in cases not covered by the Convention and its annexed Protocols *"the civilian population and the combatants shall at all times remain under the protection and the authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience"*.

It will be recalled that Article 3 common to the Four Geneva Conventions insists that persons taking no active part in the hostilities be, in all circumstances, treated humanely; Additional Protocol II codifies the general principle that protection is due to the civilian population against the dangers of hostilities, already recognized by customary international law and by the laws of war as a whole.[49]

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[48] Additional Protocol I, Article 90.

[49] *Commentary on the Additional Protocols to the Geneva Conventions,* on Article 13 of Additional Protocol II, *op. cit.*, p. 1448.

When the 1980 Convention entered into force the ICRC appealed to all parties, even if they are not bound by these instruments and even if the armed conflicts are non-international and not covered by them, to observe their provisions because this is a humanitarian demand that transcends the strict limits of the law.[50] Indeed, as Sandoz points out, it would be particularly shocking if governments should themselves feel free to use against their own population weapons which they have agreed to forego against an alien enemy.[51] When one considers the continually increasing number of internal conflicts, it is to be hoped that the ICRC's appeal will be heeded by all the parties and that progress both in this respect and from a legal standpoint may be made.

2. Towards a further conference

Now that ten years have passed since the 1980 Convention entered into force, each Contracting Party may request the Secretary-General of the United Nations Organization, in his capacity as Depositary, to convene a new conference with powers to study all proposals for:

- amendments to the Convention and its Protocols;
- new Protocols relating to other categories of conventional weapons.[52]

At the time of signing, France reserved the right possibly to submit at a future conference draft procedures *"that would make it possible to bring before the international community facts and information which, if verified, could constitue violations of the provisions of the Convention and the Protocols annexed thereto"*.

In addition, it would be advisable for one or more States to propose examining new Protocols. Since 1980 many technical studies have been carried out into small-calibre weapons (high-velocity bullets). In view of the resolution adopted on this subject, it therefore ought to be possible to consider a protocol dealing with this type of weapon.

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[50] "ICRC appeal following the entry into force of the Convention on Prohibitions and Restrictions on the Use of Certain Conventional Weapons", *International Review of the Red Cross*, No. 238, January-February 1984, p. 30.

[51] Sandoz, *op. cit.*, p. 16.

[52] 1980 Convention, Article 8.

For its part, the ICRC has dealt with the use of laser weapons which, capable of causing blindness, must be deemed particularly cruel and hence as weapons that inflict superfluous injury or unnecessary suffering. It convened a Round Table on this subject in 1989. The participants came from various official or private scientific backgrounds – governments, armies and universities – and put forward their personal views. They asked for two specialized working groups to be set up, the first of which met in May-June 1990 and the second in November of the same year. The results suggest that the ICRC might request some of the Contracting Parties to include the study of a protocol on laser weapons on the agenda of a new conference.

It should be noted that States bound by Additional Protocol I are under an obligation to determine whether the employment of any new weapon is prohibited by international law.[53] This provision would certainly be of practical relevance at a new conference because, in this sphere too, progress undoubtedly does not come to a halt!

3. Dissemination

The Contracting Parties undertake "*in time of peace as in time of armed conflict, to disseminate this Convention and those of its annexed Protocols and, in particular, to include the study thereof in their programmes of military instruction, so that those instruments may become known to their armed forces*".[54] This obligation is of paramount importance, because commanders can scarcely be expected to find the time to start studying the Protocols and their application when in the midst of battle or even preparing for an attack. These rules are quite restrictive and they must be not only known but also put into practice.

First and foremost, compliance with the Convention and its Protocols means that States must not supply their armies with prohibited weapons (non-detectable fragments and booby-traps). They must, on the other hand, enact internal regulations placing restrictions on the use of weapons. Moreover, military training must be given in peacetime already to inculcate, at every level, the use of methods of warfare which conform to international humanitarian law. In States

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[53] Additional Protocol I, Article 36.

[54] 1980 Convention, Article 6.

bound by Additional Protocol I, military commanders, from generals to corporals, must be aware of their obligation to prevent serious breaches[55] and of the fact that it is no excuse to plead that they were carried out on the orders of a superior officer.[56]

The heavy responsibility of States party to the 1980 Convention and its Protocols calls for meticulous preparation on their part and the ICRC is always willing to lend its help.[57] To help ensure respect for, and prevent breaches of, humanitarian law the ICRC addresses itself in particular to the armed forces and political circles. It organizes international courses for commissioned and non-commissioned officers as well as for legal advisers and regional and national courses principally intended for the training of instructors. It is also in contact with governments and members of parliament to promote the ratification and application of the Protocols additional to the Geneva Conventions and of the 1980 Convention, together with its Protocols.

4. Further efforts needed to implement and extend international humanitarian law

On the tenth anniversary of the United Nations Conference, it is all too evident that the end of the cold war between the two superpowers has been no guarantee of peace. Recent events have shown that violations of international order are not a thing of the past and that respect for humanitarian law is very difficult to ensure, either in international or internal armed conflicts. Acts of violence against civilians are particularly heinous. The ICRC appeals therefore to all States – and to all leaders of opposition movements – to try to advance the cause of humanitarian law. One of the most advisable ways is to pledge compliance with the 1980 Convention and its Protocols. To date, only 31 States out of the present total of 170 have ratified or acceded to these agreements.

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[55] Additional Protocol I, Article 87.

[56] Additional Protocol I, Article 86. See Maurice Aubert, "The question of superior orders and the responsibility of Commanding Officers in the Protocol additional to the Geneva Conventions of 12 August 1949 and relating to the protection of victims of international armed conflicts (Protocol I) of 8 June 1977, offprint from the *International Review of the Red Cross*, No. 263, March-April 1988, pp. 105-120.

[57] See CDDH Resolution 21 which "invites the International Committee of the Red Cross to participate actively in the effort to disseminate knowledge of international humanitarian law...".

The preamble to the Convention emphasizes the desirability that all States, especially the militarily significant ones, become party to these agreements. However, many of those which signed the Convention have not yet ratified it. The ICRC will consequently continue its efforts in the hope that all States will become bound by this Convention and its Protocols, together with Additional Protocol I, since these legal instruments complement each other. To that end it appeals to the conscience of nations throughout the world to make humanitarian law ever more effective. There is common ground for understanding as long as belligerents respect the humanitarian principles.

Moreover, by sparing civilians and limiting the methods and means of warfare, the hatred which often triggers an escalation of violence is attenuated. Humane values have never yet led to defeat in war. Indeed, it might very well be said that their pacifying effect helps to resolve all conflicts. It is devoutly to be wished that the ICRC will persuade reluctant States of the urgency to bind themselves to these agreements and convince those which have already done so of the need to organize another Conference in the near future – for instance 1994 – so that further progress can be made in international humanitarian law.

Maurice Aubert
Vice-President
International Committee
of the Red Cross

Maurice Aubert, a lawyer, has a doctorate in law from Geneva University, is Vice-President of the ICRC and has been a member of the ICRC since 1979. He was on the Executive Board from 1983 to 1990. He has published books and articles on business law, Swiss law, international legal aid and international humanitarian law. (See: "The question of superior orders and the responsibility of Commanding Officers in the Protocol additional to the Geneva Conventions of 12 August 1949 and relating to the protection of victims of international armed conflicts (Protocol I of 8 June 1977)" *IRRC*, No. 263, March-April 1988, and "From the Declaration of the Rights of Man and of the Citizen of 26 August 1789 to present-day international humanitarian law", *IRRC*, No. 271, July-August 1989.

The Conventional Weapons Convention: A modest but useful treaty

W. J. Fenrick*

The author commenced an earlier study of the 1980 United Nations Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons (Conventional Weapons Convention) by quoting the late Sir Hersch Lauterpacht's remark: *"If international law is, in some ways, the vanishing point of law, the law of war is, perhaps even more conspicuously, at the vanishing point of international law"*.[1] He then carried Lauterpacht's statement one stage further to suggest that the vanishing point of the law of war was most likely to be found in the body of law restricting the use of weapons. Shortly after writing these words, the author discovered that a colleague had also used the remarks of Sir Hersch and asserted that the vanishing point of the law of war was the law of air warfare. More recently, the author read a paper by a younger colleague in which Sir Hersch was quoted once again, but this time it was asserted that the vanishing point of the law of war was to be found in the body of law regulating nuclear weapons. The two lessons one might derive from this brief tale are that serious students of the law of war rarely have grandiose expectations for their discipline and that a good quotation is always reusable.

The Conventional Weapons Convention is not a major attempt to modernize and redefine the entire law of armed conflict, as is Additional Protocol I of 1977. Indeed, although the conference which spawned the Conventional Weapons Convention was entitled the United Nations Conference on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Exces-

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* Commander W. J. Fenrick, Director of International Law, Department of National Defence, Ottawa. The views expressed herein are those of the writer and do not necessarily reflect either the policy or the opinion of the Canadian government.

[1] H. Lauterpacht, "The problem of the Revision of the Law of War", (1952), 29 British Yearbook of International Law (BYBIL), pp. 360, 382.

sively Injurious or to Have Indiscriminate Effects, neither the Convention nor its annexed protocols specifically deemed any weapons to be excessively injurious or to have indiscriminate effects. They simply prohibited weapons which cause injury by means of undetectable fragments and imposed restrictions on the use of mines, booby-traps, and incendiary weapons.

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The two basic principles of the law concerning the use of weapons in armed conflict are that weapons should not cause unnecessary suffering to combatants and that weapons should not be used when they will indiscriminately affect both combatants and non-combatants. The modern origins of these principles are contained in the Declaration of St. Petersburg of 1868. An adequate, reasonably self-explanatory, definition of indiscriminateness in the context of an attack is contained in Additional Protocol I at Article 51 (4):

"Indiscriminate attacks are prohibited. Indiscriminate attacks are:

(a) those which are not directed at a specific military objective;
(b) those which employ a method or means of combat which cannot be directed at a specific military objective; or
(c) those which employ a method or means of combat the effects of which cannot be limited as required by this Protocol;
and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction".

A modern restatement of the unnecessary suffering rule is also contained in Additional Protocol I at Article 35:

"1. In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited.
2. It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering...".

Unfortunately, it is very difficult to determine when a weapon causes unnecessary suffering. At the beginning of this century, one candid British writer put forth this argument:

"It is really by its fruits that the engine of war is judged. The test of lawfulness (and, one might add, of use) of any weapon or projectile is practically the answer one can give to the question—what is its

'bag'? Does it disable so many of the enemy that the military end thus gained condones the suffering it causes?... Today, a commander has an acknowledged war right to use any weapon or explosive which, however terrible and ghastly its effects, is capable of putting out of action such a number of the enemy as to justify the incidental mutilation of individuals".[2]

Contemporary writers have often adopted this approach but used more moderate phraseology. A weapon causes unnecessary suffering when in practice it inevitably causes injury or suffering disproportionate to its military effectiveness. In determining the military effectiveness of a weapon, one looks at the primary purpose for which it was designed.

* * *

Although States have been willing to accept general principles in this area of law, they are somewhat more conservative when it comes to imposing specific restrictions on the use of particular weapons. One American writer summed up the results of the Hague Conferences of 1899 and 1907, and early exercise in arms control, in this way: *"The proceedings of the Hague Conference demonstrate... that a weapon will be restricted in inverse proportion, more or less, to its effectiveness; that the more efficient a weapon or method of warfare the less likelihood there is of its being restricted in action by rules of war".*[3] Indeed, even when States have been able to reach agreement on rules affecting the use of weapons, too often they have not been observed in war unless the weapons were obsolete or obsolescent or observance of the restrictions conferred roughly similar benefits on both sides in a conflict.

Although the antecedents of the weapons conference can be traced back indefinitely, appropriate starting points are a resolution of the Twenty-second International Conference of the Red Cross in Tehran in 1973, and the first session in 1974 of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts, which took up the Red Cross Conference's call to address the problem of weapons.

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[2] J. M. Spaight, *War Rights on Land*, London, 1911, pp. 76-77.

[3] M. W. Royse, *Aerial Bombardment and the International Regulation of Warfare*, New York, 1928, pp. 131-132.

The Diplomatic Conference established an *ad hoc* Committee on Conventional Weapons. Except for agreement on a relatively innocuous proposal concerning fragments not detectable by X-rays, the *ad hoc* Committee was unable to agree on rules that would amplify the existing general law concerning the use of or restrictions on weapons. As the Diplomatic Conference moved towards the final version of the Additional Protocols, some delegations, perhaps frustrated by the lack of progress on weapons issues, pushed very hard to have a provision establishing a permanent international weaponry review committee inserted in Additional Protocol I. This provision was voted down but a compromise of sorts was reached on the weapons issue and the Conference adopted a resolution which recommended that another conference devoted exclusively to restrictions on conventional weapons be convened. This resolution was passed on to the United Nations General Assembly which, on 19 December 1977, adopted resolution 32/152, which became the mandate for the conventional weapons conference.

In anticipation of the Weapons Conference, a preparatory conference met in Geneva for two sessions, in September 1978 and March-April 1979. Progress at these sessions was quite slow, most of the time being taken up with procedural arguments or with general statements of points of view. The major decision taken was a non-decision. Although the Prepatory Conference adopted a number of rules of procedure, it did not reach agreement on rules for decision-making. As a result, no votes were taken at the Preparatory Conference or at the subsequent main conference. Decisions were reached on the basis of an unofficial and undefined consensus.

Subsequent to the Preparatory Conference, the Weapons Conference met for two sessions in Geneva from 10 to 28 September 1979, and from 15 September to 10 October 1980. Mexico and Sweden led those States that favoured maximum restrictions and even the outright prohibition of certain weapons, particularly incendiaries and small-calibre, high-velocity small arms ammunition. At the opposite end of the spectrum were the North American and Western European States, who adopted a more pragmatic and also a more conservative approach to the problem. It soon became apparent, or should have become so, that most of these last-mentioned States did not hold positions permitting of much negotiation. While the USSR and other Eastern European States held essentially similar views to those of the United States and other Western States, they adopted a public stance of readiness to accept far-reaching prohibitions or restrictions but maintained that these should be negotiated in the context of a world-wide disarmament

conference or at the Conference on Disarmament (at such a conference, military considerations would predominate). Some States were represented by delegates with an abundance of humanitarian zeal but, unfortunately, this zeal was often coupled with an apparent lack of appreciation of the technical and military considerations involved.

Basically, the Conference proceedings consisted of a prolonged struggle between the prohibitionists, who perceived the position of the militarily developed and conservative States to be an unreasonable one, and attempts by the more militarily developed States to justify their position and to demonstrate that the position of the prohibitionists was essentially idealistic and unrealistic. One is inclined to feel that the Conference lasted as long as it did because the prohibitionists expected to gain more concessions by prolonging the agony.

The end result of the Conference was the adoption of a convention with three annexed optional protocols. Features of the **Convention** itself worth noting are the scope of application, the review mechanism, and the optional protocol device.

Article 1 (scope of application) indicates that the Convention applies to international armed conflicts as defined in Article 2 Common to the Geneva Conventions, that is, to armed conflicts between States, and as defined in Article 1(4) of Additional Protocol I, which refers to *"armed conflicts in which peoples are fighting against colonial domination and alien occupation and against racist régimes in the exercise of their right of self-determination"*.

When a State ratifies the Convention, it must notify the Depositary of its consent to be bound by any two or more of the annexed Protocols. Article 8 is concerned with review and amendments. At any time after the Convention is in force, that is, six months after the twentieth instrument of ratification is deposited, any party may propose amendments to the Convention or to any annexed protocol by which it is bound. If a majority of no less than eighteen parties agrees, a conference will be convened to consider the proposals. All States are invited to the conference but only States that are bound by particular protocols may decide on amendments to those protocols. A similar procedure is followed to convene a conference to consider additional protocols relating to different categories of conventional weapons, except that all States at such a conference would take part in decisions on the acceptability of new additional protocols.

* * *

Optional **Protocol I** is concerned with weapons which do not exist. The protocol in its entirety is as follows: *"It is prohibited to use any weapon the primary effect of which is to injure by fragments which in the human body escape detection by X-rays"*. The Protocol was advanced at a time when it was believed, erroneously, that American forces had used such weapons in Vietnam. Once the proposal was suggested, it received unanimous support because none of the States participating in the Weapons Conference had such weapons in their inventory nor did they foresee any conceivable use for such weapons in the future.

Optional **Protocol II**, the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and other Devices, was concerned with a much more serious subject. In brief, minefields are generally laid to delay an enemy advance, to cause him to turn away from this chosen line of advance into areas more favourable to the defence, or to harass him by causing casualties. The land forces of all countries use such weapons in combat. Until recently, minefields were, for the most part, laid manually and, as a result, they would normally be emplaced in an area under the control of the forces laying the mines. Because of this, commanders of the forces laying the mines would, as a matter of practice, have a major interest in controlling the use of mines and in recording the location of minefields. During the period of time in which the area containing the minefield remained a zone in which combat might occur, the danger to non-combatants would be reasonably small because such persons should not be in the zone.

As the law relative to the conduct of military operations was concerned essentially with how casualties were inflicted during battle, little attention was paid to what happened after the zone of combat shifted elsewhere. Presumably, records would be kept of where minefields were located as long as these were relevant for military operations, but what would happen after that was not clear. A military commander would always have an interest in the location of minefields, if for no better reason than the wish to protect his own troops if they were to pass through the area, but one must assume that the intensity of his interest would decrease as the battle moved on. For whatever reasons, records do get lost while the mines remain. A United Nations study of the problem of material remnants of wars, particularly mines, was conducted in 1977. One of several similar reports submitted for the study, that of Poland, indicated that nearly 15,000,000 mines had been disposed of in the country since World War II. During the same period, nearly 4,000 civilians had been killed by mines and 9,000 had been injured. Most of the victims were chil-

dren. At the time of writing the report, thirty or forty people were still being killed annually. Obviously, the continued presence of these mines served no useful military purpose.

In recent years, the development of scatterable or remotely delivered mines has substantially changed the conduct of mine warfare. When mines were emplaced by hand, they had normally, of necessity, to be used defensively to help ward off enemy attacks. With the new developments, mines can be delivered by artillery, mortar or aircraft and, as a result, they can be placed far behind enemy lines. Such mines may be used for offensive or defensive reasons. In either event, however, because of inevitable inaccuracy in placing the mines, the military commander has a much lesser degree of control over them and, incidentally, the technical possibility of increased civilian casualties from mine warfare exists.

The law concerning the use of landmines is relatively uncharted. Prior to the drafting of Additional Protocol I it was necessary to rely on basic concepts and principles such as military necessity, humanity, proportionality, unnecessary suffering, and the prohibition of weapons having indiscriminate effects in attempting to assess the legality of a particular use of landmines. It is even debatable whether or not Additional Protocol I has an effect on the use of landmines although some writers have argued that, as landmines are used to neutralize territory, they come within the scope of the indiscriminate attacks rule of Article 51. Others have argued that a landmine is something placed in or on the ground which detonates when certain persons or objects approach it. As a result it is nonsensical to refer to a landmine as something which "attacks" a person or object. In view of this confusion about the content of the applicable law, all participants at the Weapons Conference considered it appropriate that a specific protocol be drafted to regulate the use of landmines. They also considered it appropriate to include provisions in such a protocol regulating the use of booby-traps as these were also time-delay weapons, that is, weapons that did not detonate immediately after striking the ground.

Optional Protocol II is based on a draft treaty initially proposed by the United Kingdom and applies to the use of mines and booby-traps on land (Article 1). The definition of mine includes remotely delivered (scatterable) mines, the type most likely to be used in the technologically sophisticated warfare of the future (Article 2[1]).

Article 3 of the Protocol prohibits directing mines or booby-traps against the civilian population as such or against individual civilians; this is merely an application of an accepted principle. It also prohibits the indiscriminate use of these weapons, that is, not placing them on,

or directing them at, a military objective, or employing a method or means of delivery which cannot be directed or which may be expected to cause excessive injury to civilians or excessive damage to civilian objects. The definition of indiscriminate use may provide the basis for legal arguments favouring the intrinsic illegality of mine warfare in the future because it is difficult to argue that a mine is "directed" at anything. A mine is placed in or on the ground on the assumption that someone or something will either approach it and cause it to detonate or be deterred from entering the area where it is located. The prohibition of use that may cause disproportionate civilian casualties is, however, a useful particularization of the proportionality principle.

Article 4 prohibits the use of mines, other than remotely delivered mines, and booby-traps in populated areas where ground combat is not taking place or imminent unless the weapons are placed on or near enemy-controlled military objectives or measures are taken to protect the civilian population. This article codifies the mine-laying practices of most States, as no country has an infinite number of mines and it could be expected that mines would be used to achieve a military goal. As such, it does provide some degree of additional protection for the civilian population by imposing a legal obligation on parties to the Protocol.

Article 5 imposes a restriction on the use of remotely delivered (scatterable) mines. Such mines may only be used within an area that is itself a military objective or that contains military objectives. It must also be possible to record the location of minefields containing such mines or they must be fitted with neutralizing mechanisms. In practice, most such mines will be fitted with a naturalizing mechanism which will cause the mine to explode after a certain period of time.

Article 6 prohibits the use of certain types of booby-traps.

Article 7 obligates the parties to record the location of "*a) all pre-planned minefields laid by them*; and *b) all areas in which they have made large-scale and pre-planned use of booby-traps*". It is unfortunate that the expression "pre-planned" was used or, having been used was not defined in the Protocol. Efforts to arrive at a definition were unsuccessful. Since national practice, in the broadest sense, could result in the development of customary law, lack of a definition could conceivably result in the development of a legal doctrine requiring the recording of the location of all minefields or, alternatively, national statements of interpretation or practice restricting the meaning to mines laid before the war started.

Article 8 provides a certain degree of protection for UN peacekeeping forces as it obligates parties to a conflict to protect peacekeeping forces in the area from the effects of mines and booby-traps.

In summary, the Protocol on the use of mines is a modest advance in the law; for the most part, it merely codifies national practice. Military commanders have an interest in controlling the use of mines and knowing their location, if for no other reason than to protect their own personnel. The indiscriminate use provision and the expression "preplanned" used in connection with the recording obligation may leave scope for developments in the law which the draftsmen did not envisage.

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Prior to the Weapons Conference there was no specific treaty law concerning the use of incendiary weapons. Because of the peculiar horror aroused by flame and because of the perception of unnecessary suffering caused by burn injuries, however, some authorities have considered the use of flame weapons against personnel to be illegal because it offended against the unnecessary suffering principle. At the same time they have considered the use of such weapons against material targets to be permissible.[4]

Negotiation of **Protocol III**, restricting the use of incendiary weapons, was extremely difficult because the positions of the main protagonists were very far apart. Mexico wanted a total prohibition of the use of incendiaries. Sweden wanted a total prohibition of the use of pure incendiaries, allowing retention of weapons with incidental incendiary effects or with incendiary effects combined with other effects. The USSR indicated it could accept major concessions but only if certain other powers would accept the same concessions. The United States did not wish to accept particular restrictions on the use of incendiary weapons because the weapons were not different in

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[4] H. Lauterpacht, ed., Lassa Oppenheim's *International Law*, 7th ed., Longman, London, 1952, p. 340 and M. Greenspan, *The Modern Law of Land Warfare*, Los Angeles, 1959, pp. 360-362. The US law of land warfare manual, *Department of the Army Field Manual FM 27-10*, at p. 18, Washington, 1956, indicates that the use of weapons employing fire is not of itself unlawful but such weapons should not be employed in such a way as to cause unnecessary suffering. The UK manual, *The Law of War on Land*, Part III of the *Manual of Military Law*, p. 41 London, 1958 indicates that the use of flame throwers and napalm bombs against personnel is unlawful "in so far as it is calculated to cause unnecessary suffering".

kind from other weapons and the alternative weapons likely to be used if incendiary weapons were restricted would, in many cases, cause greater casualties. Eventually, however, largely because of a last-minute concession by the United States, a protocol was agreed upon.

Article I of the Protocol contains a number of definitions. The definition of incendiary weapon was one of the main questions to be resolved, as the scope of the restriction on use was dependent on the inclusiveness of the definition. The definition finally agreed on is as follows:

"1.'Incendiary weapon' means any weapon or munition which is primarily designed to set fire to objects or to cause burn injury to persons through the action of flame, heat or a combination thereof, produced by a chemical reaction of a substance delivered on the target".

Certain weapons are then excluded from the definition. These are munitions that have incidental incendiary effects, such as illuminants or tracers, and

"1.(b) (ii) Munitions designed to combine penetration, blast or fragmentation effects with an additional incendiary effect, such as armour-piercing projectiles, fragmentation shells, explosive bombs and similar combined-effects munitions in which the incendiary effect is not specifically designed to cause burn injury to persons, but to be used against military objectives, such as armoured vehicles, aircraft and installations or facilities".

The combined incendiary-effect exclusion limits the scope of the definition. A substantial number of modern incendiary weapons are in fact combined-effects munitions and outside the scope of the definition. Older weapons such as those used in World War II and napalm are, however, within the definition.

Article 2 sets out four rules restricting the use of incendiary weapons. The first rule prohibits making civilians, or civilian objects, the object of attack by incendiary weapons. As attacks directed at civilians or civilian objects are already prohibited by Article 48 of Additional Protocol I, this provision does not add to civilian protection.

The second rule prohibits attacks directed against military objectives located within a concentration of civilians by incendiary weapons delivered by air. As far as these incendiaries are concerned, the prohibition is absolute if the military objective to be attacked is located within a concentration of civilians. The expression "concentration of civilians" defied precise definition but the descriptive language

employed should not present too much difficulty to those delivering an attack by air.

"Concentration of civilians" is defined as meaning *"any concentration of civilians, be it permanent or temporary, such as in inhabited parts of cities, or inhabited towns or villages, or as in camps or columns of refugees or evacuees, or groups of nomads"* (Article 1[2]). In large cities there may be areas in which a military objective could be placed without its being located within a concentration of civilians.

The third rule prohibits attacks by incendiary weapons, other than weapons delivered by air, directed at military objectives located within a concentration of civilians, except when the military objective is clearly separated from the concentration of civilians and all feasible precautions are taken to minimize civilian casualties and damage. In practice this will mean that, even if civilians are present, incendiary attacks can be made if the civilians have taken shelter in bunkers or are at such a distance from the objective that the effects of the incendiary weapon will not be felt by them. It is considered that the expression "clearly separated" can connote separation by distance or separation by the presence of a protective barrier such as a hill between the objects to be attacked and the civilians concerned.

The fourth rule prohibits attacks on forests or other kinds of plant cover except when these natural elements are used to conceal combatants or other military objectives or are themselves military objectives. It will not stop a commander from using incendiaries to clear a field of fire or facilitate an advance through a forest. Once a forest falls within the definition of military objective, that is, *"any object that by its nature, location, purpose, or use makes 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"*, it can be attacked.

There are no provisions on the use of incendiaries against combatants. Even though there was a measure of support for some restriction in this area, it was not possible to achieve consensus on the subject. As a result, the pre-existing law applies and the use of incendiary weapons to cause unnecessary suffering is prohibited. A value judgment must be made in particular circumstances to determine whether or not the suffering caused is unnecessary.

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In conclusion, the results of the Weapons Conference will have a comparatively minor impact on the conduct of warfare. The new

Convention does not affect the use of war-winning weapons. For that matter, it has relatively minor effect on the use of effective modern conventional weapons. At the same time, because it does not purport to redress technological imbalance or to impose one-sided restrictions, it might have more impact in practice than more idealistic documents.

As of the end of 1989, the Conventional Weapons Convention had been ratified by thirty-two States, including China and the USSR. It entered into force on 2 December 1983, six months after deposit of the twentieth instrument of ratification. For the most part, the 1980s were not a good time for the development or even for the consolidation of the law of armed conflict. Further, the small number of experts on the law of armed conflict possessed by most States were preoccupied with determining whether or not to ratify the Additional Protocols of 1977. It is reasonable to presume that the process of intellectual digestion of the Additional Protocols is now nearly complete, although some States which have indicated their intent to ratify have yet to complete the ratification procedure. The apparent ending of the Cold War and the end of the national process of coming to terms with the Additional Protocols may well lead to renewed interest in ratification of the Conventional Weapons Convention.

W. J. Fenrick

Commander **W. J. Fenrick** began his career in the Canadian Forces as a naval officer. Since becoming a lawyer, he has devoted most of his time to humanitarian law and has published several articles in this field. He was a member of the Canadian delegation to the Conventional Weapons Conference. He is presently employed as the Director of International Law for the Canadian Department of National Defence, in Ottawa.

The Conventional Weapons Convention: Underlying Legal Principles

by Frits Kalshoven*

1. Introduction

Neither the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to have Indiscriminate Effects, adopted in Geneva on 10 October 1980, nor the Protocols annexed to it specify in their operative parts the principles on which the prohibitions and restrictions rest. Such principles are, however, found in the preamble to the Convention.

Four of the twelve preambular paragraphs are relevant here. They list: the *"general principle of the protection of the civilian population against the effects of hostilities"*; the principle *"that the right of the parties to an armed conflict to choose methods or means of warfare is not unlimited"*; the ban on *"the employment in armed conflicts of weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering"*; and the fact that it is prohibited *"to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment."*[1] The fifth paragraph reiterates the well-known Martens clause, in the formula-

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* Professor of international humanitarian law (ret.). The author wishes to thank Louise Doswald-Beck, member of the ICRC Legal Division, for her useful comments on a first version of this paper.

[1] Although preambular paragraphs are generally regarded as non-binding, France upon signature took the precaution of specifying that the last-quoted part of the preamble reproduces Art. 35(3) of the 1977 Protocol I and "applies only to States parties to that Protocol"; Schindler & Toman, *The Laws of Armed Conflicts*, Martinus Nijhoff Publishers, Dordrecht, The Netherlands, Henry Dunant Institute, Geneva, 1988, (3rd ed.), p. 194.

tion accepted for Article 1, paragraph 2, of Additional Protocol I of 1977.

The remaining seven paragraphs state such evident truths as the duty not to make war and the aspiration of all peoples to live in peace. Taken as a whole, the preamble may strike the reader as a rather more eloquent piece of writing than the operative parts of the Convention and Protocols taken together.

This is not uncommon: the same could already be said of one of the oldest instruments in the field, viz., the Declaration of St. Petersburg, 1868. While it has only one operational paragraph, on the mutual engagement of the parties to renounce the employment of one specific type of small-arms projectile, it is adorned with a lengthy and highly idealistic preamble that would not have been out of place in a treaty on the general reduction of armaments.[2] Indeed, the ideas expressed in the preamble of 1868 are very similar to some of the principles embodied in the preamble to the Convention of 1980.

This suggests two questions of interest. One concerns the history of principles relating to the employment of weapons of war, and the other the function of such principles. We shall briefly discuss each of these questions. In doing so we shall come across some other matters of general interest that, although not properly belonging under the heading of "principles", are of sufficient import to deserve some attention in the concluding section of this article.

2. Historical development of the principles

Mention was just made of the St. Petersburg Declaration of 1868, with its high-principled preamble preceding the down-to-earth ban on the use of *"any projectile of a weight below 400 grammes, which is either explosive or charged with fulminating or inflammable substances"*. In my submission, the "principles" set forth in the preamble did not at the time have force of law, nor did the authors intend to convey such an impression. Rather, they may have felt it their duty to embellish the prosaic, technical text they were adopting with an ornamental introductory piece, choosing to this end a series of somewhat philosophical considerations that could be regarded as their source of inspiration. As, after all, exalted phraseology was not uncommon in that era, the repetition of some of their rhetoric in the

[2] Schindler & Toman, *op. cit.*, p. 101. On this instrument, see further below.

preamble to the Declaration of Brussels of 1874[3] may still have been first and foremost an element of style.

After 1899 this could no longer be maintained. The first Hague Peace Conference included the "no unlimited right" rule and the prohibition on employing weapons "of a nature to cause unnecessary suffering" among the provisions in the Regulations on Land Warfare designed *"to define and govern the usages of war on land"* and *"destined to serve as general rules of conduct for belligerents in their relations with each other and with populations"*.[4] No matter how broad and vague, the phrases were thus effectively turned into rules of treaty law.

Irrespective of whether at the time the rules were already regarded as principles of customary law, they have acquired that status long since, together with the principle of distinction that had been implicit rather than expressly stated in the Regulations of 1899[5].

With a giant step through time we now come to a meeting in 1973 of a group of experts convened by the ICRC. As is apparent from the title of the report,[6] the experts discussed in the main the two principles outlawing the use of weapons that may cause unnecessary suffering or have indiscriminate effects. On an even higher level of abstraction, the experts noted, referring to Article 22 of the 1899/1907 Hague Regulations on Land Warfare, that any discussion of weapons "must proceed from the principle that the choice of means and methods of combat is not unlimited".[7]

Soon thereafter, the question of applicable principles came up at the first session of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts (Geneva, 1974-1977). The debate in the *Ad Hoc*

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[3] Schindler & Toman, p. 25.

[4] The quoted phrases are from the preamble to the 1899 Hague Convention (II) on Land Warfare, to which the Regulations are annexed.

[5] The principle of distinction was clearly expressed in Resolution XXVIII adopted by the XXth International Conference of the Red Cross, Vienna, 1965, and subsequently in Resolution 2444 (XXIII) of the United Nations General Assembly; Schindler & Toman, pp. 259, 263.

[6] ICRC, *Weapons that May Cause Unnecessary Suffering or Have Indiscriminate Effects: Report on the Work of Experts*, Geneva, 1973. Most of the discussion dealt with the characteristics and effects of specified categories of weapons. Obviously, the work of the forty-odd experts participating in their private capacities could only have a very preliminary character.

[7] *Report, op. cit.*, p. 11: para. 20. The summary of the discussion on unnecessary suffering and indiscriminate effects takes less than three pages; pp. 12-13: paras. 21-27.

Committee on Conventional Weapons brought to light deeply contrasting views on nearly all points, both as regards the properties and effects of weapons and in respect of existing principles and the correct interpretation of such principles. One salient aspect concerned the applicability of the existing principles: whereas some delegates felt that "unnecessary suffering" and "indiscriminate effects" provided well-established standards that could simply be applied to existing and possible future weapons, others took pains to demonstrate that the criteria by which these concepts could be measured needed clarification.[8]

Next to take up the matter of principles was the Conference of Government Experts on the Use of Certain Conventional Weapons, Lucerne, 1974. Unlike 1973, the participants had been delegated by their governments. The neutral reference in the title to "certain" weapons, dropping the notions of unnecessary suffering and indiscriminate effects, reflects the fact that the Conference was empowered to cover the whole range of conventional weapons: it was, in effect, the only conference to do so.

Matters of principle figured high on its agenda.[9] The discussion benefited greatly by a detailed paper by the British expert, (then) Colonel Sir David Hughes-Morgan. His (unpublished) paper discussed three criteria: unnecessary suffering, indiscriminate effects and, as a possible third, treacherous or perfidious character. The report adds that in the debate mention was made of other criteria, such as ecological damage and the prohibition of the use of force.[10] The "great diversity of opinion on applicable legal criteria which had emerged from the debate" had led to the suggestion to set up a working group of legal experts, charged with developing "a set of suitably defined criteria for the assessment of specific conventional weapons". The Conference had considered this premature: as noted in the report, *"criteria would have to emerge, or find clarification, as much as the result of discussions on military and medical aspects of the use of specific weapons as of the work of legal experts"*.[11]

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[8] Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts, (Geneva, 1974-1977), *Official Records*, Vol. XVI, pp. 457-459: CDDH/47/Rev. 1, Report of the *Ad Hoc* Committee on Conventional Weapons, paras. 21-35.

[9] ICRC, Conference of Government Experts on the Use of Certain Conventional Weapons (Lucerne, 24 September-18 October 1974), *Report*, Geneva, 1975; pp. 7-13: Chapter II: "Legal Criteria".

[10] *Report, op. cit.*, p. 7: para. 18.

[11] *Report, op. cit.*, p. 13: para. 42.

More or less independent of the foregoing, the issues of methods and means of warfare and general protection of the civilian population figured on the agenda of Committee III of the Diplomatic Conference. From the 1975 session, its discussions under these items embraced matters of principle also relevant to the use of weapons. The results of its deliberations are reflected in Articles 35, 36, 48 and 51 of Additional Protocol I (and, dimly, in Article 13 of Protocol II).

Article 35, after repeating the "no unlimited right" rule and reformulating the criterion of unnecessary suffering, lays down in treaty form the criterion of ecological damage. Article 36, giving some practical effect to the "no unlimited right" rule, requires a State considering the introduction of a new weapon to determine whether its employment would be prohibited by any rule of international law applicable to that State. Article 48 posits the principle of general protection of the civilian population (with Article 13 of Protocol II echoing at least the essence of this principle). Article 51, paragraph 4, prohibiting "indiscriminate attacks", specifies that this notion includes attacks *"which employ a method or means of combat which cannot be directed at a specific military objective"* or *"the effects of which cannot be limited as required by this Protocol"*.

As for the *Ad Hoc* Committee, although in the course of the remaining sessions it contributed little to the debate on principles, it is worth noting that at the 1975 session some delegations raised the matter of the need for some sort of review mechanism. Without such a mechanism, they felt, "there would be a strong temptation to produce ever more effective and inhumane weapons.[12]

In 1976 the Conference of Government Experts met in second session, this time in Lugano. It did not attempt to improve on the work on criteria done at Lucerne and Geneva. Its main deliberative body, the General Working Group, set up a Working Sub-Group on General and Legal Questions. This discussed such matters as possible types of agreement, nature and scope of the obligations to be achieved, entry into force, and, taking up the idea raised in 1975 by the *Ad Hoc* Committee, questions of review.[13]

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[12] *Official Records, op. cit.*, Vol. XVI, 479: CDDH/220/Rev.1: Report of *Ad Hoc* Committee on Conventional Weapons, Second Session, *op. cit.*, para. 51.

[13] ICRC, Conference of Government Experts on the Use of Certain Conventional Weapons (Second Session, Lugano, 28 January-26 February 1976), *Report*, Geneva, 1976. The report of the Working Sub-Group is on pp. 140-146. It may be noted here that the need to devise machinery for periodic review had already been referred to at the first session of the Diplomatic Conference, *op. cit.*, note 8, p. 457: para. 20 of *Report*.

With that, the matter came to the UN Conference on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to have Indiscriminate Effects.[14] Rather than doing any original work on the matter of principles, it simply copied into the preamble of the Convention some of the elements adopted earlier in Additional Protocol I of 1977. For the rest, it spent quite some time and energy on matters such as entry into force, the great diversity of conceivable treaty relations among parties and non-parties to the Convention and each of the three annexed Protocols and, last but not least, review and amendments.

At the very last minute, the Conference added to the title of the Convention express references to excessive injury and indiscriminate effects.[15] This might suggest that the classes of weapon dealt with in the annexed Protocols (mainly land mines and booby-traps, and incendiary weapons) must all be "deemed" to have such intolerable effects and, hence, be properly regarded as outlawed. The suggestion is effectively belied by the reference in the title to "restrictions" alongside "prohibitions", and even more so by the substantive provisions of the annexed Protocols, which for the most part deal with restrictions on use. The additional language, in other words, serves more as rhetoric than anything else.

The above brief historical survey leads to the conclusion that the principles of "no unlimited right", unnecessary suffering and indiscriminate effects are as firmly entrenched as ever in the law governing the use of weapons of war. One further principle, prohibiting excessive ecological damage, was added to this short list and now applies as treaty law between the parties to Additional Protocol I of 1977. Other suggested notions, such as excessive cruelty or perfidious character, did not survive the debates. As regards the view that *"criteria would have to emerge, or find clarification, as much as the result of discussions on military and medical aspects of the use of specific weapons as of the work of legal experts"*[16], this much is certain: new "criteria" did not emerge from the discussions and the debate on "legal criteria" at Lucerne may be regarded as the only effective contribution to clarification of the principles at issue.

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[14] UNGA Doc. A/CONF./95.

[15] On this episode see F. Kalshoven, "Arms, Armaments and International Law", in 191 *Recueil des Cours* (1985-II) at pp. 263-264.

[16] *Supra*, text at note 11.

Another matter is the application of three of the principles in the Protocols annexed to the Convention of 1980. Most conspicuous throughout Protocols II and III is the effect of the principle of indiscriminate effects in protecting the civilian population. The principle of unnecessary suffering underlies Protocol I on non-detectable fragments and is referred to in so many words in Article 6, paragraph 2, of Protocol II, which prohibits the use of "any booby-trap which is designed to cause superfluous injury or unnecessary suffering". And the ecological principle is reflected in Article 2, paragraph 4, of Protocol III protecting "forests or other kinds of plant cover" against unjustifiable attacks with incendiary weapons.

3. Functions of legal principles relating to use of weapons

This section discusses some conceivable functions of these principles in debating or determining the permissibility or otherwise of the use of given weapons. Attention shall be given to the principles' potential as rhetorical means and as yardsticks or guidelines.

Use as rhetoric may well be the most common. Third parties, be they States, international organizations or (groups of) individuals, may invoke the principles to expose a belligerent for its use of given weapons. This was what happened at the time of the Viet Nam war, with the United States being accused of employing weapons that were said to cause unnecessary suffering or to have indiscriminate effects. A more recent example is the protests against the use of certain weapons by the Soviet Union in Afghanistan. As the examples go to show, the persuasive force of such third-party protests depends on such factors as the authority and good faith of the protesting party, the blatancy of the violation and, last but not least, the vulnerability of the belligerent to the pressures of public opinion. Obviously, the rhetorical invocation of one or other principle may at best have some effect as a means of moral persuasion. It is an observable fact, however, that belligerents often find little difficulty in countering such attacks by equally rhetorical means, i.e., by explaining either the facts or the principles, or both, in a manner that appears to justify the use of the weapon. In either case, no final determination of the lawfulness or otherwise of the use of the weapon in question comes about.

This brings us to the application of the principles as yardsticks or guidelines. If invoked as yardsticks, they should be able to support a fairly straightforward determination of the legal issue. As guidelines, they need provide little more than a set of basic, perhaps mutually conflicting, considerations that must be weighed in arriving at such a decision.

Here the level of abstraction of the principle concerned is a first important factor. It sets the "no unlimited right" rule apart from the other principles. As noted above, it may be said to underlie the obligation created in Article 36 of Additional Protocol I of 1977 for a State to determine whether the employment of a new weapon would bring it into conflict with the law. For the rest, however, the statement that belligerents have no absolute power to introduce weapons of their choice is abstract and devoid of specific content to such a degree that it could find direct application as a rule of law only in the unlikely event of a belligerent expressly claiming such unlimited power. Apart from this entirely theoretical possibility, it can and does serve as a sort of introduction, a reminder that rules of law apply even in this dark corner of human behaviour.

It is submitted that the remaining principles are not particularly suited to serve as yardsticks as defined above. In other words, I do not share the optimism of those delegates who believed that "unnecessary suffering" and "indiscriminate effects" provided standards that could simply "be applied to existing and possible future weapons".[17] For any such straightforward application, their component parts on the one hand and the characteristics of modern weaponry on the other provide far too many complications and difficulties of interpretation. Witness the debate in Lucerne about the notions of suffering and injury[18] and the multiple factors involved in evaluating the necessity of accepting such suffering or injury in the light of military considerations.

It follows that in determining the lawfulness or otherwise of existing or new weapons, the main function of the principles may lie in their capacity to be used as guidelines. As such, they are first of all at the disposal of individual States. As mentioned above, Article 36 of Additional Protocol I of 1977 requires a State considering the

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[17] *Supra*, text at note 8.

[18] See Major General R. Scott, "Unnecessary Suffering?—A Medical View", in M. A. Meyer (ed.), *Armed Conflict and the New Law*, British Institute of International and Comparative Law, London, 1989, pp. 271-279.

introduction of a new weapon *"to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law applicable"* to the State. It need hardly be emphasized that this individual assessment of the characteristics and probable effects of a weapon in the light of applicable broad principles leaves much room for subjective interpretation.

Although there exists no obligation to this effect, a similar determination can also be made by States collectively, leading to a mutual agreement not to use, develop or introduce a given weapon, or to change its design or restrict its use. In practical terms, this probably is the materially most important application of the principles under consideration. This is what was done in 1899 when the so-called dum-dum bullet was banned, and was done again in 1980 when the United Nations Conference adopted the Convention with annexed Protocols that prohibit or restrict the use of some classes of conventional weapons.

A last item to be considered under this heading concerns the possible application of the principles in a judicial or quasi-judicial procedure against a belligerent party. This brings us back, though in a different manner, to the issue of third-party invocation. With the belligerent State in the role of accused party one would have to think in terms of State responsibility. The established rule that a State at war is responsible for all acts committed by persons forming part of its armed forces[19] doubtless extends to the choice of weapons and the way these are used. When doubts arise regarding the lawfulness of such use, one could envisage a fact-finding and possibly conciliatory role for a respected international institution such as the Office of the UN Secretary-General, or even (in a slightly better world) for the Security Council.[20] Obviously, the authoritative force of such an intervention would depend entirely on the authority of the body performing this quasi-judicial function and on the care it takes in arriving at its conclusions. Indeed, even the International Court of Justice, whether acting in an advisory capacity or in a contentious procedure, might be asked to determine whether the use of a particular weapon is in conformity with the applicable principles. Yet surely one must be something of an optimist to consider this latter possibility as anything but theoretical.

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[19] The rule was first codified in Art. 3 of the 1907 Hague Convention on land warfare and reaffirmed with the adoption of Art. 91 of Protocol I of 1977.

[20] In this connection reference may also be made to the International Fact-Finding Commission provided by Article 90 of Additional Protocol I of 1977.

It should be emphasized that the character of the principles as broad and ill-defined guidelines need not stand in the way of such authoritative determination by a body of high standing.

It would be for the body concerned to extract and elucidate to the best of its ability the criteria involved, much as a national judge is required to do in applying a broadly phrased piece of municipal legislation. On the other hand, a perusal of the various conference reports mentioned above, in particular the Lucerne Conference, may convince the reader that the great number of uncertainties in the various equations involved might make the task of such a body of wise men unusually arduous.

4. Concluding remarks

In his paper for the Lucerne Conference Sir David Hughes-Morgan suggested that the most radical development in the field of generic prohibitions on weapons would be *"to lay down specific parameters for weapon characteristics and to prohibit any weapon not falling within them"*. However, he continued: *"It is not yet clear whether sufficient technical knowledge of weapon effects or characteristics exists in order to determine meaningful parameters; and it is difficult to see how such a proposal could be implemented without a system of inspection and control. Any state which disregarded the prohibitions could acquire an overwhelming military advantage. To date, no general agreement on such a system has been reached and it seems unlikely to be attained in the near future"*.

Sixteen years after Sir David wrote his paper and ten years after the adoption of the Convention with its annexed Protocols, these words have lost none of their relevance. Not only has no further progress been made in the development of meaningful principles governing the use of weapons of war, but even for the existing principles and specific rules no effective "system of inspection and control" has been set up. The one and only provision in the Convention that has a bearing on implementation lays down an obligation of dissemination (Article 6); important no doubt, but it cannot mask the silence on other matters, such as orders and instructions to ensure observance, repression of breaches, fact-

finding or (with one exception[21]) reprisals. There is, on the other hand, a long and complicated provision on "review and amendments" (Article 8). May this serve one day to remedy such defects and make the "umbrella" Convention with its underlying principles an even more comprehensive and effective protection against the vagaries of the international climate.

Frits Kalshoven

Frits Kalshoven is a retired professor of international law, and of international humanitarian law in particular ("Red Cross Chair"), of the University of Leiden. He currently is an adviser on international legal affairs to the Netherlands Red Cross Society. His publications include: *Belligerent Reprisals,* thesis, Leiden (1971); *The Law of Warfare* (1973); *Constraints on the Waging of War* (1987); *Assisting the Victims of Armed Conflicts and other Disasters* (ed. 1989); *Implementation of International Humanitarian Law* (ed. with Sandoz, Yves, 1989). He also wrote a series of articles on "Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts", in *Neth. YIL* (1971-1978) and several articles in *IRRC* (see more particularly "Impartiality and Neutrality in Humanitarian Law and Practice", IRRC, No. 273, November-December 1989). Earlier writings of the author on wartime use of weapons include: "The Soldier and His Golf Clubs", in C. Swinarski (ed.), *Studies and Essays on International Humanitarian Law and Red Cross Principles in Honour of Jean Pictet* (1984), pp. 369-385; "Arms, Armaments and International Law", in 191 *Recueil des Cours* (1985-II), 183-341; and "Conventional Weaponry: The Law from St. Petersburg to Lucerne and Beyond", in M. A. Meyer (ed.), *Armed Conflict and the New Law* (1989), pp. 251-270.

[21] The exception is in Art. 3, para. 2, of the Mines Protocol.

Mines, Booby-traps and Other Devices

by A. P. V. Rogers

I. INTRODUCTION

In the Declaration of St. Petersburg of 1868 the signatory States recognized that the object of war is to weaken the enemy's military forces, for which it is sufficient to disable the greatest possible number of men, and that this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men or render their death inevitable.

This principle was repeated in Article 23(e) of the Regulations annexed to The Hague Convention No. IV of 1907 concerning the laws and customs of war on land. That article forbids the employment of arms, projectiles or material calculated to cause unnecessary suffering. The authentic French text of the article referred to "des armes, des projectiles ou des matières propres à causer des maux superflus" whereas the English text of the same article referred to "arms, projectiles or material calculated to cause superfluous injury".

The principles of St. Petersburg and The Hague were repeated in Geneva in Article 35, paragraph 2 of the First Additional Protocol of 1977 to the Geneva Conventions of 1949. This article prohibits the employment of weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering. It brings together the English and French texts of 1907. The words "méthodes de guerre" and "methods of warfare" have been added to the list. It was also considered that the expression "calculated to cause" used in English as an equivalent of the French expression "propre à", and which can be found in the 1907 version of The Hague Regulations, was not appropriate and consequently the text was amended to "of a nature to". Finally the French expression "maux superflus" was translated in English no longer only by the words "unnecessary suffering", as it had been formerly, but by the expression

"superfluous injury or unnecessary suffering" as the French expression covers simultaneously the sense of moral and physical suffering.[1]

It is difficult to apply such general statements of principle to specific weapons and, of course, general statements can be given a wide variety of interpretations. The better course is to deal with specific weapons and some attempts have been made to do this, notably in the St. Petersburg Declaration itself and in The Hague Declaration of 1899 dealing with expanding or dum-dum bullets.

Then came the United Nations Conventional Weapons Conference in 1979-1980.

On 10 October 1980 a Final Act of the conference was produced which had annexed to it the "Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects" (hereinafter termed the "Weaponry Convention"). The text consisted of the Convention itself and three Protocols, the first dealing with non-detectable fragments, the second with mines, booby-traps and other devices and the third with incendiary weapons.

Before broaching the subject of mines, it will be necessary briefly to look at the covering Convention itself.

II. THE 1980 CONVENTION[2]

The Convention applies in wars, armed conflicts, occupations and wars of national liberation and is in force, having been ratified, acceded to or accepted by more than 30 States.

Article 2 provides that nothing in the Convention detracts from the obligations imposed by the law of armed conflict. It is intended to prevent the *a contrario* line of argument that anything not expressly prohibited in the Convention is permitted.

Article 7 reflects the modern approach to treaty relations. Paragraph 1 is the opposite of the non-participation clause. Unlike some of The Hague Conventions of 1907, where if a State not party became

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[1] See *Official Records of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts, Geneva (1974-1977)*, Département politique fédéral, Bern, 1978, XV, p. 267, CDDH/215/Rev.1, paras. 19 and 21. See also *Commentary on the Additional Protocol of 1977 to the Geneva Conventions of 1949*, Ed. Yves Sandoz, Christophe Swinarski, Bruno Zimmermann, Martinus Nijhoff Publishers, ICRC, Geneva, 1987, pp. 406-407, para. 1426.

[2] For text, see Roberts & Guelff, *Documents on the Laws of War*, 2nd ed., Oxford, 1989, at p. 473.

involved in an armed conflict the States party were absolved from compliance, under the Weaponry Convention States party will always be bound between themselves. They are not, however, bound as regards States not party, unless the non-party accepts and applies the Convention and notifies the depositary of its intention to do so.

Paragraph 4 of Article 7 deals with the complicated situation that arises where a war of national liberation is going on. If the State party involved in the liberation conflict is party to both the Geneva Conventions of 1949 and Additional Protocol I, the Weaponry Convention will apply provided the authority representing the liberation movement has undertaken to apply all three treaties. If, however, the State party involved in the liberation conflict is not a party to Additional Protocol I but is party to the Geneva Conventions of 1949, the Weaponry Convention applies provided the authority representing the liberation movement undertakes to apply both the Geneva Conventions and the Weaponry Convention.

Most of the work of the conference was done in English and it is tempting to regard the English text as authentic. Although the texts in the other languages are nearly always translations of the working text, they are equally authentic. It is possible, having regard to the speed with which the texts were pushed through the drafting committee towards the end of the conference, that there might be divergencies in the different languages.

III. PROTOCOL ON MINES, BOOBY-TRAPS AND OTHER DEVICES[3]

This Protocol evolved from a draft originally tabled by the United Kingdom delegation at a preparatory conference of government experts in 1976.

Although unglamorous, mines play a vital part in any military defensive plan, especially to deny mobility to armoured formations and, by slowing down an attack, giving the defenders more time to deal with the threat. Anti-tank mines, however, probably pose less of a threat for the civilian population than do anti-personnel mines.

According to Sloan[4], there are three main uses for anti-personnel mines:

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[3] For text, see *ibid.*, at p. 479.

[4] Sloan, Col. C., "Land Mines—An Appraisal", *Military Technology*, 2/86, at p. 74.

(a) in anti-tank minefields, to hinder their clearance or breach by personnel;
(b) as nuisance mining, to delay and demoralize advancing enemy infantry;
(c) to protect defended localities by denying routes to the enemy and to disrupt the final assault phase of an infantry attack.

However, their military usefulness apart, mines are a danger for the civilian population not only while hostilities continue but also after their cessation and until the mines have been finally cleared. Fenrick[5] refers to a report issued by Poland in 1977 to the effect that 15 million mines had been disposed of in that country since the second World War, nearly 4,000 civilians had been killed and 9,000 injured by mines since the war, 30 to 40 persons were still being killed each year and most of the victims were children.

Although laying mines by vehicle, as with the British bar mine or Ranger systems, means that a minefield can be laid quickly[6] and its position recorded accurately, it may not be rapid enough for a fluid and fast-moving battlefield. The current trend is to develop remotely delivered mines that can be delivered by aeroplane, helicopter, rocket launcher, artillery or even mortar. This means that more mines can be laid, but the problems of recording their location for eventual clearance are exacerbated.

Modern designs, using plastic instead of metal, has increased the military utility of mines by making detection and clearance by the enemy more difficult, allowing inexpensive mass production and, above all, making them lighter and tougher for remote delivery.[7]

Protocol II to the Weaponry Convention was designed to deal with the problems posed both by conventional mines and by the new remotely delivered mines.

One of the difficulties of the conference was to apply to mine warfare the provisions of Additional Protocol I dealing with attacks. Agreement could not be reached as to what stage in the mine-laying process amounts to an attack: when the mine is laid, when it is armed, when somebody is endangered by it or when it actually explodes. To avoid these difficulties it was necessary to draw up special rules

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[5] Fenrick, Cdr. W. J., "The Law of Armed Conflict, The CUSHIE Weapons Treaty", *CDQ*, Summer 1981, at. p. 28.

[6] Gander T. J., "Land Mine Warfare—The British Position", *Jane's Defence Review*, Vol. 4, No. 6, 1983, at p. 597.

[7] Sloan, *op. cit.*, at p. 75.

relating to the use of mines. In these rules an attempt was made to reconcile the wording of Additional Protocol I to the use of mines, particularly the expression "acts of violence" in the definition of attacks.

By their nature, mines and booby-traps are less discriminate than other weapons because, although intended to be used against military targets, they are not directly aimed at the target by the user as is the case, for example, with a rifle or guided anti-tank missile.

Remotely delivered mines cause further complications. While the civilian population may be aware, because it has seen the mine-laying operation, of the whereabouts of traditionally laid mines, it may be unaware of the delivery of remotely delivered mines. On the other hand, remotely delivered mines are only laid when it is necessary to do so and usually when the thrust of an attack is known. In terms of time and space the danger to the civilian population is therefore reduced.

The mines protocol achieves its aim in the following ways:

1. By requiring precautions to be taken to protect the civilian population, especially in populated areas.
2. By requiring the recording of all pre-planned minefields and areas in which there has been large-scale and pre-planned use of booby-traps.
3. By prohibiting the use of remotely delivered mines unless their use is connected with military objectives and unless either their location is recorded or they are fitted with self-neutralizing mechanisms.
4. By prohibiting certain types of booby-traps.
5. By laying down rules for the protection of UN forces and missions.
6. By requiring States, at the end of hostilities, to publish information about the location of mines and booby-traps and to co-operate in their clearance.

Since the Weaponry Convention was developed from Additional Protocol I, there can be no incompatibility between the two instruments. Additional Protocol I lays down the general rules. The Weaponry Convention applies those general rules to specific weapons.

Material scope of application (Article 1)

The Protocol applies to all mines, whether land mines or anti-ship mines, used on land, including beaches. It does not apply to mines used at sea. These are regulated by The Hague Convention No. VIII of 1907.

Definitions (Article 2)

The definition of remotely delivered mines makes it clear that they are simply a category of mines. Wherever the word "mine" appears without qualification in the Protocol, it includes remotely delivered mines. This means, for example, that Article 3, prohibiting the indiscriminate use of mines, applies to remotely delivered mines but that Article 4, imposing restrictions on the use of mines in populated areas, does not.

The definition of mines is not all-embracing. It covers munitions which are set off by the victims but does not include remotely-delivered, time-delayed devices or floating bridge demolition devices.

Booby-traps are not necessarily explosive. They are devices designed to function when a person performs some act in relation to an apparently innocent object, such as opening the door of a refrigerator or walking through a door frame.

Other devices are subject to both the general restrictions and the special restrictions applicable in populated areas. They differ from mines, which are set off by the target, in being devices which are activated by other persons by remote control when the target approaches or which are set to go off at a certain time.

The definition of military objectives corresponds to the definition given in Additional Protocol I, Article 52. The word "location" in the definition shows that, for example, an area of land that one wants to deny to the enemy by laying a minefield is a military objective. There is nothing new in the concept of an area of land being treated as a military objective. Land is, and always has been, an important element in military operations.

General restrictions (Article 3)

The general protection of the civilian population is dealt with in Article 3, which underlines the customary prohibition of the use of weapons against the civilian population or individual civilians. The article also forbids indiscriminate use, the definition of indiscriminate use being taken from Additional Protocol I, Article 51, and is an attempt to apply paragraphs 4 and 5 of that Article to mine warfare. There is a subtle difference between the two texts. A look at Article 3, paragraph 3(a) of the mines Protocol will reveal that indiscriminate use is any placement of such weapons "which is not *on,* or directed

against a military objective".[8] In Article 51, pararaph 4(a) of Additional Protocol I, indiscriminate attacks include those which "are not directed *at* a specific military objective".

All feasible precautions are to be taken to protect civilians from the effect of these weapons, a concept deriving from Article 57 of Additional Protocol I. It is of interest that the definition of "feasible" is taken from the wording of the UK statement on signature of Additional Protocol I relating to the interpretation of the same word in that Protocol, but the words "including humanitarian and military considerations" have been added at the end to make it clear that we are talking about the rule of proportionality and the need to balance humanitarian and military considerations.

The use of weapons controlled by the Protocol by way of reprisal against civilians is prohibited. Since this is a limited prohibition on reprisals, it lends support to the argument that reprisals may be taken under the conditions imposed by customary law except where expressly prohibited by treaty.

Populated areas (Article 4)

Mines (other than remotely delivered mines), booby-traps and other devices are not to be used in populated areas if ground combat is not taking place or imminent unless either (a) they are placed on or in the close vicinity of a military objective under the control of an adverse party, or (b) (if these weapons are emplaced in populated areas but are not placed on or in the close vicinity of military objectives belonging to an adverse party) measures are taken to protect civilians from their effects. Examples of such measures are the posting of warning signs, the posting of sentries, the issue of warnings[9] or the provision of fences.

Although the question of marking minefields was widely discussed at the conference, there is now no specific requirement anywhere in the Protocol to mark minefields, even those that are preplanned and manually emplaced. It is likely, however, that defensive minefields laid when combat is not imminent are likely to be marked so as to comply with the requirement to take measures to protect

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[8] A number of the early published texts of the Convention and articles relating to it incorrectly used the formula "directed at" rather than "directed against", which appears in the authentic text.

[9] Which can be by word of mouth to prevent that knowledge reaching the enemy.

civilians. If combat between ground forces is taking place, or about to take place, the restrictions relating to populated areas do not apply, but the general restrictions do. Remotely delivered mines are not subject to the populated areas restrictions, but are subject to the special rules set out below.

Remotely delivered mines (Article 5)

Remotely delivered mines may not be used unless their use is within an area which is itself a military objective or which contains military objectives, and either their location can be accurately recorded or they are fitted with an effective neutralizing mechanism. Effective advance warning is required if the civilian population is likely to be affected, unless the circumstances do not permit. It has been suggested that such circumstances might be the necessity for tactical surprise or concern for the safety of the aircraft dropping remotely delivered mines, and that a requirement to warn the civilian population after delivery of remotely delivered mines is a curious omission, although it might be required anyway by the "feasible precautions" provisions of Article 3, paragraph 4.[10]

The Article is clumsily worded, the result of trying to find a compromise at a late night session of the conference. Persons who are not familiar with the negotiations may, on reading the text of Article 5 in conjunction with that of Article 7, come to the conclusion that the Protocol prohibits the use of remotely delivered mines not fitted with self-neutralizing mechanisms unless their use is pre-planned and the mines so laid are recorded. This is an erroneous interpretation. So is an interpretation that recording is only mandatory if the remotely delivered mine is pre-planned. The background to the present wording is explained elsewhere.[11]

The intention of the conference was to make accurate recording compulsory where self-neutralizing mechanisms are not used.

The passage limiting use of remotely delivered mines to "within an area which is itself a military objective or which contains military objectives" is intended to cover two situations:

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[10] Carnahan, Lt. Col. B. M., "The Law of Land Mine Warfare—Protocol II to the United Nations Convention on Certain Conventional Weapons", *Military Law and Law of War Review*, 1-2, 1983, at p. 124.

[11] Rogers, Lt. Col. A. P. V., "A Commentary on the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-traps and Other Devices", *Military Law and Law of War Review*, 1, 2, 3, 1987 at p. 195.

(a) Where the area itself has military significance, such as a hill or pass.

(b) Where the area has no military significance but contains military objectives such as troop or tank concentrations.

The effect of Article 7 on remotely delivered mines is that recording their location is mandatory where either the minefield is pre-planned or no self-neutralizing mechanism has been fitted.

The situation becomes complicated where there are "mixed" minefields of both manually emplaced and remotely delivered mines, some with self-neutralizing mechanisms and some without, but basically recording is mandatory for all pre-planned minefields and for all uses of remotely delivered mines without self-neutralizing mechanisms.

Booby-traps (Article 6)

Certain types of booby-traps are prohibited, namely:

(a) Those that are specifically designed and manufactured to look like apparently harmless objects, such as cameras, fountain-pens or watches. A distinction must be drawn here. The Protocol does not prohibit the conversion of an existing portable object, such as a camera, into a booby-trap. It is designed to outlaw the mass production of booby-traps in the form of inoffensive objects.

(b) Also prohibited are booby-traps attached to or associated with certain protected objects such as protective emblems and sick, wounded or dead persons. The problem at the conference was that delegations kept wanting to add items to the list. It is still permitted to booby-trap kitchen appliances, such as refrigerators, in military installations. Such use in civilian installations would contravene Article 3, prohibiting indiscriminate attacks.

Booby-traps designed to cause superfluous or unnecessary suffering are also forbidden. This prohibition was intended to cover booby-traps designed to cause cruel or lingering death, their purpose being to intimidate through terror. They include devices which stab, impale, crush, strangle, infect or poison the victim as well as those which explode.

Recording (Article 7)

As has been mentioned (apart from the case of remotely delivered mines without self-neutralizing mechanisms) recording is mandatory only when minefields are pre-planned. Whereas the word "plan" implies that mine-laying is consciously and deliberately done, "pre-planned" on the other hand means that the plan is drawn up in anticipation of some contingency. For example, some Argentinian minefields in the Falkland Islands were retained by the British for use in existing defence plans.[12] These would clearly be pre-planned and subject to the recording requirement. Recording is also required for large-scale and pre-planned use of booby-traps. There is, however, a general exhortation to parties to the conflict to endeavour to record all mines and booby-traps. There is no requirement to record other devices, presumably on the basis that they will either be set off by the operator or will be activated at a set time.

Article 7 requires disclosure of records in certain circumstances. Many States were unable to agree to disclosure of any information about mines laid on any part of their territory which was under adverse occupation.[13] Both parties are, in such a situation, obliged to take measures to protect civilians from mines and they can use the records to this end. Once complete withdrawal from adverse territory has taken place, disclosure becomes mandatory, as it does when the conflict ends without any adverse territory being occupied. It was agreed that the "cessation of active hostilities" has the same meaning as in Article 118 of the Third Geneva Convention of 1949.

Guidelines for recording are set out in the technical annex to the protocol. This suggests that as a minimum records must indicate the extent of the pre-planned minefield or booby-trapped area in relation to the co-ordinates of a single reference point; and as far as possible like information is to be recorded in respect of other mined or booby-trapped areas.

Protection of UN Forces or missions (Article 8)

If the head of a UN peace-keeping force or observation mission so requests, each party to the conflict must, as far as it is able, remove or render harmless mines and booby-traps in the area where the force or mission operates; take steps to protect the force or

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[12] Gander, T. J, *op. cit.*, at p. 603.

[13] For a full discussion of this problem, see Carnahan, *op. cit.*, at p. 128.

mission from their effects; and supply information about the location of mines and booby-traps. In the case of a fact-finding mission, the obligation is to provide protection for the mission or, if that is impracticable, information about the location of mines and booby-traps. The words "as far as it is able" leaves it open to a party to the conflict not to disclose information if doing so would seriously interfere with its legitimate defence interests.

International co-operation (Article 9)

States are encouraged, after the cessation of active hostilities, to reach agreement on measures to be taken for the removal of mines and booby-traps.[14]

IV. DISCUSSION

Problems during the Falklands war

Problems arose during the Falklands war where, according to one commentator: *"Argentinian troops hurriedly sowed large minefields using untrained soldiery for the purpose and consequently not compiling logs or maps of their efforts. The resultant minefields remain uncharted and their boundaries are now fenced off, rendering large areas of real estate unusable by the local populace"*.[15] The Argentinian FMK-3 non-metallic anti-tank mine and the MISAR SB-3 scatterable anti-personnel mine have proved particularly troublesome. The latter is very small, but powerful enough to blow off a foot, and is almost impossible to detect by any means.[16] The boggy terrain in the Falkland Islands has also hampered mine clearance.

The way mines were laid also caused difficulties for the Royal Engineers. The minefields laid by the Argentinian Army when they first landed were conventionally marked and recorded but mine-sowing did not follow a set pattern. Later minefields were laid quickly at the time of the San Carlos landings by helicopter dispensers or as a result of mines being handed out to all units

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[14] Useful examples of agreements in armistices are given by Carnahan, *op. cit.*, at p. 126.

[15] Gander, T. J., "The Underground World of the Land Mine", *Jane's Military Review* 1983/4, at p. 59.

[16] *Ibid*, at p. 63.

involved. Most of these units had no mine experience or training and simply laid the mines where they thought fit without keeping records or maps. Some of these unmarked minefields have been located and fenced off but will take years to clear.[17]

This has led to the British Army abandoning the old distinction between anti-tank and anti-personnel mines and re-classifying them as metallic, minimum metallic and non-metallic. The first category can be cleared with existing detection equipment and the second with sophisticated metal detectors, but the last category causes the most difficulties: hand clearance with probes is effective but slow; wheelbarrow remote control vehicles or the use of dogs has proved problematical; explosive line devices seem more promising, as do mine-clearing ploughs or armoured bulldozers.[18] Mines laid on beaches may be buried by the action of the sea only to resurface months later.[19]

Experience of the Falklands war suggests that minefields laid by expert engineers will be easier to clear on the cessation of active hostilities; but that minefields laid in a hurry by inexperienced personnel are a very different proposition and are unlikely to fall within the pre-planned category where recording is mandatory. That war was fought in a largely unpopulated area so the problem of mine warfare in populated areas was not put to the test. Neither Argentina nor the United Kingdom was a party to the mines Protocol in any event.

Other technical advances in mine warfare

Another cause for concern is the off-route mine. This is aimed across paths that tanks are likely to use. A sensor will fire the projectile at the side of any passing tank and it can be operated either remotely or by self-control.[20] The interest from a legal point of view is whether these devices can be classed as mines within the meaning of the mines Protocol. In so far as it can be operated remotely by the "presence, proximity or contact of a vehicle" it must be classed as a mine and is subject to the Protocol's general restrictions, the restrictions on use in populated areas and the provisions

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[17] Gander, T. J., "Land Mine Warfare", *op. cit.*, at p. 603.

[18] *Ibid.*, at pp. 601-607.

[19] *Ibid.*, at p. 603.

[20] *Ibid.*, at p. 600.

relating to the United Nations, but not to those applying to remotely delivered mines or, since they are unlikely to comprise minefields, the mandatory recording requirement.

As these weapons develop in sophistication they will become increasingly discriminating in being able to detect certain types of tanks by differentiating between varying degrees of ground pressure or vibrations.[21]

Some fragmentation mines have been developed for the immediate protection of positions, such as the Claymore mine or the more accurate PADMINE which was developed from it. These are detonated either remotely through an electrical cable or by a tripwire. They send out hundreds of steel pellets in a defined arc.[22] They would come within the definition of mine and would be subject to the same controls as the off-route mine.

Legal problems

One of the most outspoken critics of the mines Protocol, Dr. Rauch, considers that Additional Protocol I of 1977 and the mines Protocol are incompatible and irreconcilable.[23] His criticisms have been answered by the architect of the mines Protocol.[24] There is no doubt in my mind that the use of mines at some stage amounts to an attack within the meaning of Additional Protocol I. The difficulty is to decide when, hence the need for the special rules of the mines Protocol. I do not follow the point made by Dr. Rauch that scatter-mines could be dropped on a town by way of reprisals without a violation of Additional Protocol I being committed.[25] Not only would this violate Additional Protocol I, it would also violate Article 3, paragraph 2, of the mines Protocol. Moreover, I find it hard to conceive of a situation where a mine of a type that would endanger a passing civilian train would be used to blow up a bridge.[26] For my

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[21] *Ibid.*, at p. 601.

[22] Sloan, *op. cit.*, at p. 21; Gander, *ibid.*, at p. 601.

[23] Rauch, Dr. E., "The Protection of the Civilian Population in International Armed Conflicts and the Use of Landmines", *German Yearbook of International Law*, Vol. 24, 1981, at p. 262.

[24] Hughes-Morgan, Maj. Gen. D. J., *A Criticism of Some Aspects of the Report by Dr. E. Rauch* (paper presented to the Committee for the Protection of Human Life in Armed Conflict of the International Society for Military Law and the Law of War, Bern, October 1981, unpublished).

[25] Rauch, *op. cit.*, at p. 277.

[26] Rauch, *op. cit.*, at p. 282.

part, I belong to the school of those who, in the words of Dr. Rauch, are "satisfied with a more relaxed interpretation", in taking the view that the States party to the mines Protocol accept that in their mutual dealings these are specific rules that they will apply in mine warfare.

A. P. V. Rogers

Colonel A. P. V. Rogers OBE, Army Legal Corps, was born in 1942. After legal training in London he became a solicitor in 1965. In 1968 he was commissioned into what is now the Army Legal Corps and holds an appointment in the Ministry of Defence with responsibility for advising on general legal questions relating to the Army. He has held appointments specializing in international agreements (1976-78) and in the law of armed conflict (1979-81 and 1987-89) and was a member of the United Kingdom delegation at the UN Conventional Weapons Conference (1979-80). Colonel Rogers is a member of the Board of Directors of the International Society for Military Law and the Law of War, was coordinator of the Society's Congress in 1988, has published various articles on the law of armed conflict and is currently working in his spare time on a thesis entitled *Law on the Battlefield.*

The Protocol on Incendiary Weapons

by W. Hays Parks

From the time that man discovered fire and devised ways to use it as a tool for survival and advancement, it also has been employed as a weapon for destruction. Sun Tsu's *The Art of War* (500 B.C.) refers to incendiary arrows, while Thucydides' *The Peloponnesian War* describes a flame weapon used by the Spartans in 42 B.C. Edward Gibbon, in *The Decline and Fall of the Roman Empire,* ascribes Roman success at Constantinople (1453 A.D.) to "Greek fire," ignited naptha mixed with pitch and resin and spread upon the surface of the water. Great Britain employed Greek fire almost five centuries later as a defence along its coastlines in anticipation of an invasion in 1940.

In the European wars of the 16th and 17th centuries, armies employed compulsory taxation of the countryside in lieu of looting to finance their activities. A defaulting town would have some of its buildings burned, leading to the tax being referred to as *Brandschatzung,* "burning money." This practice became widespread during the Thirty Years war.

The use of incendiary weapons can be traced throughout the history of war. But their effects greatly increased with the industrialization of nations and the advent of the airplane, which provided the range to attack not only an enemy's military forces, but also his capacity to wage war Aerially-delivered incendiary devices were employed first on 31 May 1915, when the German Zeppelin LZ38 bombed London with incendiary bombs and high-explosive grenades; in 1915, more than 70% of the munitions dropped on London by Zeppelins were incendiaries. The following year, on 21 October 1916, 22 German Gotha bombers attacked London with high expolosive bombs and ten-pound incendiary bombs.

Both sides in World War I were quick to recognize the value of incendiary munitions in aerial attacks on industrial facilities. High-explosive bombs could cause some structural damage to a building, but anti-materiel incendiaries were necessary to do substantial damage to manufacturing or other industrial equipment. However, the mingling

of industrial targets with the civilan population, an inevitable result of industrialization, when coupled with the problems of target identification by aircrews and the relative inaccuracy of World War I bombing, led to great losses among the civilian population of each belligerent.

Attempts at prohibiting or regulating incendiary weapons in the period between World Wars I and II were unsuccessful. With the outbreak of World War II, efforts by each side to attack enemy industrial targets again demonstrated the problems aircrews experienced with target indentification and the difficulty of bombing targets accurately in heavily defended, populated areas. Over the course of the war this resulted in significant injury to the civilian population and destruction of civilian objects.

Not all death, injury and destruction can be attributed solely to the use of incendiaries. But while the firestorms that devastated Hamburg in 1943 and Dresden in 1945 were in large measure due to unique meteorological conditions not appreciated by scientists until well after World War II, those firestorms would not have occurred but for the tonnage of high-explosive and incendiary bombs dropped on each city in concentrated fashion. The significant contribution of aerially-delivered incendiaries to the death and injury suffered by the civilian population during World War II becomes evident when it is realized that the aerial fire raid visited upon Tokyo during the night of 9-10 March 1945 caused substantially greater casualties than did the atomic bomb attacks on Hiroshima and Nagasaki less than five months later.

In the period following 1945, the battlefront shifted from total war to the myriad wars for independence. Because the guerrilla generally operated in proximity to the civilian population, the results of an attack on guerrillas with air-delivered incendiaries, and particularly napalm, was often catastrophic for innocent civilians.

It was in the context of the experience of World War II and the postwar counterinsurgency environment that some, including the ICRC, began to examine the possibility for increasing the protection of the civilian population against the effects of twentieth-century warfare. Focus on incendiary weapons did not occur immediately. In 1955 the ICRC published its *Draft Rules for the Protection of the Civilian Population from the Dangers of Indiscriminate Warfare.* The portion that addressed weapons did not discuss incendiaries because the ICRC felt that *"the ... damage to the civilian population [caused] by incendiary bombs was due to their indiscriminate use".* In the revised 1958 edition, retitled *Draft Rules for the Limitation of the Dangers Incurred by the Civilian Population in Time of War,* the ICRC modified its stance to suggest elimination or regulation of:

"weapons whose harmful effects—resulting from the dissemination of incendiary... or other agents—could spread to an unforeseen degree or escape, either in space or time, from the control of those who employ them, thus endangering the civilian population".[1]

Public awareness of the problem increased during the highly-publicized wars of the 1960s and 1970s. United Nations General Assembly (UNGA) resolutions in the early 1970s condemning incendiary weapons, and particularly napalm, were followed by a 1973 Report of the Secretary-General entitled *Napalm and Other Incendiary Weapons and All Aspects of Their Possible Use.* UNGA Resolution 3076 (XXVIII) of 6 December 1973 invited the forthcoming Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts to consider the question of the use of napalm and other incendiary weapons, as well as other specific weapons which may be deemed to cause unnecessary suffering or to have indiscriminate effects, and to seek agreement on rules prohibiting or restricting the use of such weapons.

That same year the ICRC hosted a meeting of experts to consider weapons that may cause unnecessary suffering or have indiscriminate effects, and subsequently issued a report with that title. In the course of the 1974-1977 Diplomatic Conference, the ICRC hosted conferences of government experts in Lucerne (1974) and Lugano (1976) to consider further the use of certain conventional weapons. Those conferences heard statements from experts on the technical characteristics, military utility, medical effects and legal criteria of incendiary munitions, which were defined at Lucerne as

" ...any munition which is primarily designed to set fire to objects or to cause burn injury to persons through the action of flame and/or heat produced by a chemical reaction of a substance delivered on the target".[2]

A division of views emerged that was to persist until the final moments of the 1980 United Nations Conference on Prohibitions or Restrictions on the Use of Certain Conventional Weapons (hereinafter "UNCCW"). One group felt strongly that all incendiaries should be prohibited without exception, while the other group was equally adamant that the use of incendiaries against military targets was neither inhumane nor inherently indiscriminate, and in many circum-

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[1] ICRC, *Draft Rules for the Limitation of the Dangers Incurred by the Civilian Population in Time of War,* second edition, Geneva, 1958, Article 14, p. 12.

[2] ICRC, Conference of Government Experts on the Use of Certain Conventional Weapons, *Report,* Geneva, 1975, p. 17, para. 49.

stances had unique military value which could not be duplicated by other weapons. However, members of the second group were in agreement with the first group that measures should be taken to protect areas populated by civilians from mass incendiary attacks of the kind that occurred during World War II. From the outset, however, the breach between the two groups was wide.

While the meetings of experts under ICRC auspices in 1973, 1974 and 1976 considered the various types of weapons that were discussed in the course of the UNCCW, a review of the ICRC reports on those conferences makes it clear that limitations on, if not prohibitions of, incendiary weapons was for many the *raison d'être* for a conference — and a treaty — on conventional weapons.

More than 2,000 years of use of incendiary weapons as a tool of war was clear evidence of customary use, thereby establishing that incendiary weapons were not illegal *per se*. The problem facing delegates to the UNCCW is expressed in the final words on incendiary weapons in the report of the 1973 ICRC meeting of experts:

"The military attractions of incendiary weapons reside in their area effectiveness and in their utility both against personnel and against many types of materiel. When these properties were exploited on a large scale against enemy cities during World War II, they caused immense devastation and loss of life".[3]

While there appeared to be little support for a total prohibition on incendiary weapons, a majority of delegations that participated in the preparatory and formal sessions of the UNCCW seemed to favour restrictions on their employment that would provide increased protection for the civilian population. The difficulty lay in finding a formula upon which all could agree.

The Preparatory Conference

Little of substantive value was accomplished in the course of the two preparatory conference sessions, which concentrated on procedural matters and general debate. Although the second session approved a draft protocol on fragments not detectable by X-ray and made considerable progress on a draft protocol regulating the use of landmines and booby-traps, the delegates were unable to reconcile diver-

[3] ICRC, *Weapons that may Cause Unnecessary Suffering or have Indiscriminate Effects - Report of the Work of Experts*, Geneva, 1973, p. 63, para. 221.

gent views on the issue of incendiary weapons. Those favouring total prohibition pointed to the destruction caused during World War II as evidence of the inhumanity of incendiary weapons. The potential for indiscriminate use was the prevailing point made by those in favour of total prohibition, though some argued that the wounds caused by incendiary weapons were greater than those caused by other conventional weapons. Medical evidence offered by each side to support its view on the latter was inconclusive.

A number of arguments were advanced in opposition to the proposal for total prohibition. Opponents pointed out that the major cause of combat-related civilian casualties during World War II was artillery rather than air attacks, much less aerial incendiary attacks. Restrictions on aerially-delivered incendiaries were opposed because such restrictions suggested that aerial delivery was less accurate than other means of warfare, such as artillery or surface-to-surface missiles. Where aerial incendiary attacks were made on large cities during World War II, the postwar United States Strategic Bombing Survey found that the leading causes of death were, in descending order: (1) burial under rubble and debris and injury from flying fragments; (2) secondary injuries through explosions; and (3) burns. Large-scale incendiary attacks on urban areas were militarily obsolete, owing not only to the increased accuracy of aircraft and weapons, but also to the fact that no nation possesses the capacity to carry out incendiary attacks on the scale seen during World War II. The form of area attack carried out during World War II was prohibited by paragraphs 4 and 5 of Article 51 of 1977 Protocol I. Finally, there was an argument of military necessity, that is, incendiaries are the weapon of choice for certain targets.

The arguments in opposition to a total prohibition offered little reassurance to those in favour of a ban or restrictions on incendiaries. While there was acknowledgement that aerial destruction of populated areas on the scale witnessed in World War II was unlikely, it was pointed out that the increased weapons-carrying capability of modern tactical aircraft permitted a single squadron of 12 to 16 attack aircraft to carry bombs and incendiaries equivalent in weight to those delivered by more than 120 medium bombers on London on 29 December 1940, resulting in a fire that damaged a large portion of that city. This capability was within the means of virtually all of the world's air forces. In the conflicts since 1945, civilians had suffered all too often as a result of aerially-delivered incendiaries; even if incendiaries were lawful, new rules were necessary to increase protection of innocent civilians.

The arguments tested the balance between the law of war principles of *military necessity* and of *unnecessary suffering*. A study by one of the principal delegations in the dabate illustrates the problem. The study examined bombloads for a modern aircraft of high explosive (HE) only, incendiary (I) only, and a mixture of high-explosive and incendiary bombs (HE/I). In order to achieve 50% target destruction, the following number of aircraft sorties would be required against the type of target listed:

Target	HE	I	HE/I
Electrical transformers	8	*	7
Ammunition storage	996	*	456
Aircraft plant	58	*	17
Petroleum storage	89	13	**
Railroad car repair shop	19	*	41

* The figure for a purely incendiary load could not meet the 50% target destruction requirement within reasonable parameters.

** Calculation of the HE/I mix sortie rate was not required since incendiary munitions were found more effective than high explosives against this particular target.

Two conclusions can be drawn from the study. First, incendiary weapons are not a panacea that the military would prefer to use under all circumstances. While they are highly desirable in attacks on certain targets, they are of no value in attacks on others. Secondly, while the fewer sorties required to achieve the desired level of destruction illustrates the military necessity for incendiaries against certain targets, since the smaller number of sorties brings a concomitant decrease in risks to aircraft and aircrews, it also reduces the risk to the civilian population and civilian objects in that the fewer sorties flown, the less change there is of injury or damage due to errant bombs or crashing aircraft.

A similar argument was advanced with regard to air-delivered napalm. The military necessity for napalm, it was argued, lies in the fact that it can be used at distances closer to friendly forces than any fragmenting or high-explosive munition, and can be delivered more accurately. The counter-argument was that unnecessary suffering was manifested in the appreciation that, notwithstanding rules of engagement drawn up by a number of nations in recent conflicts to limit the employment of incendiary munitions in proximity to inhabited or urban areas, mistakes of combat had frequently led to suffering of

innocent civilians. The distinction between intentional and unintentional injury or death is lost on the civilian who suffers that injury.

For the reasons suggested in the preceding paragraphs, the issue of incendiary weapons proved extremely difficult to resolve, and led to many hours of highly charged debate. At the conclusion of the second preparatory conference, the heavily-bracketed Working Paper of the drafting group on Elements of An Agreement on Incendiary Weapons made it clear that a wide gap still existed amonst the delegations.

The 1979-1980 Conference: First Session

A Working Group on Incendiary Weapons was appointed under the chairmanship of Lieutenant Colonel R. Felber of the German Democratic Republic. Membership was open, and the working group's meetings were heavily attended. The Working Group held ten formal meetings, while sub-groups were formed for informal consultations.

In an effort to focus the efforts of the Working Group, the chairman produced a single working draft consolidating the previous drafts of various delegations. This facilitated discussion, but the respective positions of opponents and proponents remained intractable.

Because some nations were willing to accept limitations on flame weapons used in proximity to the civilian population or urban areas, but not on all incendiary weapons, considerable time was devoted to an attempt to define the term "flame weapon." The complexity and divisiveness of the debate is illustrated by the fact that, by the end of the first session, the Working Group's draft protocol contained three alternative definitions, none of which was acceptable to all delegations. Some delegations felt the category should be deleted altogether as flame weapons were included in the definition of incendiary weapons, while others argued that no additional agreement was required beyond the provisions on means and methods of warfare contained in Additional Protocol I of 1977. However, a separate definition for flame weapons had to remain so long as a distinction was being made between flame weapons and incendiary weapons within the rules of the protocol. The focus was clearly on air-delivered napalm, and the difficulty in reaching agreement on a definition affected efforts to draw up rules.

The issue of protection from incendiary attack for combatants was equally divisive. In an effort at compromise, various formulae were considered to limit the employment of incendiary weapons against combatants not in proximity to military equipment, fortified emplace-

ments or other military objectives, or within a specified distance of combat lines. Agreement proved unattainable, with some delegations continuing to argue that protection for combatants from the effects of a lawful weapon was unprecedented and ill-advised.

The first session closed with a draft protocol. The heavily bracketed text of the Working Group's draft was a clear manifestation of the disagreement that persisted after many hours of negotiation, and of the challenge facing the participants if there remained any hope for an incendiaries protocol. A new draft protocol introduced in the closing days of the session by some delegations, while severely criticized at the time as a diversion from the Working Group's draft, was viewed as movement by those nations from their previous position in favour of a total ban on incendiaries. But a sharp division remained between delegations in favour of prohibiting the use of all incendiary weapons against military objectives located within a concentration of civilians and those willing to accept a restriction only with respect to air-delivered flame weapons. It was evident that greater flexibility would have to be exhibited by all delegations if agreement was to be achieved. At the close of the first session of the conference, the likelihood of agreement was not great.

The Conference: Second Session

Although there were informal meetings of officials from the nations representing the differing points of view in the year between conference sessions, it was clear at the start of the second session that agreement was not in sight. Chairman Felber, in an effort to narrow the differences, concentrated on the language contained in the draft rules rather than on the definitions. The Working Group held six formal meetings, eight informal meetings, and numerous meetings in small contact groups in an effort to arrive at a consensus, without success. The Working Group prepared a report advising the Conference of its inability to reach agreement, with a heavily bracketed text appended thereto.

With little more than a week of the Conference left, however, compromise began to emerge through corridor meetings of the principal delegations representing the two factions. The distinction between air-delivered flame weapons and air-delivered incendiaries was removed upon agreement that weapons having combined effects were excluded from the restriction; this proposal was accepted tentatively, and eliminated the necessity for a separate definition of flame

weapons. This was followed by withdrawal of a demand for rules for protection of combatants. Time permitting, an agreement remained possible.

General agreement was held up by the necessity for some delegations to forword the new text to their respective capitals for review as to its acceptability. While these acceptances were pending, the language of the combined-effects munition exclusion was referred to an *ad hoc* committee of military experts, where it became possible to work out an acceptable technical description which now appears in Article 1 (1) (b) (ii) of Protocol III. At the beginning of the last week of the Conference, there was general agreement on the acceptability of the text that became Protocol III.

The Incendiaries Protocol

The text of the treaty, and an explanation thereof, follows.

"***Article 1 : Definitions***

For the purpose of this Protocol:

1. 'Incendiary weapon' means any weapon or munition which is primarily designed to set fire to objects or to cause burn injury to persons through the action of flame, heat, or a combination thereof, produced by a chemical reaction of a substance delivered on the target".

COMMENT: This definition, the product of an informal working group that met in the course of the conference of experts held in Lucerne in 1976, had remained essentially unchanged over the years. There was unanimity that although reference is made to a "chemical reaction," incendiary weapons are not chemical weapons subject to the prohibitions contained in the Geneva Protocol of 17 June 1925 for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare.

"(a) *Incendiary weapons can take the form of, for example, flame throwers, fougasses, shells, rockets, grenades, mines, bombs and other containers of incendiary substances".*

COMMENT: The list is intended to be illustrative rather than exclusive. Generally, incendiary weapons have been of two types. Thermite weapons, which contain a mixture of powdered ferric oxide and powdered or granular aluminium, are antimateriel and fire-sustaining. Thermite bombs, which burn at temperatures of about 2,400 degrees Centigrade, were the primary antimateriel incendiaries used by air

forces of both sides in World Wars I and II. A later version contained barium nitrate and is called thermate, while a more recent variant is triethylaluminium (TEA). There has been little use of thermite-type bombs since 1945, in part because there have been few air campaigns directed against industrial targets.

Individually, thermite bombs have little antipersonnel effect unless an individual is actually struck by a falling bomb. In Great Britain and Germany during World War II, air raid crews manned city roofs to grasp thermite bombs, which generally weighed less than five kilogrammes, and throw them into the street or douse them in buckets of sand or water before they could take effect. There was reluctance on the part of most nations to accept a total prohibition on the use of thermite type weapons, as a single, well-placed thermite grenade can disable a tank.

The second category of incendiary weapons includes napalm, which describes a class of thickened oil incendiary agents. Similar thickened agents were and are utilized in man portable flamethrowers carried by assault forces, in flame tanks, and in the *fougasse,* a static defence weapon.

Napalm is predominantly an antipersonnel weapon. It is fire-starting, but not fire-sustaining, though the use of napalm or any other pyrophoric compound in a volatile environment could lead to fire that could burn out of control.

"(b) Incendiary weapons do not include:

(i) Munitions which may have incidental incendiary effects, such as illuminants, tracers, smoke or signalling systems..."

COMMENT: Protocol III did much to clarify ambiguities with respect to certain battlefield devices. Not the least of these is White Phosphorous (WP), a device used primarily as a screening and marking agent, or as a combined smoke and antipersonnel agent. WP ignites spontaneously when exposed to air, forming a dense white smoke of phosphorous pentoxide. It is not an effective antimateriel weapon, and is of limited effect as an antipersonnel weapon.

The dilemma facing the participants in the Conference was the effect of WP as a marking agent. If WP were prohibited as an antipersonnel weapon, it would not be possible to distinguish between WP used as a marking agent (for example, against enemy troops concealed in a line of trees) and WP employed as an antipersonnel weapon. As WP employed as a marking agent is generally followed by an artillery barrage or airstrike on the position so marked, the follow-on means

are far deadlier than the effects of WP itself. For these reasons, WP was excluded from consideration as an incendiary.

Tracers, i.e. bullets containing a small amount of a pyrophoric material, are used primarily for determining the point of fire of a rapid-fire weapon, such as a machine gun. Although there have been suggestions over the years that owing to its pyrophoric compound the use of tracers against combatants was prohibited by Article 23(e) of the Annex to Hague Convention IV of 18 October 1907, these suggestions did not withstand close scrutiny. As a general rule, every fifth round in a machine gun ammunition belt is a tracer; hence the probability that 20% of all battlefield casualties have been wounded by tracer bullets. No evidence could be found of tracer wounds, or of more severe wounds caused by tracers. As the incendiary effect of tracers is extremely limited, they were excluded from the incendiaries protocol.

"(ii) Munitions designed to combine penetration, blast or fragmentation effects with an additional incendiary effect, such as armour-piercing projectiles, fragmentation shells, explosive bombs and similar combined-effects munitions in which the incendiary effect is not specifically designed to cause burn injury to persons, but to be used against military objectives, such as armoured vehicles, aircraft and installations or facilities".

COMMENT: Combined-effects munitions (CEM) are fire-starting rather than fire-sustaining. As suggested by the text of sub-paragraph (b), a modern CEM is designed with pyrophoric compound fragments which, after penetrating light armour or aircraft and their various oil and fuel lines, can ignite the released flammable substances.

Acceptance of an exception for CEM proved a key to reaching agreement on an incendiaries protocol. To allay the fears of some delegations that the more advanced nations had "engineered" their way around the incendiaries protocol, this language provides examples of the types of munitions restricted and the types of targets against which they would be used, and makes clear that the incendiary effects of such munitions would not be specifically designed for anti-personnel purposes.

The sub-paragraph also aligns the law of war with twentieth-century munitions technology. When the first antimateriel type of incendiary projectiles were developed, they were intended for use against enemy supply and ammunition wagons. Inevitably some were directed at combatants, and this gave rise to the 1868 St. Petersburg Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 grammes Weight.

With the advent of light armoured vehicles and aircraft, however, came the requirement for antimateriel projectiles to be used by and against each. Many such projectiles weighed less than 400 grammes. During World War I, for example, the British developed the Woolwich incendiary bullet for use against the Zeppelins. While ineffective against Zeppelins, it subsequently proved invaluable against enemy aircraft. Such munitions raised questions regarding their legality in the light of the 1868 St. Petersburg Declaration. Article 18 of the unadopted 1923 Hague Rules of Air Warfare addressed the issue, declaring that "The use of tracer projectiles, whether, incendiary or explosive, by or against an aircraft is not forbidden,"[4] and made specific reference to the 1868 St. Petersburg treaty. The issue remained unresolved until it was addressed in sub-paragraph (ii) quoted above, which recognized that the pupose of such munitions is antimateriel, with little antipersonnel effect.

"2. "Concentration of civilians" means any concentration of civilians, be it permanent or temporary, such as in inhabited parts of cities, or inhabited towns or villages, or as in camps or columns of refugees or evacuees, or groups of nomads".

COMMENT: The definition is generally self-explanatory. However, as a point of further clarification, the report of the chairman of the Incendiaries Working Group for each session of the conference provided as follows:

> "The definition... is intended to convey a word picture to the military commander regarding the protected character of the civilian population, rather than to present a precise mathematical or geographical formulation of what is a 'concentration' of civilians. The commander's attention is directed by the definition to the concern he must have for the presence or absence of the civilian population, which is fluid in wartime, rather than to the character or size of the city, town or village as such. It is understood that "civilians" means those persons who are not taking a direct part in the hostilities".[5]

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[4] Rules concerning the Control of Wireless Telegraphy in Time of War and Air Warfare fixed by the Commission of Jurists entrusted with Studying and Reporting on the Revision of the Laws of War assembled at The Hague on December 11, 1922 – Part II – Rules of Air Warfare, Article 18 in *General Collection of the Laws and Customs of War*, Marcel Deltenre (ed.), Editions Ferd. Wellens-Pay, Brussels, 1943, p. 827.

[5] Working Group on Incendiary Weapons (A. CONF. 95/cw6) of 2 October 1980, *Report*, p. 2.

"3. "Military objective" means, so far as objects are concerned, any object which by its nature, location, purpose or use makes 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".

"4. "Civilian objects" are all objects which are not military objectives as defined in paragraph 3".

COMMENT: Paragraphs 3 and 4 require no comment, as they bring Protocol III into line with the definitions of "military objective" and "civilian objects" contained in Article 52 of Additional Protocol I of 1977.

"5. *"Feasible precautions are those precautions which are practicable or practically possible taking into account all circumstances ruling at the time, including humanitarian and military considerations".*

COMMENT: The definition of "feasible precautions" may seem to be a definition of the obvious. However, participants in the drafting of Protocol III noted that the terms *feasible* and *feasible precautions* had been used extensively in Additional Protocols I and II of 1977 without definition, and a question arose in the course of the negotiation of Protocol III as to what the term or phrase meant or should mean. The intent was to provide a practical definition that could be used in Protocol III as well as within the context of the 1977 Protocols. The extensive discussion that ensued in defining the phrase made it clear that an agreed definition was needed.

Article 2: Protection of civilians and civilian objects

"1. It is prohibited in all circumstances to make the civilian population as such, individual civilians or civilian objects the object of attack by incendiary weapons".

COMMENT: Some delegations felt that this rule was unnecessary, given that this was a restatement of customary international law applicable to all means and methods of warfare, and had been codified in Article 51(2) of Protocol I of 1977. Others felt that the statement was essential to any law of war treaty dealing with means and methods of warfare, noting that some nations might become party to the Conventional Weapons Convention before they became party to Protocol I of 1977.

"2. *It is prohibited in all circumstances to make any military objective located within a concentration of civilians the object of attack by air-delivered incendiary weapons".*

COMMENT: The article must be read within the context of the Protocol's definitions. As a number of delegations pointed out in their statements during the final plenary session of the UNCCW, this restriction is not intended to alter the customary law of war obligation of a defender to take all feasible precautions to avoid locating military objectives within or near densely-populated areas, as codified in Articles 51(7) and 58 of Protocol I of 1977.

Paragraph 2 on the face of it may be viewed as an advancement in the law of war over the language contained in Additional Protocol I of 1977, in that it expressly prohibits any attack on a military objective by air-delivered incendiary weapons where that objective is located in a concentration of civilians, whereas the language contained in Articles 51(5) (b) and 57(2) (a) (iii) and (b) prohibits such an attack only where it may be expected to cause incidental damage which would be excessive in relation to the military advantage anticipated from the attack.

While accepting this compromise language, some delegations were concerned that Article 2(2) was not entirely consistent with Article 57 (2) (a) (ii) of Additional Protocol I in that, in some cases, employment of air-delivered incendiary weapons would be a preferred alternative in the choice of means and methods of attack that would reduce the risk to the civilian population.

The dilemma posed by the wording of Article 2(2) is simple to articulate, but difficult to resolve. The wording addressed the concerns of those delegations who believed that air-delivered incendiary munitions were less accurate than ground-delivered incendiaries. The predicament is that where a ground-based incendiary weapon is not available and a military objective in a populated area must nonetheless be attacked, a commander may be forced by the language contained in paragraph 2 to employ artillery fire or an air-delivered high-explosive munition that would be less accurate or more destructive than an air-delivered incendiary weapon, resulting in greater collateral civilian casualties or damage to civilian objects. Only time will tell whether the prohibition contained in Article 2 (2) has increased protection for innocent civilians near military objectives.

It was the understanding of the Working Group that the phrase "in all circumstances" was intended as reinforcing language for the restrictions contained in Articles 2(1) and 2(2). Addition of the phrase was not intended to suggest any modification of the general prohibition on attacking the civilian population as such, or individual civilians, contained in Article 51(2) of Additional Protocol I, or on attacking civilian objects, contained in Article 52 (1) of Additional Protocol I;

that is, use of "in all circumstances" in the restrictions on the use of incendiary weapons was not intended to imply that there are circumstances in which the civilian population as such, individual civilians, or civilian objects may be attacked with other weapons. Nor was the expression "in all circumstances" intended to prevent civilians from losing the protection given by those rules, if they take a direct part in hostilities.

"3. It is further prohibited to make any military objective located within a concentration of civilians the object of attack by means of incendiary weapons other than air-delivered incendiary weapons, except when such military objective is clearly separated from the concentration of civilians and all feasible precautions are taken with a view to limiting the incendiary effects to the military objective and to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects".

COMMENT: Although slightly different in context from Article 51(5) (a) of Additional Protocol I, this sub-paragraph restates, in terms of use of any ground-based, incendiary weapon, the rule contained in Article 57(2) (a) (ii) of Additional Protocol I of 1977. The principle applies to all means and methods of war. In the course of the negotiations, this sub-paragraph was offered as one alternative solution. Once agreement was obtained on the provision stated in Article 2(2) cited above, some delegations felt this provision could be deleted. However, that would have left the Protocol without any rule relating to ground-based systems.

Accordingly it was retained, but with an added phrase concerning its application to "other than air-delivered incendiary weapons". As is true of Article 2(2), the rule stated in Article 2(3) is not intended to alter the obligation of a defender to take all feasible precautions to separate military objectives from concentrations of civilians.

"4. It is prohibited to make forests or other kinds of plant cover the object of attack by incendiary weapons except when such natural elements are used to cover, conceal or camouflage combatants or other military objectives, or are themselves military objectives".

COMMENT: A new provision introduced late in the course of the last session, its intent was to prohibit use of incendiary weapons to carry out a "scorched earth" policy. However, the rule was refined by a small contact group appointed by the Chairman of the Working Group to ensure its consistency with existing law of war principles. As stated,

the rule is consistent with Articles 52(1), 52(2) and 55 of Additional Protocol I.

Conclusion

Protocol III on incendiary weapons was the product of lengthy, emotional debates and negotiations. In positive terms, agreement was reached where this was not considered possible; specific new protection was provided for the civilian population to avoid a repetition of events of the past. The Protocol also did much to clarify a historically controversial area of the law of war while aligning the law of war with modern technology. The legality of incendiary weapons was established without qualification.

In that sense some may feel that Protocol III did not go far enough, for example, in providing some protection for combatants. There was little support for this effort. A draft resolution offered by six nations in the final plenary session to continue study of a possible restriction on the attack of combatants with incendiaries was soundly defeated by the Conference. This is the reality of the law of war, for war remains a conflict of arms in which death or destruction are the inevitable, if unfortunate, results. An unrealistic rule would have undermined the credibility of the rules that were adopted.

It is unfortunate that the rules contained in Protocol III were written for international armed conflict only. While a majority of nations represented at the UNCCW favoured restrictions on incendiary weapons, an overwhelming number were quick to add that such rules would not apply to the suppression of internal conflicts. The prevailing form of combat today is the internal armed conflict, a form of war in which the civilian population is at greatest risk — and tends to suffer the most. Regrettably, Protocol III will provide little, if any, protection for civilians caught up in such wars.

W. Hays Parks

W. Hays Parks is Chief of the International Law Branch, International Affairs Division, in the Office of The Judge Advocate General of the United States Army. He was the member of the US delegation to the UN Conventional Weapons Conference responsible for negotiations on incendiary weapons and small-calibre weapons.

The 1980 Convention on Conventional Weapons and the applicability of rules governing means of combat in a non-international armed conflict

by Denise Plattner

1. Introduction

Having reached the tenth anniversary of the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to have Indiscriminate Effects, adopted on 10 October 1980 (hereinafter referred to as the 1980 Convention), we can measure the progress brought about by the treaty within the limits which the law sets for the suffering caused by war. Paradoxically, however, we are witnessing an increasing number of situations which, in form at least, fall outside the scope of application of the 1980 Convention, namely non-international armed conflicts.

Yet international humanitarian law on methods and means of combat includes general rules applicable to all armed conflict, and hence to non-international armed conflicts too. The provisions of the 1980 Convention are an application of those general rules to the means of combat which the treaty is intended to regulate. The question thus arises whether some of the rules of conduct laid down in the 1980 Convention are applicable to all armed conflicts, whether international or non-international. In the present study, we shall attempt to reply at least to some extent to that question.

We shall thus first examine the rules governing the methods and means of combat applicable to all armed conflict. After specifying the practical scope of application of the 1980 Convention, we shall then go on to analyse the content of the rules it contains. Finally, we shall assess

which of the rules of conduct embodied therein may be considered to be applicable to all armed conflict, and for what reasons.

2. Rules applicable to all armed conflict

A rule applicable to non-international armed conflict is applicable, *a fortiori*, to international armed conflict. Accordingly, the set of rules governing means of combat in non-international conflicts is applicable to all armed conflict.[1]

Some of the sources taken into consideration to determine the nature of these rules immediately identify them as being applicable to all armed conflict, while others designate them as rules applicable to non-international armed conflicts.

The rules governing means of combat which are applicable to all armed conflict fall into two categories: firstly, rules whose legislative content is highly general, and secondly rules for application of those general rules.

The two categories are in fact intimately related. Hence, the fact that a weapon is prohibited in all armed conflict implies that the principle of limitation of the choice of means and methods of combat exists, irrespective of the type of armed conflict involved and whatever the procedures for implementing the principle. Taking the opposite view would be tantamount to allowing parties to a conflict total freedom in the manner of conducting hostilities. Fortunately, this view has never been defended. On the contrary, the need to set limits on military operations in connection with an internal armed conflict was defended as early as in the first half of the eighteenth century.[2] Indeed, even without such precedents, the Martens clause, which enbodies the principle of humanity, would establish the primacy of the law over such a freedom.[3]

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[1] Cf. The opinion handed down by the International Court of Justice in the case concerning military and paramilitary activities in and against Nicaragua (Nicaragua/United States of America), which states that *"There is no doubt, in the event of international armed conflicts, that these rules* (editor's note: those in Article 3 common to the Geneva Conventions) *also constitute a minimum yardstick, in addition to the more elaborate rules which are also to apply to international conflicts". Reports of Judgments, Advisory Opinions and Orders,* 1986, page 114, paragraph 218.

[2] Cf. Morris Greenspan, *The Modern Law of Land Warfare,* Berkeley and Los Angeles, University of California Press, 1959, p. 623, in particular the references quoted in note 17.

[3] Cf. in this regard, William J. Fenrick, "New Developments in the Law Concerning the Use of Conventional Weapons in Armed Conflict," *Canadian Yearbook*

Turning to the sources of the rules on the conduct of hostilities applicable to all armed conflict, the question arises whether Article 3 common to the four Geneva Conventions of 1949 is applicable to methods and means of combat. At present, it is considered that in so far as the rules governing methods and means of combat protect non-combatants, they are derived, whithin the limits of a reasonable interpretation, from Article 3 common to the Conventions[4].

The other sources are constituted by Additional Protocol II of 1977, to which 87 States are party[5] and which contains several rules on the conduct of hostilities (Articles 13 to 16); by the practices and common beliefs of States, as expressed, *inter alia*, in United Nations resolutions; and, finally, by legal doctrine.

The general principle of the protection of civilians against the effects of hostilities and the principle that parties to a conflict do not have unrestricted choice as to methods and means of warfare[6] are the premisses on which the general rules requiring the parties to a conflict to comply with a certain code of conduct in the use of weapons are based.[7]

These rules include, in particular, the obligation to distinguish between combatants and civilians,[8] the rule prohibiting attacks directed

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of International Law, vol. 19, 1981, pp. 229-256, *ad* p. 232.

[4] James E. Bond, *The Rules of Riot, Internal Conflict and the Law of War,* Princeton University Press, Princeton, New Jersey, 1974, p. 82; Robert Kogod Goldman, "International Humanitarian Law and the Armed Conflicts in El Salvador and Nicaragua," *The American University Journal of International Law and Policy,* vol. 2, number 2, fall 1987, pp. 539-578, *ad* p. 547.

[5] As at 30 November 1990.

[6] Both of these principles are recalled in the Preamble of the 1980 Convention. Furthermore, rules 6 and 7 of the Leaflet *Fundamental Rules of international humanitarian law applicable in armed conflicts* drawn up by the ICRC above all for dissemination purposes state that :

> *"6. Parties to a conflict and members of their armed forces do not have an unlimited choice of methods and means of warfare. It is prohibited to employ weapons or methods of warfare of a nature to cause unnecessary losses or excessive suffering.*
>
> *7. Parties to a conflict shall at all times distinguish between the civilian population and combatants in order to spare civilian population and property. Neither the civilian population as such nor civilian persons shall be the object of attack. Attacks shall be directed solely against military objectives".*

[7] Cf. the "Declaration on the Rules of International Humanitarian Law governing the conduct of hostilities in non-international armed conflicts", adopted by the Council of the International Institute of Humanitarian Law, San Remo, on 7 April 1990, and reproduced in the *International Review of the Red Cross,* No. 278, September-October 1990, pp. 387-408, *ad* pp. 404-408.

[8] Cf. United Nations General Assembly resolution 2444 (XXIII), of 19 December 1968, on respect for human rights in armed conflicts, and Resolution 2675 (XXV) of

against the civilian population as such or civilian persons,[9] the rule prohibiting the infliction of superfluous injury and unnecessary suffering[10] and the prohibition of perfidy, i.e. the rule prohibiting the killing, wounding or capture of an adversary by leading him to believe that he is entitled to, or is obliged to accord, protection under the applicable rules of international humanitarian law[11].

It is apparent from United Nations resolutions and from legal doctrine that weapons prohibited under customary law are proscribed in all armed conflict. For instance, the resolutions whose main thrust is the protection of the human person against the effects of hostilities, and which apply to all armed conflict, make explicit reference to prohibition

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9 December 1970 summarizing the basic principles for the protection of civilian populations in armed conflicts, reproduced in *The Laws of Armed Conflicts,* A Collection of Conventions, Resolutions and Other Documents, ed. Dietrich Schindler and Jiri Toman, Martinus Nijhoff Publishers, Henry Dunant Institute, Geneva, 1988, p. 263 and p. 267, respectively. Cf. also Frits Kalshoven, "Applicability of Customary International Law in Non-international Armed Conflicts," in: *Current Problems of International Law,* Essays on U.N. Law and on the Law of Armed Conflict, ed. Antonio Cassese, Milano, Dott. A. Giuffrè editore, 1975, pp. 267-285, *ad* p. 281; Hans-Peter Gasser, "Armed Conflict within the Territory of a State, Some reflections on the state of the law relative to the conduct of military operations in non-international armed conflicts," in: *Im Dienst an der Gemeinschaft,* Festschrift für Dietrich Schindler zum 65. Geburtstag, edited by Walter Haller *et al,* Verlag Helbing und Lichtenhahn, Basel/Frankfurt am Main, 1989, pp. 225-240, *ad* p. 239. For an example of practice, cf. the appeal launched by the ICRC on 14 January 1977 to the parties to the conflict in Rhodesia/Zimbabwe, in which the ICRC invited the parties to the conflict to respect the rules quoted in note 6 *supra,* ICRC, *Annual Report,* 1977, p. 16.

[9] Cf. United Nations General Assembly resolutions 2444 (XXIII) and 2675 (XXV), *supra* note 8. Cf. also Kalshoven *supra* note 8, p. 281, Antonio Cassese, "The Spanish Civil War and the Development of Customary Law concerning International Armed Conflicts," in *Current Problems of International Law, supra* note 8, pp. 287-318, *ad* p. 288 and ff.; Gasser, *supra* note 8, p. 238. For an example of practice, cf. the ICRC's appeal of 14 January 1977, *supra* note 8.

[10] Cf. operative paragraph 1a) of United Nations General Assembly resolution 2444 (XXIII), *supra* note 8. Cf. also Kalshoven *supra* note 8, p. 281; Gasser, *supra* note 8, p. 237; Goldman *supra* note 4, p. 559. On the relationship between the principle of humanity and the principle of proportionality, cf. Michael Bothe, Karl Joseph Partsch, Waldemar A. Solf, *New Rules for Victims of Armed Conflicts,* Commentary on the Two 1977 Protocols Additional to the Geneva Convention of 1949, Martinus and Nijhoff Publishers, The Hague/Boston/London, 1982, p. 671 and p. 683; Theodor Meron, *Human Rights and Humanitarian Norms as Customary Law,* Clarendon Press, Oxford, 1989, p. 36; Fenrick, *supra* note 3, p. 231. For an example of practice, cf. the ICRC's appeal of 14 January 1977, *supra* note 8.

[11] Kalshoven, *supra* note 8, p. 281. Cf., with regard to perfidious use of the protective emblem of the Red Cross and the Red Crescent; Gasser, *supra* note 8, p. 239. On the principle of chivalry as a fundamental principle of international humanitarian law, cf. Fenrick, *supra* note 3, p. 230. On the principle of "fair play" and chivalry as the foundation for the prohibition of weapons likely to cause unnecessary suffering, cf. Yves Sandoz, *Des armes interdites en droit de la guerre,* thesis, Neuchâtel, 1975, p. 19.

of the use of toxic gases. This is the case for resolution 2444 (XXIII) on respect for human rights in armed conflicts, adopted by the United Nations General Assembly on 19 December 1968[12] which affirms resolution XXVIII adopted by the 20th International Conference of the Red Cross held at Vienna in 1965,[13] resolution 3318 (XXIX) on the protection of women and children in emergency and armed conflict, adopted by the United Nations General Assembly on 14 December 1974[14] and resolution XXIII on human rights in armed conflicts, adopted on 12 May 1968 by the International Conference on Human Rights convened by the United Nations in Tehran from 22 April to 13 May 1968[15].

For their part, Kalshoven[16] and Cassese[17] both consider, on the basis of state practice, that the prohibition of toxic gases is also applicable to non-international armed conflicts. Indeed, when chemical weapons were used in the Halabja region in Iraqi Kurdistan, the ICRC stressed that *"the use of chemical weapons, whether against military personnel or civilians, is absolutely forbidden by international law and is to be condemned at all times"*.[18] The customary rules prohibiting the use of bullets which expand in the human body (such as dum-dum bullets) and of poison are also considered as being applicable in all armed conflict.[19]

From the conceptual standpoint, the extension to all armed conflict of a customary rule concerning a means of combat is easily justified. For the absolute banning of a weapon implies that its use does not meet any military purpose justifying the damage it causes, and that the means of combat thus violates the prohibition on inflicting superfluous injury or unnecessary suffering[20] or the prohibition of indiscriminate effects on the civilian population[21], or both those rules at once. It is for this reason

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[12] Cf. *The Laws of Armed Conflicts, supra* note 8, p. 263.

[13] *Id.*, p. 259.

[14] *Ibid.*, p. 269.

[15] *Ibid.* p. 261.

[16] Kalshoven, *supra* note 8, p. 277 and p. 282.

[17] Cassese, *supra* note 8, p. 297.

[18] Press release No. 1567 of 23 March 1988.

[19] Cf. San Remo Declaration, *supra* note 7.

[20] Cf. Philippe Bretton, on the problem of methods and means of warfare or combat in the Protocols additional to the Geneva Conventions of 12 August 1949, in: *Revue générale de droit international public*, January-March 1978, No. 1, pp. 1-50, *ad* p. 9.

[21] Cf. Provision 3 of the general provisions on the scope of the future Convention, which reads as follows: "Each State party undertakes not to use chemical weapons", *Report of the Special Committee on Chemical Weapons to the Disarmament Conference on the work conducted from 17 January to 3 February 1989*, CD/881, 3 February 1989, Appendix I, p. 9.

that the customary prohibition of a weapon can sometimes tend towards disarmament and lead to a ban on the manufacture of the weapon concerned. Examples of this are the Convention on the Prohibition of Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, of 10 April 1972, and the work of the Special Committee on Chemical Weapons instituted within the framework of the Conference on Disarmament.[22]

Are we to conclude from the above that rules which restrict the use of certain weapons without actually prohibiting them are applicable only to international armed conflicts, in other words that as far as means of combat are concerned, non-international armed conflict is not subject to any limitation other than prohibition?

Obviously, the general rules governing the conduct of hostilities, in particular those concerning protection of the civilian population, have some bearing on whether the use of a means of combat is lawful or not. The problem addressed in this study is, among other things, the extent to which their influence is felt; this is reflected by the degree of development and sophistication of the rule according to the nature of the conflict. In this regard, the most detailed regulations available in positive law governing means of combat is the set of rules constituted by the 1980 Convention. We thus have to examine that text before attempting to draw any conclusions.

3. Rules of the 1980 Convention

The 1980 Convention comprises the Convention itself and the three Protocols annexed thereto, namely the Protocol on Non-Detectable Fragments (Protocol I), the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and other Devices (Protocol II) and the Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III). The Convention itself contains formal provisions governing the set of substantive rules contained in the Protocol (entry into force, procedure for revision, etc.). In particular, it defines their scope of application, namely international armed conflicts in the sense of Article 2 common to the four Geneva Conventions of 1949 and Article 1, paragraph 4, of 1977 Additional Protocol I.

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[22] Cf. Antonio Cassese, "Means of Warfare: The Traditional and the New Law" in: *The New Humanitarian Law of Armed Conflict*, ed. A. Cassese, Editoriale Scientifica S.r.l.; Napoli, 1979, pp. 161-198, *ad* pp. 164-165.

In order to commit themselves to the obligations of the 1980 Convention, States must consent to be bound by at least two Protocols (Article 4, paragraph 3).

Apart from the usual procedures for commitment to a treaty, namely ratification, acceptance, approval and accession (Article 4), the Convention also foresees a special procedure, applicable during an international armed conflict, including a national war of liberation (Article 7, para. 2 and 4). In such situations, a State which is not yet bound by the Convention or is not bound by the same Protocols as its adversary, or, where applicable, a national liberation movement, may enter into a commitment for the duration of the conflict by accepting and applying the relevant instruments.[23]

Protocol I on non-detectable fragments prohibits the use of weapons *"the primary effect of which is to injure by fragments which in the human body escape detection by X-rays"*. The innovation here is that the rule is set down in writing; it in fact develops the basic rule of the prohibition of weapons causing unnecessary suffering.[24]

The rules in Protocol II on prohibitions or restrictions on the use of mines (other than anti-ship mines used at sea or in inland waterways), booby-traps and other devices are varied, and can be classified on the basis of different criteria. We shall consider them in decreasing order in terms of the constraints they impose on the parties involved in a conflict, before going on to examine the provisions relating to precautionary measures advocated in Protocol II.

Booby-traps designed to cause superfluous injury or unnecessary suffering are prohibited in all circumstances (Article 6, para. 2).[25] The same applies to booby-traps used to endanger the protection due to wounded, sick or dead persons, children, cultural or religious objects and items essential to the survival of the civilian population (Article 6, para. 1 b)).[26]

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[23] Cf. Capitain J. Ashley Roach, "Certain Conventional Weapons Convention: Arms Control or Humanitarian Law" in: *Military Law Review*, vol. 105, 1984, pp. 9-72, pp. 25-26.

[24] *Ibid*, p. 69.

[25] Cf., in this regard, A.P.V. Rogers, "A Commentary on the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices," in: *Revue de droit pénal militaire et de droit de la guerre* 1987, vol. XXVI, pp. 185-206, *ad* p. 200.

[26] Cf. Lieutenant Colonel Burrus M. Carnahan, "The Law of Land Mine Warfare: Protocol II to the United Nations Convention on Certain Conventional Weapon", in: *Military Law Review*, 1984, vol. 105, pp. 73-95, pp. 91-93.

Furthermore, booby-traps in the form of an apparently harmless portable object which is specifically designed to explode are also forbidden in all circumtances (Article 6, para. 1 a)). This rule prohibits the use of possibly mass-produced prefabricated booby-traps, and the remote delivery of booby-traps, for instance by air.[27]

Article 6 thereby covers the prohibitions stemming from Article 23, sub-para. 1 a), b), e) and f), of the Regulations respecting the Laws and Customs of War in the Hague Convention (No. IV) of 1907.

In the light of Article 3, para. 3 a), *in fine*, the indiscriminate use of mines, booby-traps or other devices is understood to mean any placement of such weapons *"which is not directed at a military objective"*. This definition calls for interpretation. It has been suggested, for instance, that it might provide legal arguments pleading in favour of the intrinsic illegality of mines as a means of combat, on the grounds that a mine is never *"directed"* at anything.[28]

The use of remotely-delivered mines is forbidden. A remotely-delivered mine is a mine *"delivered by artillery, rocket, mortar or similar means or dropped from an aircraft"* (Article 2, para. 1).

Exceptions must meet the following conditions (Article 5, para. 1 a) and b)):

— the mine may only be used within an area which is itself a military objective or which contains military objectives.[29]

and

— the location of the mine must be accurately recorded,

or

— the mine must be equipped with a neutralizing mechanism.

The question arises whether, in view of the general principle stated in Article 5 that the remote delivery of mines is prohibited, the delivery of mines is not prohibited *a fortiori* in a populated area in the sense of Article 4, paragraph 2, of Protocol II. It is clear, in any event, that a populated area cannot be an area constituting a military objective in the sense of Article 5. Accordingly, Article 5 should be interpreted in conjunction with Article 4.

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[27] *Id.*, p. 90.

[28] Cf. Fenrick, *supra* note 3, p. 244. According to Rogers, *"The words 'directed against' [...] must not be interpreted in the narrow sense of 'aimed at'"* (Rogers, *supra* note 26, p. 192).

[29] As Rogers points out, the area containing military objectives in the sense of Article 5, paragraph 1, cannot be limitless (Rogers, *supra* note 25, p. 196).

Besides remotely-delivered mines, the use of other weapons is also prohibited in populated areas, namely mines other than remotely-delivered mines, booby-traps and other devices. By *"other devices"*, Protocol II means *"manually-emplaced munitions and devices designed to kill, injure or damage and which are actuated by remote control or automatically after a lapse of time"* (Article 2, para. 3).

In the terms of Article 4, paragraph 2, populated areas are *"any city, town, village or other area containing a similar concentration of civilians in which combat between ground forces is not taking place or does not appear to be imminent"*. Exceptions must fulfil the following conditions (Article 4, para. 2 a) and b)):

— the weapons must be placed on or in the close vicinity of a military objective

or

— measures must be taken to protect civilians from their effects, for example by the posting of warning signs.

Article 3 of Protocol II sets forth general restrictions on the use of mines, booby-traps and other devices. This is in fact a transposition, to the said weapons, of the general rules concerning the distinction to be made between combatants and civilians and the immunity of the civilian population. In the light of the rules we have examined in the preceding paragraphs, the use of weapons other than remotely-delivered mines and which are not used in populated areas as defined in Article 4 is governed by the general restrictions alone. In the case of remotely-delivered mines or weapons used in populated areas, the general restrictions apply in addition to the specific rules in Articles 4 and 5.

Apart from the rules governing the use of weapons covered by Protocol II, which create obligations to refrain from such use, Protocol II also sets forth certain concomitant duties in the form of precautions to be taken to limit the effects of the weapons concerned.

These precautionary measures are designed primarily to protect the civilian population. However, the presence of the United Nations places parties to a conflict under specific obligations designed to protect the Organization's personnel. Finally, since one of the features of the weapons covered by Protocol II is that their effects may extend beyond the duration of the conflict itself, the parties concerned inherit particular duties under Protocol II upon the cessation of active hostilities.

When parties to a conflict use mines in a pre-planned manner[30] or

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[30] According to Carnahan, the adjective *"pre-planned"* means that "a detailed military plan exists considerably in advance of the proposed date of execution" (Carnahan, *supra* note 27, p. 84).

make large-scale use of booby-traps, they must record[31] the location of the minefields or the areas in which these weapons have been laid (Article 7, para. 1 a) and b)).

As we have seen, the lawfulness of remotely-placed mines is subject to compliance with the safety measures stipulated in Article 5, para. 1 a) and b). Paragraph 2 of Article 5 further provides that the civilian population shall be given advance warning of any delivery of such mines. As the lawfulness of the placing of other weapons in populated areas is also subject to compliance with the measures laid down by Article 4, para. 2 b), the precautionary measures prescribed in Article 3, para. 4 are applicable on a cumulative basis with those already provided for in the case of remotely-delivered mines or weapons used in populated areas. In other cases, by contrast, this provision is the only one applicable, subject to the relevant provisions of Article 7.

Finally, irrespective of the method of use, the parties to a conflict must endeavour to record the locations of minefields, mines and booby-traps (Article 7, para 2) and must whenever possible, by mutual agreement, provide for the release of information concerning minefields, mines and booby-traps (Article 7, para. 3 c)).

When the United Nations performs functions in the conflict, the parties must make available to it the records kept (Article 7, para. 3 b)) together with, on request and if possible, any other information (Article 8, para. 1 c)). In addition, the protection of United Nations personnel must be guaranteed, among other things, and as far as possible, by removing mines or rendering them ineffective (Article 8, para. 1 a) and b)). The same protection must also be provided to staff conducting fact-finding missions. If this protection cannot be adequately provided, all information must be made available to the head of the mission (Article 8, para. 2).

When active hostilities cease, the parties involved are required to take the necessary measures to protect civilians (Article 7, para. 3 a) (i)); to make available to each other and to the Secretary-General of the United Nations, where appropriate after the withdrawal of forces, all information concerning minefields, mines and booby-traps placed on the territory of the adverse party, (Article 7, para. 3 a) (ii) and (iii)); to endeavour, by mutual agreement, to provide for the release of information (Article 7, para. 3 c)); and, finally, to endeavour, again by mutual agreement, to provide information and to arrange for minefields,

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[31] Cf., for the notion of recording, the technical annex to Protocol II, which provides guidelines on recording to assist parties in fulfilling their obligations in this regard.

mines and booby-traps to be removed or rendered ineffective (Article 9).

Although the rules in Protocol III on incendiary weapons are much fewer in number than those in Protocol II, we shall consider them in the same manner, i.e. in decreasing order in terms of the constraints they impose on the parties to the conflict.

With regard to the definition of incendiary weapons, it should be noted that Article 1, paragraph 1, of Protocol III is intended to exclude weapons which may have incidental incendiary effects or are designed to combine incendiary effects with penetration, blast or fragmentation effects.

By virtue of Article 2, para. 2, attacks by air-delivered incendiary weapons against any military objective located within a concentration of civilians [32] are prohibited *"in all circumstances"*.

Land attacks against a military objective located within a concentration of civilians are prohibited. Exceptions are allowed only under the following cumulative conditions:

— the military objective must be clearly separated from the concentration of civilians.[33]

and

— all feasible precautions must be taken to ensure that the civilian population and civilian objects are not affected by the effects of the incendiary weapon.

The rules in paragraphs 1 and 4 of Article 2 in fact merely reiterate the ban on attacks against objectives other than military targets (cf. Article 52, paragraph 2, of 1977 Additional Portocol I).

The ban on indiscriminate attacks Article 51, para. 4 and 5, of 1977 (Additional Protocol I) is not repeated. This prohibition does however seem to be applicable, whether or not the military objective is located in a concentration of civilians, since it is implicit in the rules of Protocol III. In the event that the (land) attack is directed against a military objective located in a concentration of civilians, the prohibition of indiscriminate attacks is applicable cumulatively with the special rule in Article 2, para. 3, of Protocol III.

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[32] According to Article 1, paragraph 2, of Protocol III, *"'concentration of civilians means any concentration of civilians', be it permanent or temporary, such as in inhabited parts of cities, or inhabited towns or villages, or as in camps or columns of refugees or evacuees, or groups of nomads"*.

[33] This condition means in practice that an attack using incendiary weapons other than by air can only take place if civilians are protected by natural relief (hill) or a building (bunker), or are a sufficient distance away (Fenrick, *supra* note 3, pp. 249-250).

The rule prohibiting the causing of superfluous injury and unecessary suffering remains applicable to incendiary weapons. It must therefore be considered whether or not this rule has been respected in practice.[34]

4. Applicability of the content of the rules of the 1980 Convention to non-international armed conflicts: evaluation and conclusion

In the previous section, we have identified several categories of rules in the 1980 Convention.

First of all, some rules constitute an absolute ban on a weapon, solely on the grounds of the type of weapon concerned. This category *(category A)* includes the prohibition of weapons causing non-detectable fragments as formulated in Protocol I and the prohitition of the types of booby-traps described in Article 6 of Protocol II.

One of the rules in Protocol III must be taken as an absolute ban on the use of the weapon concerned, not only on account of its nature, but also of the method of use.

This rule, which is set out in Article 2, para. 2 of Protocol III, prohibits aerial attack using incendiary weapons in all circumstances. It thus constitutes a category on its own *(category B)*.

The provisions of Articles 4 and 5 of Protocol II and Article 2, para. 3, of Protocol III may be placed on an equal footing, in so far as they restrict the use of the weapon involved. However, the stipulations in Article 5 of Protocol II appear somewhat stricter than those in the other rules. Firstly, the text sets out a general prohibition of remotely delivered mines. Secondly, the conditions imposed to limit the effects of remotely placed mines are extremely strict. On the other hand, Article 4 of Protocol II and Article 2 para. 3, of Protocol III both restrict the use, in concentrations of civilians, of the weapons concerned, with a view to avoiding such use altogether. Article 5 of Protocol II could thus be considered as *category C*, while *categrory D* would consist of Article 4 of Protocol II and Article 2, para. 3, of Protocol III.

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[34] Cf. Fenrick, *supra* note 3, p. 250 and Yves Sandoz, "Prohibitions or Restrictions on the Use of Certain Conventional Weapons" in: *International Review of the Red Cross*, January-February 1981, No. 220, pp. 3-18, *ad* p. 15.

Article 3 of Protocl II and Article 2, para. 1 and 4, of Protocol III recall obligations already existing under other treaties of international humanitarian law, such as for example those embodied in Additional Protocol I of 1977. Accordingly, they belong together in the same category (*Category E*).

Finally, consideration must be given to the provisions concerning precautionary measures in Protocol II. These could be gathered together in one category. Nevertheless, it would seem appropriate to single out those which are aimed at protecting United Nations staff, on account of the specific nature of the situation governed by the rules concerned (*category F*).

On the basis of the criteria identified in section 2, the content of the rules in *category A* should be considered as being applicable to all armed conflicts, i.e. to non-international conflicts as well.[35] Some refinements might however be necessary with regard to the booby-traps referred to in Article 6, para. 1, b), of Protocol II, on account of the limits to the protection granted to persons and property by the international humanitarian law applicable to non-international armed conflicts.

The general restrictions in *category E* should also be considered as being applicable to non-international armed conflicts, since they reflect, in terms of the use of certain means of combat, the general rules which have to be observed in all armed conflict.[36] The question of the application of those restrictions to civilian property should also be examined.

Whatever the situation, the intervention of United Nations staff would without doubt give rise to application of the provisions in *category F*, at the very least by analogy and on an *ad hoc* basis.

In view of the absolute nature of the prohibition embodied in Article 2, para. 2, of Protocol III, this prohibition might also be applicable to all armed conflict. Although one might have more reservations as to the applicability of *category C*, constituted by Article 5 of Protocol II, the prohibition in principle formulated therein makes it, at the very least, extremely desirable in a non-international armed conflict. It does in fact reflect a particularly clear decision by States, expressed within the framework of a diplomatic conference, on the relationship between the dangers that remotely placed mines present for the civilian population and the military usefulness of such mines.[37]

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[35] Cf. San Remo Declaration (section B.4, paragraph 2), *supra* note 7.

[36] Cf. San Remo Declaration (sections B.4 and 5), *supra* note 7.

[37] Cf. the opinion of the Special Rapporteur on the human rights situation in Afghanistan, Mr. Felix Ermacora, on the losses resulting from the use of mines, *United Nations Document A/41/778*, paragraph 42, and the opinion of the Special Rapporteur

The rules in *category D,* along with the provisions of Protocol II relating to precautionary measures other than those which determine the lawfulness of the use of weapons, constitute applications, also drawn up within the framework of a diplomatic conference, of the general rule concerning the distinction to be made between combatants and civilians. It would thus be desirable for their content, at least as regards the underlying principles of these rules, also to be applicable during a non-international armed conflict.

As we have seen, Protocol III does not imply that the use of incendiary weapons is always lawful, subject to compliance with the prohibition on causing superfluous injury and unnecessary suffering. On the other hand, the question remains as to the interpretation to be given to Article 3, Para. 3 a) *in fine*, of Protocol II. In view of the terrible suffering which mines have been inflicting on the civilian population in recent conflicts, in particular in non-international armed conflicts, this interpretation could be of paramount importance.

In conclusion, it emerges from our analysis that the rules of conduct laid down in a number of the rules of the 1980 Convention belong to the system of law governing means of combat which is applicable to all armed conflict. Even if these obligations are tiny in comparison with those which have to be observed in international armed conflicts, they should nevertheless help to curb the potential horror of internal armed conflicts.

Denise Plattner

Denise Plattner joined the International Red Cross in Geneva in 1978 as legal delegate in the Operations Departement, and has carried out several missions to ICRC delegations. Since 1987, she has been a lawyer in the ICRC Legal Division. She has published the following articles in the *International Review of the Red Cross:* "The protection of children in international humanitarian law", No. 240, May-June 1984, and "The penal repression of violations of international humanitarian law applicable in non-international armed conflicts", No. 278, September-October 1990.

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on the human rights situation in El Salvador, Prof. Antonio Pastor Ridruejo, recommending that the use of anti-personnel mines should cease as they are "incompatible with the norms of international humanitarian law applicable to the civil war in El Salvador," *United Nations Document A/43/736.* Cf. also the ICRC's interventions reported in the following *Annual Reports*: 1985, p. 35; 1986, p. 37; 1987, p. 40; 1988, p. 43.

The development of new anti-personnel weapons

by Louise Doswald-Beck and Gérald C. Cauderay

1. Introduction

Article 36 of Additional Protocol I of 1977 states that:

"In the study, development, acquisition or adoption of a new weapon, means or method of warfare, a High Contracting Party is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law applicable to the High Contracting Party".

The provision is not new law, but codifies the customary law duty of implementing a treaty or customary rule in good faith. Article 36 does, however, draw attention to the fact that new developments in weapons are quietly going on, and that care must be taken, before their deployment, that their use in some or all circumstances does not violate international humanitarian law. Although the duty to determine in advance the legality of the use of new weapons lies with the State developing them, other States have a legal interest in ensuring that this is done.

As indicated in earlier articles in this issue of the *Review,* in addition to treaties on specific weapons, the use of weapons is limited by two basic rules: the prohibition of weapons that are not or cannot be directed at a military objective or would cause excessive incidental damage; and the prohibition of means and methods of warfare of a nature to cause superfluous injury or unnecessary suffering. The latter rule is specifically directed at preventing excessive harm to combatants, and it is this aspect that we shall principally be dealing with in this short article. The origin of this rule, it will be recalled, lies in the basic principle of international humanitarian law, namely, the balance between military necessity and humanitarian considerations. This prin-

ciple was most eloquently explained in the first international treaty prohibiting the use of a type of weapon, that is, the 1868 St. Petersburg Declaration Renouncing the Use, in Time of War, of Explosive Projectiles under 400 grammes Weight. After the somewhat hopeful statement that *"the progress of civilization should have the effect of alleviating as much as possible the calamities of war"*, the Declaration states that *"the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy"*, and that *"this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men or render their death inevitable;* [and] *that the employment of such arms would therefore be contrary to the laws of humanity"*.

With regard to the development of future weapons, the Declaration stated that the "Parties reserve to themselves to come hereafter to an understanding whenever a precise proposition shall be drawn up in view of future improvements which science may effect in the armament of troops, in order to maintain the principles which they have established, and to conciliate the necessities of war with the laws of humanity".

Later steps involved not only the repetition of the principle that it is prohibited to use weapons of a nature to cause unnecessary suffering or superfluous injury (Hague Regulations of 1899 and 1907, Article 23(e), and Protocol I of 1977, Article 35, paragraph 2, but also the prohibition of the use of bullets that expand or flatten easily in the human body (Hague Declaration 3 of 1899), and of chemical and biological weapons (Hague Declaration 2 of 1899, Geneva Protocol of 1925).

The most recent large-scale attempt to assess the development of new weapons took place in the series of conferences leading to the adoption of the 1980 UN Convention. Other than the weapons which became the object of regulation in the three Protocols to the 1980 Convention, the following weapons were discussed at the initial conference organized by the ICRC in Lucerne and Lugano: small-calibre bullets, blast and fragmentation weapons, fuel-air explosives and "future weapons" (lasers, microwave, infrasound, light-flash devices, geophysical, environmental and electronic weapons).

"Future weapons" were not discussed beyond these first two conferences because the experts stated that insufficient information was available to make an assessment. However, during the 1979-1980 UN Conference, fuel-air explosives and small-calibre bullets were both the subject of proposals which sought to impose restrictions on these weapons in order to avoid causing unnecessary suffering or superflu-

ous injury to combatants. However, after discussion at the Conference it was decided that further research was necessary in these two fields in order to establish whether these weapons could indeed violate the terms of humanitarian law and, if so, what kind of regulation would be necessary.

In this article we shall be looking at four types of weapons which have been the subject of further study since the 1979-1980 UN Conference, namely, small-calibre bullets, fuel-air explosives, battle-field laser weapons and other directed energy weapons.

2. Small-calibre bullets

This issue was brought up at the Lucerne Conference by some delegations who argued that the new 5.56 mm. bullets caused more serious injuries than the standard 7.62 mm. bullets used since the turn of the century, which had a slightly lower velocity (about 10% difference). At Lugano these delegations put forward the view that, according to recent research, the severity of the wound was dependent mainly on the release of energy per unit and that greater energy release was caused by bullet tumbling or break-up. They recommended that the testing of bullets should be standardized in order to evaluate energy release. Other delegations contested not only that 5.56 mm. bullets caused more severe injuries but also the method and criteria of testing proposed. However, all delegations agreed that further research was necessary.

During the preparatory meeting to the UN Conference of September 1979, a draft proposal was submitted by Mexico and Sweden on the regulation of small-calibre weapon systems. This proposal provided for the prohibition of the use of small-calibre projectiles which cause high energy transfer and then listed four examples on how such transfer could be brought about, including early tumbling and easy fragmentation. It also proposed a method of testing and an undefined maximum allowable energy release.

This proposal did not succeed, principally because some other delegations contested both the substantive criteria and the testing method. Finally a resolution was passed during the Conference, on 23 September 1979, calling for further research, in particular in order to develop a standardized assessment methodology for bullets, so as to "avoid an unnecessary escalation of the injurious effects" of such weapon systems.

Thus although agreement could not be reached on the exact criteria to be used in assessing the wounding potential of these bullets, the

principle that they should not cause more severe injuries than standard bullets, which rendered sufficiently *hors de combat,* was accepted. It should be remembered that the smaller bullets had been introduced only to enable soldiers to carry more ammunition, not for any purpose connected with their effect.

Eleven years have elapsed since this resolution was passed and in the meantime the International Conferences of the Red Cross in 1981 and 1986 passed resolutions calling on governments to exercise care in the development of small-calibre weapons systems so as to avoid unnecessary escalation of injurious effects. Research has continued in this field, but not always with a view to achieving the generally accepted methodology recommended in the UN resolution of 1979. A number of seminars and conferences have been held at which the ICRC was present, and opinions are still not unanimous in some respects. However, research in this period has confirmed that energy transfer is the most important factor for wound severity and that high energy transfer is often caused by early turning of the bullet once it hits the body (turning of military bullets is inevitable at some stage) or break-up of the bullet. These problems can be caused by poor stability (early turning) but also by the construction of the bullet itself (materials used, thickness and toughness of the jacket), which can cause early turning or easy fragmentation.

On the basis of this information, some States have taken steps to improve the design of their bullets, in particular to increase their resistance to fragmentation. It should be remembered that The Hague Declaration of 1899 prohibits the use not only of partially jacketed bullets, but of all those which expand or flatten easily in the body. The French authentic text refers to "balles qui *s'épanouissent*", which means bullets which open up, and therefore includes fragmentation. In any event, as partially jacketed bullets which flatten at low velocities fragment at higher velocities, fragmentation is a further and worse result than mere flattening. Therefore if bullets that flatten easily are prohibited, *a fortiori,* bullets that fragment easily are also prohibited. It should also be remembered that the Hague Declaration prohibits the use of *all* bullets that flatten or expand easily, partially jacketed bullets being mentioned only by way of example and not as the sole category concerned.

It is to be hoped that all States will take steps to ensure at least that their bullets do not fragment easily. However, in order to achieve this, the necessary instructions should be given to weapons manufacturers, which is generally not the case. As far as we know, NATO specifications for bullets do not include the thickness of the jacket; as

a result some manufacturers produce bullets with such a flimsy jacket that they fragment easily in the body. The problem seems to have been exacerbated by the introduction of the smaller bullet and the slightly higher velocity, which meant that its standard jacket did not prevent easy fragmentation, even if its 7.62 mm. counterpart did not present this problem. The standardization of the testing of bullets would be a very important step towards clarifying manufacturing specifications, to ensure that bullets do not fragment easily and that all States conform to this requirement.

Further developments in small-calibre projectiles

Specialized publications have in the last few years reported on programmes for the development of the "advanced combat rifle" in order to improve effectiveness and hit probability. Two projects involve projectiles which are very similar to the 5.56 mm. bullet, one of them including two bullets in the same cartridge, the other using a caseless cartridge and a smaller 4.92 mm. bullet. The two other projects would use flechettes as projectiles, which in itself is not a new idea, but has been the subject of controversy as to their effect. In fact flechettes were discussed, without result, during the Lucerne and Lugano conferences as well as during later ones at the United Nations, but in the context of their use as artillery ammunition. As a replacement for bullets, flechettes would be fired either singly or in bursts of three. Manufacturers supporting the development of flechettes state that they are of sufficient length to turn and deform in the body so that all their energy is liberated. Other experts contest the sufficient effectiveness of flechettes.

However, one consideration is conspicuously absent from all these specialized reports and from the published arguments of specialists on the effectiveness of the new projects, namely, whether they conform to the requirements of international law. It is to be feared that developments will take place without sufficient, or even any, testing for legal requirements. Such testing ought to be carried out in good faith and, ideally, according to standardized criteria as recommended in the 1979 UN resolution.

3. Fuel-air explosives (FAE)

During the UN Conference of 1979, Mexico, Sweden and Switzerland submitted a working paper which proposed the prohibition of the use of FAEs except when aimed exclusively at destroying materiel, as in the clearance of minefields. This was, therefore, an attempt to

prohibit the anti-personnel use of these weapons, but some other States maintained that it was premature to consider restrictions on or prohibitions of fuel-air explosives before reliable and scientifically valid evidence was available. It was suggested that their medical effects might be less severe than those of current conventional munitions.

Publications on this subject are very rare, but articles published in the late 1980s indicate that the fuel-air explosives used in the 1970s have long since been surpassed in effectiveness by a second generation, a third generation now being in the developmental stage. They also indicate that the physical and physiological shock caused by the FAE is so intense that it is similar to that produced by a nuclear weapon of less than a kiloton.

The principle of this new weapon is the production of an aerosol cloud of a volatile and inflammable liquid with high energy content which is mixed with the ambient air. When the right proportion of fuel to air is reached, the aerosol cloud is detonated. The result is a powerful blast similar, for example, to gas explosions that sometimes accidentally occur in houses or coal mines.

The detonation of the aerosol cloud generates a shock wave which propagates at the speed of sound from the cloud to a distance which may be as large as four times the size of the cloud. The overpressure reaches a very high level within the explosion. The overpressure decreases with the increase of the shock wave diameter, but the lethal radius is nevertheless very much greater than with an explosive weapon of similar size. The anti-personnel efficiency is 100% up to a certain distance and then decreases rapidly to zero.

FAE weapons have been used in Viet Nam, mainly to clear landing areas for helicopters and to neutralize mine fields. However, an anti-personnel use of FAEs appears to be being considered. The FAE aerosol cloud spreads through vegetation and follows the contours of the ground into foxholes and trenches where otherwise troops would be sheltered from fragmentation weapons. In fact the fuel-air mixture will enter any space not hermetically sealed and will seep into houses, ventilation systems, air intakes of engines, etc., thus making cover from bombardment virtually impossible for combatants and civilians alike.

According to the information available, the consequences for human beings of shock waves generated by fuel-air explosives are of exceptional severity. People at the fringe of the shock wave would suffer loss of hearing, serious concussion, pneumothorax, ruptured internal organs and blindness. Victims in or nearer the cloud would be annihilated. A person caught by shock waves from the blast would

probably be suffocated by his own blood coming from ruptured lungs, and death would either be instantaneous or could be an agonizing process lasting up to half an hour.

As far as we know, this new type of weapon is already being manufactured and deployed in certain corps of several armies. It is generally installed on assault vehicles.

As already mentioned, development work is under way in laboratories of industrialized nations to design and produce a FAE weapon of the third generation. These weapons should be simpler to produce and their firing devices could be controlled by a microprocessor.

Such a weapon, depending on its charge, could produce a devastating explosion within a radius of approximately 500 m.

4. Anti-personnel laser weapons

In the last few years, the military have taken advantage of scientific developments in the use of directed energy for various applications on the battlefield.

One of the most important of these developments is that of laser beams, which the military have been using for some time for range-finding, target designation and missile-guiding. These lasers are not weapons as such but improve the efficiency of traditional weapons.

However, recent articles in the specialized literature have reported the development of laser weapons for the purpose of destroying sensor systems on military vehicles, planes and tanks, and for anti-personnel use. These weapons would use low-energy laser beams which would be effective against only one part of the human body, namely, the eyes. The intense concentration of this light energy on the eye results in temporary or permanent blindness. Statements in these reports made it clear that developers of these weapons intentionally sought this blinding effect.

At the Lucerne and Lugano Conferences the possible development of anti-personnel laser weapons was discussed but there was far too little information at that stage to consider the subject carefully, and some participants thought that such a development was unlikely in the near future. However, one expert warned already at that stage that anti-personnel lasers would appear in the early 1980s, and indeed it has been divulged in the press only this year that some ships have been equipped with lasers since the early 1980s. The purpose of such lasers is principally to blind or dazzle pilots of incoming aircraft perceived as hostile, although recent articles refer only to dazzle as the effect sought by lasers on ships.

Reports indicate that more recently prototypes of portable laser weapons have been developed, some being relatively light, hand-held devices, for both anti-sensor and anti-personnel use. According to the same reports, production of such weapons is planned in the next year or so.

The ICRC was very concerned about this development and decided to gather more detailed information on the accuracy of these reports and on the effects of such weapons. An initial meeting was held in June 1989, bringing together experts in laser technology, ophthalmologists, experts in the military uses of lasers, psychologists specializing in problems of blindness and specialists in international humanitarian law. Some of the participants were private specialists, while others were government experts who attended in their personal capacity.

The meeting confirmed not only the fact that anti-sensor and anti-personnel laser weapons are being developed, but also that it is not so easy to achieve temporary rather than permanent blindness with such weapons, especially in the daytime. The chances of permanent blindness are therefore high, and the psychologists consulted stressed the very severe effects of this disability. The specialists in international humanitarian law were divided in their opinion as to whether intentionally causing permanent blindness, in the context of the possible military uses of these weapons, amounted to causing unnecessary suffering or superfluous injury. However, they agreed that the question calls for further study.

At the suggestion of the participants, the ICRC organized two working groups of scientific experts in 1990. The first studied in greater detail the nature and effect of the various laser weapons under development and in addition indicated that present range-finding equipment could be used as a weapon. The ophthalmologists present warned that treatment for the resulting injuries is at present, and will be for the foreseeable future, virtually non-existent.

The second working group, which will principally comprise psychiatrists and doctors, will study in greater detail the short and long-term effects, both for the individual and for society, of blindness as compared with other injuries typically sustained on the battlefield.

The information collected can then be used for a more thorough discussion of the legal and policy implications of the development of these weapons.

5. Directed energy weapons (DEW)

Apart from the anti-personnel laser weapon, which in some respects could also be considered as a directed energy weapon, there are also very special weapons, such as those using electromagnetic waves of different wavelengths and generators of particle beams, which are considered by some experts as extremely efficient potential anti-materiel weapons. Although this particular type of weapon, which requires a considerable energy supply, is unlikely to become operational on the battlefield in the near future, the same cannot be said for weapon systems using beams of electromagnetic waves or pulses.

The effects induced in human beings by electromagnetic waves have been known, albeit imperfectly, for a long time and have been the subject of continuous research. Depending on the frequency used, the emission mode, the energy radiated, and the shape and duration of the pulses used, electromagnetic radiations directed against the human body may produce heat and cause serious burns or even changes in the molecular structure of the tissues they reach.

Research work in this field has been carried out in almost all industrialized countries, and especially by the great powers, with a view to using these phenomena for anti-materiel or anti-personnel purposes. Tests have demonstrated that powerful microwave pulses could be used as a weapon in order to put the adversary *hors de combat* or even kill him. It is possible today to generate a very powerful microwave pulse (e.g., between 150 and 3,000 megahertz), with an energy level of several hundreds of megawatts. Using specially adapted antenna systems, these generators could in principle transmit over hundreds of metres sufficient energy to cook a meal.

However, it is important to mention that the lethal or incapacitating effects which can be expected from weapon systems using this technology can be produced with much lower energy levels. Using the principle of magnetic field concentration, which permits the control of the geometry on the target, by means of antenna systems especially designed for the purpose, the radiated energy can be concentrated on very small surfaces of the human body, for example the base of the brain where relatively low energy can produce lethal effects.

It seems that with currently available technology, serious consideration could be given to the production of such weapon systems, which could have a range of approximately 15 km and could sweep a zone with a series of fast pulses. Unprotected soldiers within this zone could be put *hors de combat* or killed within a few seconds.

Such a weapon could be installed on a truck and would therefore be easily transportable.

In spite of the rarity of publications on this subject, and the fact that it is usually strictly classified information, research undertaken in this field seems to have demonstrated that very small amounts of electromagnetic radiation could appreciably alter the functions of living cells. Research work has also revealed that pathological effects close to those induced by highly toxic substances could be produced by electromagnetic radiation even at very low power, especially those using a pulse shape containing a large number of different frequencies.

As mentioned earlier, the energy necessary to achieve these results is often much lower than the energy required to induce a significant effect of heat in body tissues.

Some research seems to have confirmed that low-level electromagnetic fields, modulated to be similar to normal brainwaves, could seriously affect brain function. Experiments with pulsed magnetic fields carried out in animals have reportedly produced specific effects such as inducing sleep and triggering anxiety or aggressiveness, depending on the modulation of the frequency used. It is, on the other hand, well known that lethal effects can also be produced by using higher power levels than those used for the experiments on behaviour modification. An anti-personnel weapon based on such biophysical principles could produce similar effects to those of a nerve gas, but would have no secondary effects and leave no lasting trace.

6. Conclusion

Despite advances in arms control and disarmament, which are well publicized in the media, considerable energies are quietly being directed towards the development of new weapons which have very serious implications from the humanitarian standpoint. Most of the research on these weapons is classified, or is published with incomplete information in highly specialized literature.

These developments are taking place without evidence of a serious analysis as to their conformity with international humanitarian law. The discussions in the conferences preparatory to the 1980 Convention, as well as the discussion at the ICRC Round Table on battlefield laser weapons in 1989, show that there is a growing reluctance to admit that the use of a weapon might violate the rule prohibiting weapons causing unnecessary suffering or superfluous injury. Although there is reasonable acceptance of the need to protect civilians from the effect of hostilities, there is a lack of will on the part of a number of

leading States to seriously consider the fate of combatants. The layman is usually unaware that, as a matter of principle, combatants should not be attacked with weapons causing unnecessary suffering or superfluous injury, but those who are familiar with international humanitarian law must realize that this rule is a logical and natural consequence of the basic philosophy of that law. Combatants may be attacked only to stop their hostile military acts; in other words the attack is aimed at averting the danger the combatant presents at that time, but not at the human being as such. The whole purpose of international humanitarian law is to protect people's dignity and accord them the respect and care to which they are entitled as human beings. It is no accident that the first codifications of humanitarian law in the 19th century dealt with the protection of the human being in the combatant, by according him prisoner-of-war status when he is captured, providing for medical care when he is wounded, and prohibiting the use of unnecessarily cruel weapons. This protection of the human being in the combatant means that in developing weapons for anti-personnel use, care must be taken that the degree of harm expected or aimed at is no more than that necessary to render the soldier *hors de combat*. *"Hors de combat"* in this context obviously means temporarily out of action, otherwise States would not be obliged to give medical care to wounded soldiers so that they can recover or to release prisoners of war once hostilities are over.

Although the injuries sustained do sometimes result in permanent disability or death, it is a different matter to aim intentionally at serious permanent disability or death when developing a new weapon, or to develop a weapon that normally has that effect, because this punishes the human being as such rather than hitting only at his military purpose. That is the reasoning behind the statement in the St. Petersburg Declaration that the legitimate object of weakening the military forces of the enemy would be "exceeded by the employment of arms which... render their death inevitable". It is submitted that it is not death in itself that is seen as unacceptable, as it often occurs in battle, but rather the use of weapons which normally have this permanent result.

The weapons that we have briefly described in this article all pose serious questions, new bullets frequently not being adequately tested for their effect, anti-personnel lasers for their sought-after permanent result and fuel-air explosives and electromagnetic weapons for the particular suffering they can cause and the 100% lethality they can allegedly achieve. It is particularly disturbing that these weapons are being developed without a thorough analysis of the legal implications.

Although all new weapons have a certain military utility—otherwise they would not have been developed—it is not sufficient to demonstrate genuine military utility in order to be cleared of legal problems. This military utility must be weighed against the suffering engendered, and when the latter is particularly acute, the former would have to be shown of particular importance also.

The final Protocol of the Brussels Conference in 1874 stated that it had been:

"unanimously declared that the progress of civilization should have the effect of alleviating, as far as possible, the calamities of war, and that the only legitimate object which States should have in view during war is to weaken the enemy without inflicting upon him unnecessary suffering".

It is noteworthy that "civilization" here is not equated with scientific discoveries and technological innovations, but rather with self-imposed restrictions to "alleviate the calamities of war". It is to be hoped that this concept of civilization has not died and that the rules protecting combatants are not in practice undermined or swept away in the drive to develop new weapons without thought to their immediate or long-term implications.

Louise Doswald-Beck
Gérald C. Cauderay

Louise Doswald-Beck, LLM (London), Barrister-at-Law, was formerly a lecturer in international law at Exeter University and then University College, London, with a particular specialization in the law relating to the use of force, international humanitarian law and international human rights law. She has been a member of the ICRC Legal Division since January 1987 when she specialized, in particular, in international humanitarian law relating to the conduct of hostilities.

Gérald C. Cauderay trained and worked for several years as a merchant navy radio and radar officer. He later held a number of senior positions in the electronics industry, in particular in the fields of telecommunications and marine and aeronautical radionavigation, before being appointed Industrial and Scientific Cousellor to the Swiss Embassy in Moscow. At the ICRC, Mr. Cauderay is in charge of matters related to the marking and identification of protected medical transports and units and to telecommunications. He published an article entitled: "Visibility of the distinctive emblem on medical establishments, units and transports" in the July-August 1990 issue of the *IRRC*.

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STATES PARTY TO THE CONVENTION ON PROHIBITIONS OR RESTRICTIONS ON THE USE OF CERTAIN CONVENTIONAL WEAPONS (10 OCTOBER 1980) and States party to Protocol I of 8 June 1977 additional to the Geneva Conventions of 12 August 1949

(as at 31 October 1990)

Ratification: R
Acceptance: A
Approval: AP
Accession: AC

D: Day
M: Month
Y: Year

Protocol I: P. I
Protocol II: P. II
Protocol III: P. III

Protocol I additional to the Geneva Conventions: P. I, ad. G.C.

STATES PARTY	CONVENTION (D.M.Y.)		P. I	P. II	P. III	P. I ad. G.C.
Australia	29.09.1983	R	X	X	X	
Austria	14.03.1983	R	X	X	X	X
Benin	27.03.1989	AC	X		X	X
Bulgaria	15.10.1982	R	X	X	X	X
Byelorussian SSR	23.06.1982	R	X	X	X	X
China	07.04.1982	R	X	X	X	X
Cuba	02.03.1987	R	X	X	X	X
Cyprus	12.12.1988	AC	X	X	X	X
Czechoslovakia	31.08.1982	R	X	X	X	X
Denmark	07.07.1982	R	X	X	X	X
Ecuador	04.05.1982	R	X	X	X	X
Finland	08.05.1982	R	X	X	X	X
France	04.03.1988	R	X	X		
Guatemala	21.07.1983	AC	X	X	X	X
Hungary	14.06.1982	R	X	X	X	X
India	01.03.1984	R	X	X	X	

STATES PARTY	CONVENTION (D.M.Y.)		P. I	P. II	P. III	P. I ad. G.C.
Japan	09.06.1982	A	X	X	X	
Lao (People's Dem. Rep.)	03.01.1983	AC	X	X	X	X
Liechtenstein	16.08.1989	R	X	X	X	X
Mexico	11.02.1982	R	X	X	X	X
Mongolia	08.06.1982	R	X	X	X	
Netherlands	18.06.1987	A	X	X	X	X
Norway	07.06.1983	R	X	X	X	X
Pakistan	01.04.1985	R	X	X	X	
Poland	02.06.1983	R	X	X	X	
Sweden	07.07.1982	R	X	X	X	X
Switzerland	20.08.1982	R	X	X	X	X
Tunisia	15.05.1987	AC	X	X	X	X
Ukrainian SSR	23.06.1982	R	X	X	X	X
USSR	10.06.1982	R	X	X	X	X
Yugoslavia	24.05.1983	R	X	X	X	X

On 31 October 1990, 31 States were party to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons (10 October 1980).

Among these States, 24 were party to Protocol I additional to the Geneva Conventions.

ICRC President in South-East Asia

ICRC President Mr. Cornelio Sommaruga visited Viet Nam, Combodia and Thailand from 19 September to 1 October 1990.

Invited by the Viet Nam Red Cross, Mr. Sommaruga met Mr. Do Muoi, Chaiman of Viet Nam's Council of Ministers, Mr. Nguyen Co Thach, Minister of Foreign Affairs, and Maj.-Gen. Mai Chi Tho, Minister of the Interior. Mr. Do agreed in principle to ICRC visits to security detainees.

The Vietnamese government also expressed its satisfaction at the orthopaedic project in Ho Chi Minh City and stressed the importance of the work done by the ICRC tracing service.

Mr. Sommaruga's talks with Mr. Hun Sen, Prime Minister of the State of Cambodia, led to progress in several areas: *ICRC delegates are to have greater facility of access to all parts of the country, agreement in principle was given for visits to persons detained in connection with the Cambodian conflict and permission was given, for the first time, for direct flights between Bangkok an Phnom Penh.* All humanitarian flights into Cambodia had previously had to be routed through Viet Nam.

On 2 October 1990, the first flight left the Thai capital for Phnom Penh with 4.5 tonnes of medical supplies on board. The ICRC hopes that this new air link will soon be set up on a regular basis.

Mr. Sommaruga also discussed plans for a blood bank with Mr. Hun Sen and expressed his satisfaction at the arrival last August of an ICRC surgical team in Mongkol Borei in western Cambodia. The ICRC's presence in that region is important in several respects. For example, the ICRC is thus able to work in a conflict area which will probably eventually receive most of the displaced persons now living in camps on the Thai border.

In Thailand, Mr. Sommaruga went to the Site 2, Khao-I-Dang and Site 8 camps on the Khmer-Thai border, where the ICRC has been working for eleven years.

Mr. Sommaruga met representatives of the National Societies in the three countries he visited. His discussions with them were focused on promoting knowledge of and respect for the principles of international humanitarian law.

FORTY-FIFTH SESSION OF THE UNITED NATIONS GENERAL ASSEMBLY

The ICRC is granted observer status at the United Nations

On 16 October 1990, the United Nations General Assembly decided to invite the ICRC to take part in its proceedings as an observer. A resolution to this effect, which was sponsored by 138 of the United Nations' members, was adopted without a vote.

The text of the resolution is as follows:

Observer status for the International Committee of the Red Cross in consideration of the special role and mandates conferred upon it by the Geneva Conventions of 12 August 1949

The General Assembly,

Recalling the mandates conferred upon the International Committee of the Red Cross by the Geneva Conventions of 12 August 1949,

Considering the special role carried on accordingly by the International Committee of the Red Cross in international humanitarian relations,

Desirous of promoting co-operation between the United Nations and the International Committee of the Red Cross,

1. *Decides* to invite the International Committee of the Red Cross to participate in the sessions and the work of the General Assembly in the capacity of observer,

2. *Requests* the Secretary-General to take the necessary action to implement the present resolution.

In a letter dated 16 August 1990 to the UN Secretary-General, the permanent representatives of 21 countries asked that the question of observer status for the ICRC be included in the agenda. The letter was accompanied by an explanatory memorandum (Doc. A/45/191), the text of which is printed below, and the draft resolution (see above).

* * *

The draft resolution was presented to a plenary meeting of the General Assembly by H.E. Mr. Vieri Traxler, Permanent Representative of Italy to the United Nations. It was for historical reasons, he explained, that Italy was presenting the resolution: Henry Dunant had conceived the idea of the Red Cross on the battlefield in Solferino. Speaking on behalf of the co-sponsors, Mr. Traxler first paid tribute to the ICRC for its achievements in the codification, development and implementation of international humanitarian law and for its role as a neutral and impartial intermediary dedicated to the pursuit of humanitarian ends. He then proposed that the ICRC's impressive contribution to the humanitarian cause be saluted by granting it observer status.

It should be recalled here that a number of States and Organizations, in particular specialized or regional international organizations, have observer status at the United Nations. This is the first time, however, that such status has been granted to an institution which is not a government organization. In this connection Mr. Traxler pointed out that according to the co-sponsors of the proposal, the granting of observer status to the ICRC should not be considered as a precedent, and went on to say that "the special role conferred upon the ICRC by the international community and the mandates given to it by the Geneva Conventions make of it an institution unique of its kind and exclusively alone in its status".

Several other speakers, in particular the representatives of India, Pakistan and the United States, endorsed this view.

* * *

Mr. Cornelio Sommaruga, ICRC President, remarked that *"the ICRC's admission as an observer to the United Nations represents a remarkable recognition of the role played by the institution in international affairs"*. Through its decision, the General Assembly has reaffirmed both the ICRC's mandates and the humanitarian principles on which its work is based, especially those of neutrality, impartiality and universality. It will also foster closer co-operation between the ICRC and the UN.

In practical terms, now that the ICRC can voice its opinion on subjects within its competence and has access not only to United Nations documents but also to meetings of the General Assembly and its committees, the ICRC's representatives at United Nations meetings in New York, Geneva and elsewhere will be able to make its views heard more quickly and more directly by people who play a leading role on the international scene.

The *Review* will return to this subject in a future issue.

Annex

OBSERVER STATUS FOR THE INTERNATIONAL COMMITTEE OF THE RED CROSS IN CONSIDERATION OF THE SPECIAL ROLE AND MANDATES CONFERRED UPON IT BY THE GENEVA CONVENTIONS OF 12 AUGUST 1949

Explanatory memorandum

1. The International Committee of the Red Cross (ICRC) is an independent humanitarian institution that was founded at Geneva, Switzerland, in 1863. In conformity with the mandate conferred on it by the international community of States through universally ratified international treaties, ICRC acts as a neutral intermediary to provide protection and assistance to the victims of international and non-international armed conflicts.

2. The four Geneva Conventions of 12 August 1949 for the protection of war victims, to which 166 States are party, and their two Additional Protocols of 1977 explicitly establish the role of the ICRC as a neutral and impartial humanitarian intermediary. The treaties of international humanitarian law thus assign duties to ICRC that are similar to those of a Protecting Power responsible for safeguarding the interests of a State at war, in that ICRC may act as a substitute for the Protecting Power within the meaning of the 1949 Geneva Conventions and 1977 Additional Protocol I. Moreover, the International Committee of the Red Cross has the same right of access as a Protecting Power to prisoners of war (the Third Geneva Convention) and civilians covered by the Geneva Convention relative to the Protection of Civilian Persons in Time of War (the Fourth Geneva Convention). In addition to these specific tasks ICRC, as a neutral institution, has a right of initiative deriving from a provision common to the four Geneva Conventions that entitles it to make any proposal it deems to be in the interest of the victims of the conflict.

3. The Statutes of the International Red Cross and Red Crescent Movement, as adopted by the International Conference of the Red Cross and Red Crescent, in which the States parties to the Geneva Conventions take part, require ICRC to spread knowledge and increase understanding of international humanitarian law and promote the development thereof. The Statutes also provide that ICRC shall uphold and make known the Movement's fundamental principles, namely, humanity, impartiality, neutrality, independence, voluntary service, unity and universality.

4. It was at the initiative of ICRC that the original Geneva Convention for the Amelioration of the Condition of the Wounded in Armies in the Field was adopted by Governments in 1864. Ever since, ICRC has endeavoured to develop international humanitarian law to keep pace with the evolution of conflicts.

5. In order to fulfil the mandate conferred on it by international humanitarian law, the resolutions of the International Conference of the Red Cross and Red Crescent and the Statutes of the Movement, ICRC has concluded with many States headquarters agreements governing the status of its delegations and their staff. In the course of its work, ICRC has concluded other agreements with States and intergovernmental organizations.

6. With an average of 590 delegates working in 48 delegations, ICRC was active in 1989 in nearly 90 countries in Africa, Asia, Europe, Latin America and the Middle East — including the countries covered from its various regional delegations — providing protection and assistance to the victims of armed conflicts by virtue of the Geneva Conventions and, with the agreement of the Governments concerned, to victims of internal disturbances and tension.

7. In the event of international armed conflict, the mandate of ICRC is to visit prisoners of war and civilians in accordance with the provisions of the Geneva Convention relative to the Treatment of Prisoners of War (Third Convention), the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Fourth Convention) and the Protocol Additional to the Geneva Conventions of 12 August 1949 and relating to the Protection of Victims of International Armed Conflicts (Protocol I). In situations of non-international armed conflict, ICRC bases its requests for access to persons deprived of their freedom on account of the conflict on Article 3 common to the Geneva Conventions and on the Protocol Additional to the Geneva Conventions of 12 August 1949 and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II).

8. In situations other than those covered by the Geneva Conventions and their Additional Protocols, ICRC may avail itself of its statutory right of initiative to propose to Governments that it be granted access to persons deprived of their freedom as a result of internal disturbances and tension.

9. The purpose of ICRC visits to persons deprived of their freedom is exclusively humanitarian: ICRC delegates observe the treatment afforded to prisoners, examine their material and psychological conditions of detention and, whenever necessary, request the authorities to take steps to improve the detainees' treatment and living conditions. ICRC never expresses an opinion on the grounds for detention. Its findings are recorded in confidential reports that are not intended for publication.

10. In the event of armed conflicts or internal disturbances, ICRC provides material and medical assistance, with the consent of the Governments concerned and on condition that it is allowed to assess the urgency of victims' needs on the spot, to carry out surveys in the field to identify the categories and the number of people requiring assistance and to organize and monitor relief distributions.

11. The activities of the Central Tracing Agency of ICRC are based on the institution's obligations under the Geneva Conventions to assist military and civilian victims of international armed conflicts and on its right of humanitarian initiative in other situations. The work of the Agency and its delegates in the field consists in collecting, recording, centralizing and, where appropriate, forwarding information concerning people entitled to ICRC assistance, such as prisoners of war, civilian internees, detainees, displaced persons and refugees. It also includes restoring contact between separated family members, essentially by means of family messages where normal means of communication do not exist or have been disrupted because of a conflict, tracing persons reported missing or whose families have no news of them, organizing family reunifications, transfers to safe places and repatriation operations.

12. The tasks of ICRC and the United Nations increasingly complement one another and co-operation between the two institutions is closer, both in their field activities and in their efforts to enhance respect for international humanitarian law. In recent years, this has been seen in many operations to provide protection and assistance to the victims of conflict in all parts of the world.

13. ICRC and the United Nations have also co-operated closely on legal matters, with ICRC contributing to United Nations work in this field. This is also reflected in resolutions of the Security Council,

the General Assembly and its subsidiary bodies and reports of the Secretary-General.

14. Participation of ICRC as an observer at the proceedings of the General Assembly would further enhance co-operation between the United Nations and ICRC and facilitate the work of ICRC.

ICRC statement to mark the tenth anniversary of the 1980 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons

On 30 October 1990, the ICRC representative made a statement to the First Committee (Political and Security Matters) of the UN General Assembly on item 64 of the agenda relative to the *1980 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects.*

This statement, the first made by the ICRC in its capacity as an observer, was the institution's contribution to the celebration of the Convention's tenth anniversary.

The text of the statement is reproduced hereafter. In it the ICRC calls on all members of the international community to adopt the Convention and its three Protocols. On the same day, in the General Assembly's Third Committee (Humanitarian Questions), the ICRC reiterated its appeal for the ratification of the 1980 Convention under the agenda item "A New International Humanitarian Order".

STATEMENT BY THE INTERNATIONAL COMMITTEE OF THE RED CROSS

The 1868 Declaration of St. Petersburg was one of the first international documents designed to place constraints upon the conduct of war. The representatives of the signatory States expressed their conviction that "the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable" would be "contrary to the laws of humanity". These States therefore undertook to renounce the use of certain explosive projectiles likely to cause particularly terrible injuries. Thus, as early as 1868, States expressed a principle which today is one of the fundamental rules of international humanitarian law applicable in armed conflicts.

The 1899 and 1907 Hague Conventions transformed the St. Petersburg principle into a legal rule. Article 35 of Protocol I additional to the Geneva Conventions of 12 August 1949 and relating to the protection of victims of international armed conflicts expresses the rule in its present form. Paragraph 2 of that article states: "It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering".

This prohibition stems from one of the basic principles of international humanitarian law, which is expressed in the first paragraph of the same Article 35 of Additional Protocol I: "In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited".

In addition, Article 36 of the same Protocol I obliges States party to this treaty to determine, when studying, developing, acquiring or adopting a new weapon, whether that weapon is prohibited by international law.

This brief review of the historical background to the present rule prohibiting the use of weapons and methods of warfare of a nature to cause superfluous injury or unnecessary suffering—or which limits their use—is intended as a reminder that the 1980 Convention, whose tenth anniversary we mark this year, is firmly rooted in international humanitarian law. Its Protocols give fuller expression to a funda-

mental rule contained in the first Protocol additional to the Geneva Conventions and thus enable it to be applied to specific weapons.

Ten years ago, the ICRC hailed the adoption of the 1980 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons *by the United Nations Conference convened for that purpose. It was pleased to have contributed to the success of the long and patient negotiations, especially by organizing the preliminary work. Although the ICRC was only an observer at the Conference when the Convention was adopted, for the following reasons it fully supports its aims:*

1. With each of its three Protocols prohibiting or restricting the use of certain types of weapon, the 1980 Convention contributes directly to the general aim of international humanitarian law, namely to limit the suffering caused by hostilities.

2. The 1980 Convention is an open-ended treaty, for, by negotiating further Protocols, it is possible to prohibit or limit the use of other methods or means of combat which would run counter to the general rule in Article 35 of Additional Protocol I and have harmful effects of grave humanitarian concern.

3. The International Conference of the Red Cross and Red Crescent, which brings together the States party to the Geneva Conventions and the various components of the International Red Cross and Red Crescent Movement, has on several occasions expressed its support for the 1980 Convention. The Twenty-fith International Conference (Geneva, 1986) adopted a resolution, for instance, appealing to all States to become party to this Convention (Resolution VII).

For these reasons, the ICRC hopes that the 1980 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons *will be extensively adopted by the international community. It would like to encourage those States which have not already done so to mark this tenth anniversary of the Convention and its three Protocols by becoming party thereto.*

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ADDRESSES OF NATIONAL RED CROSS AND RED CRESCENT SOCIETIES

AFGHANISTAN (Democratic Republic of) — Afghan Red Crescent Society, Puli Hartan, *Kabul.*

ALBANIA (Socialist People's Republic of) — Albanian Red Cross, Rue Qamil Guranjaku N.° 2, *Tirana.*

ALGERIA (People's Democratic Republic of) — Algerian Red Crescent, 15 bis, boulevard Mohamed V, *Algiers.*

ANGOLA — Cruz Vermelha de Angola, Av. Hoji Ya Henda 107, 2. andar, *Luanda.*

ARGENTINA — The Argentine Red Cross, H. Yrigoyen 2068, *1089 Buenos Aires.*

AUSTRALIA — Australian Red Cross Society, 206, Clarendon Street, *East Melbourne 3002.*

AUSTRIA — Austrian Red Cross, 3, Gusshausstrasse, Postfach 39, A-1041, *Vienne 4.*

BAHAMAS — The Bahamas Red Cross Society, P.O. Box N-8331, *Nassau.*

BAHRAIN — Bahrain Red Crescent Society, P.O. Box 882, *Manama.*

BANGLADESH — Bangladesh Red Crescent Society, 684-686, Bara Magh Bazar, Dhaka-1217, G.P.O. Box No. 579, *Dhaka.*

BARBADOS — The Barbados Red Cross Society, Red Cross House, Jemmotts Lane, *Bridgetown.*

BELGIUM — Belgian Red Cross, 98, chaussée de Vleurgat, *1050 Brussels.*

BELIZE — Belize Red Cross Society, P.O. Box 413, *Belize City.*

BENIN (Republic of) — Red Cross of Benin, B.P. No. 1, *Porto-Novo.*

BOLIVIA — Bolivian Red Cross, Avenida Simón Bolivar, 1515, *La Paz.*

BOTSWANA — Botswana Red Cross Society, 135 Independence Avenue, P.O. Box 485, *Gaborone.*

BRASIL — Brazilian Red Cross, Praça Cruz Vermelha No. 10-12, *Rio de Janeiro.*

BULGARIA — Bulgarian Red Cross, 1, Boul. Biruzov, 1527 *Sofia.*

BURKINA FASO — Burkina Be Red Cross Society, B.P. 340, *Ouagadougou.*

BURUNDI — Burundi Red Cross, rue du Marché 3, P.O. Box 324, *Bujumbura.*

CAMEROON — Cameroon Red Cross Society, rue Henri-Dunant, P.O.B 631, *Yaoundé.*

CANADA — The Canadian Red Cross Society, 1800 Alta Vista Drive, *Ottawa,* Ontario KIG 4J5.

CAPE-VERDE (Republic of) — Cruz Vermelha de Cabo Verde, Rua Unidade-Guiné-Cabo Verde, P.O. Box 119, *Praia.*

CENTRAL AFRICAN REPUBLIC — Central African Red Cross Society, B.P. 1428, *Bangui.*

CHAD — Red Cross of Chad, B.P. 449, *N'Djamena.*

CHILE — Chilean Red Cross, Avenida Santa Maria No. 0150, Correo 21, Casilla 246-V., *Santiago de Chile.*

CHINA (People's Republic of) — Red Cross Society of China, 53, Ganmien Hutong, *Beijing.*

COLOMBIA — Colombian Red Cross Society, Avenida 68, N.° 66-31, Apartado Aéreo 11-10, *Bogotá D.E.*

CONGO (People's Republic of the) — Croix-Rouge congolaise, place de la Paix, B.P. 4145, *Brazzaville.*

COSTA RICA — Costa Rica Red Cross, Calle 14, Avenida 8, Apartado 1025, *San José.*

CÔTE D'IVOIRE — Croix-Rouge de Côte d'Ivoire, B.P. 1244, *Abidjan.*

CUBA — Cuban Red Cross, Calle Calzada 51 Vedado, Ciudad Habana, *Habana 4.*

THE CZECH AND SLOVAK FEDERAL REPUBLIC — Czechoslovak Red Cross, Thunovskà 18, *118 04 Prague 1.*

DENMARK — Danish Red Cross, Dag Hammarskjölds Allé 28, Postboks 2600, *2100 København Ø.*

DJIBOUTI — Société du Croissant-Rouge de Djibouti, B.P. 8, *Djibouti.*

DOMINICA — Dominica Red Cross Society, P.O. Box 59, *Roseau.*

DOMINICAN REPUBLIC — Dominican Red Cross, Apartado postal 1293, *Santo Domingo.*

ECUADOR — Ecuadorean Red Cross, calle de la Cruz Roja y Avenida Colombia, *Quito.*

EGYPT (Arab Republic of) — Egyptian Red Crescent Society, 29, El Galaa Street, *Cairo.*

EL SALVADOR — Salvadorean Red Cross Society, 17C. Pte y Av. Henri Dunant, *San Salvador,* Apartado Postal 2672.

ETHIOPIA — Ethiopian Red Cross Society, Ras Desta Damtew Avenue, *Addis-Ababa.*

FIJI — Fiji Red Cross Society, 22 Gorrie Street, P.O. Box 569, *Suva.*

FINLAND — Finnish Red Cross, Tehtaankatu, 1 A. Box 168, *00141 Helsinki 14/15.*

FRANCE — French Red Cross, 1, place Henry-Dunant, F-75384 *Paris,* CEDEX 08.

GAMBIA — The Gambia Red Cross Society, P.O. Box 472, *Banjul.*

GERMAN DEMOCRATIC REPUBLIC — German Red Cross of the German Democratic Republic, Kaitzer Strasse 2, DDR, 8010 *Dresden.*

GERMANY, FEDERAL REPUBLIC OF — German Red Cross in the Federal Republic of Germany, Friedrich-Erbert-Allee 71, *5300, Bonn 1,* Postfach 1460 (D.B.R.).

GHANA — Ghana Red Cross Society, National Headquarters, Ministries Annex A3, P.O. Box 835, *Accra.*

GREECE — Hellenic Red Cross, rue Lycavittou, 1, *Athens 10672.*

GRENADA — Grenada Red Cross Society, P.O. Box 221, *St George's.*

GUATEMALA — Guatemalan Red Cross, 3.ª Calle 8-40, Zona 1, *Ciudad de Guatemala.*

GUINEA — The Guinean Red Cross Society, P.O. Box 376, *Conakry.*

GUINEA-BISSAU — Sociedad Nacional da Cruz Vermelha de Guiné-Bissau, rua Justino Lopes N.° 22-B, *Bissau.*

GUYANA — The Guyana Red Cross Society, P.O. Box 10524, Eve Leary, *Georgetown*

HAITI — Haitian National Red Cross Society, place des Nations Unies, (Bicentenaire), B.P. 1337, *Port-au-Prince.*

HONDURAS — Honduran Red Cross, 7.ª Calle, 1.ª y 2.ª Avenidas, *Comayagüela D.M.*

HUNGARY (The Republic of) — Hungarian Red Cross, V. Arany János utca, 31, *Budapest 1367.* Mail Add.: *1367 Budapest 5l. Pf. 121.*

ICELAND — Icelandic Red Cross, Raudararstigur 18, 105 *Reykjavik.*

INDIA — Indian Red Cross Society, 1, Red Cross Road, *New-Dehli 110001.*

INDONESIA — Indonesian Red Cross Society, Il Jend Gatot subroto Kar. 96, Jakarta Selatan 12790, P.O. Box 2009, *Jakarta.*

IRAN — The Red Crescent Society of the Islamic Republic of Iran, Avenue Ostad Nejatollahi, *Tehran.*

IRAQ — Iraqui Red Crescent Society, Mu'ari Street, Mansour, *Bagdad.*

IRELAND — Irish Red Cross Society, 16, Merrion Square, *Dublin 2.*

ITALY — Italian Red Cross, 12, via Toscana, 00187 *Rome.*

JAMAICA — The Jamaica Red Cross Society, 76, Arnold Road, *Kingston 5.*

JAPAN — The Japanese Red Cross Society, 1-3, Shiba-Daimon, I-chome, Minato-Ku, *Tokyo 105.*

JORDAN — Jordan National Red Crescent Society, P.O. Box 10001, *Amman.*

KENYA — Kenya Red Cross Society, P.O. Box 40712, *Nairobi.*

KOREA (Democratic People's Republic of) — Red Cross Society of the Democratic People':s Republic of Korea, Ryonhwa 1, Central District, *Pyongyang.*

KOREA (Republic of) — The Republic of Korea National Red Cross, 32-3Ka, Nam San Dong, Choong-Ku, *Seoul 100-043.*

KUWAIT — Kuwait Red Crescent Society, (provisional headquarters in Bahrain), P.O. Box 882, *Manama.*

LAO PEOPLE'S DEMOCRATIC REPUBLIC — Lao Red Cross, B.P. 650, *Vientiane.*

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LESOTHO — Lesotho Red Cross Society, P.O. Box 366, *Maseru 100.*

LIBERIA — Liberian Red Cross Society, National Headquarters, 107 Lynch Street, 1000 *Monrovia 20*, West Africa.

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MOROCCO — Moroccan Red Crescent, B.P. 189, *Rabat.*

MOZAMBIQUE — Cruz Vermehla de Moçambique, Caixa Postal 2986, *Maputo.*

MYANMAR (The Union of) — Myanmar Red Cross Society, 42, Strand Road, *Yangon.*

NEPAL — Nepal Red Cross Society, Tahachal Kalimati, P.B. 217 *Kathmandu.*

NETHERLANDS — The Netherlands Red Cross, P.O.B. 28120, *2502 KC The Hague.*

NEW ZEALAND — The New Zealand Red Cross Society, Red Cross House, 14 Hill Street, *Wellington 1.* (P.O. Box 12-140, *Wellington Thorndon.*)

NICARAGUA — Nicaráguan Red Cross, Apartado 3279, *Managua D.N.*.

NIGER — Red Cross Society of Niger, B.P. 11386, *Niamey.*

NIGERIA — Nigerian Red Cross Society, 11 Eko Akete Close, off St. Gregory's Rd., P.O. Box 764, *Lagos.*

NORWAY — Norwegian Red Cross, P.O. Box 6875, St. Olavspl. N-0130 *Oslo 1.*

PAKISTAN — Pakistan Red Crescent Society, National Headquarters, Sector H-8, *Islamabad.*

PANAMA — Red Cross Society of Panama, Apartado Postal 668, *Panamá 1.*

PAPUA NEW GUINEA — Papua New Guinea Red Cross Society, P.O. Box 6545, *Boroko.*

PARAGUAY — Paraguayan Red Cross, Brasil 216, esq. José Berges, *Asunción.*

PERU — Peruvian Red Cross, Av. Camino del Inca y Nazarenas, Urb. Las Gardenias — Surco — Apartado 1534, *Lima.*

PHILIPPINES — The Philippine National Red Cross, Bonifacio Drive, Port Area, P.O. Box 280, *Manila 2803.*

POLAND (The Republic of) — Polish Red Cross, Mokotowska 14, 00-950 *Warsaw.*

PORTUGAL — Portuguese Red Cross, Jardim 9 Abril, 1 a 5, 1293 *Lisbon.*

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ROMANIA — Red Cross of Romania, Strada Biserica Amzei, 29, *Bucarest.*

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SAINT LUCIA — Saint Lucia Red Cross, P.O. Box 271, *Castries St. Lucia,* W. I.

SAINT VINCENT AND THE GRENADINES — Saint Vincent and the Grenadines Red Cross Society, P.O. Box 431. *Kingstown.*

SAN MARINO — Red Cross of San Marino, Comité central, *San Marino.*

SÃO TOMÉ AND PRINCIPE — Sociedade Nacional da Cruz Vermelha de São Tomé e Príncipe, C.P. 96, *São Tomé.*

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SOMALIA (Democratic Republic) — Somali Red Crescent Society, P.O. Box 937, *Mogadishu.*

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SPAIN — Spanish Red Cross, Eduardo Dato, 16, *Madrid 28010.*

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SUDAN (The Republic of the) — The Sudanese Red Crescent, P.O. Box 235, *Khartoum.*

SURINAME — Suriname Red Cross, Gravenberchstraat 2, Postbus 2919, *Paramaribo.*

SWAZILAND — Baphalali Swaziland Red Cross Society, P.O. Box 377, *Mbabane.*

SWEDEN — Swedish Red Cross, Box 27 316, *102-54 Stockholm.*

SWITZERLAND — Swiss Red Cross, Rainmattstrasse 10, B.P. 2699, *3001 Berne.*

SYRIAN ARAB REPUBLIC — Syrian Arab Red Crescent, Bd Mahdi Ben Barake, *Damascus.*

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THAILAND — The Thai Red Cross Society, Paribatra Building, Central Bureau, Rama IV Road, *Bangkok 10330.*

TOGO — Togolese Red Cross, 51, rue Boko Soga, P.O. Box 655, *Lomé.*

TONGA — Tonga Red Cross Society, P.O. Box 456, *Nuku'Alofa, South West Pacific.*

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TURKEY — The Turkish Red Crescent Society, Genel Baskanligi, Karanfil Sokak No. 7, 06650 Kizilay-*Ankara.*

UGANDA — The Uganda Red Cross Society, Plot 97, Buganda Road, P.O. Box 494, *Kampala.*

UNITED ARAB EMIRATES — The Red Crescent Society of the United Arab Emirates, P.O. Box No. 3324, *Abu Dhabi.*

UNITED KINGDOM — The British Red Cross Society, 9, Grosvenor Crescent, *London, S.W.IX. 7EJ.*

USA — American Red Cross, 17th and D. Streets, N.W., *Washington, D.C. 20006.*

URUGUAY — Uruguayan Red Cross, Avenida 8 de Octubre 2990, *Montevideo.*

U.R.S.S — The Alliance of Red Cross and Red Crescent Societies of the U.S.S.R., I, Tcheremushkinskii proezd 5, *Moscow, 117036.*

VENEZUELA — Venezuelan Red Cross, Avenida Andrés Bello, N.º 4, Apartado, 3185, *Caracas 1010.*

VIET NAM (Socialist Republic of) — Red Cross of Viet Nam, 68, rue Ba-Trièu, *Hanoi.*

WESTERN SAMOA — Western Samoa Red Cross Society, P.O. Box 1616, *Apia.*

YEMEN (Republic of) — Yemeni Red Crescent Society, P.O. Box 1257, *Sana'a.*

YUGOSLAVIA — Red Cross of Yugoslavia, Simina ulica broj 19, *11000 Belgrade.*

ZAIRE — Red Cross Society of the Republic of Zaire, 41, av. de la Justice, Zone de la Gombe, B.P. 1712, *Kinshasa.*

ZAMBIA — Zambia Red Cross Society, P.O. Box 50 001, 2837 Saddam Hussein Boulevard, Longacres, *Lusaka.*

ZIMBABWE — The Zimbabwe Red Cross Society, P.O. Box 1406, *Harare.*

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