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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

Geneva, 15 September - 10 October 1980

REPORT OF THE COMMITTEE OF THE WHOLE

1. The Committee of the Whole commenced its work on 16 September 1980 and held a total of seven meetings between that date and 9 October, the summary records of which are set out in documents A/CONF.95/CW/SR.10 to 16.

2. Mr. Petar Voutov (Bulgaria), who had been appointed Chairman of the Committee at the Conference's previous session, continued to serve in that capacity at the current session of the Conference. Mr. Prvoslav Davinić served as the Secretary of the Committee.

3. At its 10th meeting, the Committee of the Whole, pursuant to the decision of the Plenary of the Conference, requested the Working Group on Landmines and Booby-traps and the Working Group on Incendiary Weapons to continue deliberations on their respective draft protocols and to submit their final reports to it according to the set agreed timetable.

4. At its 11th meeting, held on 19 September, the Committee of the Whole decided to transmit the text of a draft protocol on non-detectable fragments to the Drafting Committee on which agreement had been reached at the previous session of the Conference.

5. At the same meeting the Committee decided to refer to the Drafting Committee parts of the draft protocol on prohibitions or restrictions on the use of mines, booby-traps and other devices, on which agreement had already been reached.

6. At its 14th meeting, held on 3 October, the Committee of the Whole took note of the report of the Working Group on Land-mines and Booby-traps (A/CONF.95/CW/7) and referred the remaining text of the draft protocol attached thereto, to the Drafting Committee. In connexion with Article 3 of the draft protocol, the Committee of the Whole agreed that for the understanding and application of that Article, the following interpretation on Article 3 (3) (a) (i) should be included in the report of the Conference as the understanding of the Conference:

"Article 3 (3) (a) (i) must be read in combination with Article 3 (3) (c) and 3 ter. They are of universal application, irrespective of the whereabouts of opposing forces. The parties must take whatever measures are open to them to protect civilians wherever they are. They may use the records for this purpose by, for example, marking minefields or otherwise warning the civilian population of the dangers of mines and boody-traps. The parties may, if they wish, assist in this process by providing, either unilaterally, by mutual agreement, or through the Secretary-General of the United Nations, information about the location of minefields, mines and booby-traps".

In connexion with Article 4 of the draft protocol, the Committee of the Whole agreed that for the understanding and application of that Article, it should be noted that the restrictions in Article 2 bis apply fully to the use of remotely delivered mines to which Article 4 specifically applies. This understanding should constitute an integral part of the records of the Conference.

7. At its 15th meeting, held on 8 October, the Committee of the Whole took note of the report of the Working Group in Incendiary Weapons (A/CONF.95/CW/6 and Add.1) and referred the text of the draft protocol attached thereto, to the Drafting Committee. In connexion with the draft protocol, the Committee of the Whole also noted the recommendation of the Working Group that the following statement should be included in the report of the Conference:

"It is the understanding of the Conference that the exceptions to the definition of incendiary weapons mentioned in paragraph 3 are to be interpreted in good faith and not to alter the intent or to prejudice the application of the rules concerning the prohibition or restriction of the use of incendiary weapons contained in the Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons, especially the protection of civilians and civilian objects."

8. At its 15th meeting, in order to avoid duplication of work, the Committee of the Whole decided to request the Drafting Committee to submit its report and the texts of the protocols directly to the plenary of the Conference.

9. In addition to the weapons referred to above, consideration was given to questions concerning small calibre weapons systems. On the basis of a working paper, introduced by Sweden on 26 September (A/CONF.95/CW/5), informal consultations took place among interested delegations on the matter of small calibre weapons systems. The conclusions of these consultations were introduced to the Committee of the Whole on 8 October and are reproduced in document A/CONF.95/CW/8, which is attahced to this report (Annex I).

10. Concerning the questions of fuel-air explosives, anti-personnel fragmentation weapons and flechettes, time did not allow for their consideration and consequently no agreement thereon could be reached. Many delegations felt, however, that these questions could be taken up in due time, in the context of the follow-up mechanism contained in the general convention (Annex II).

11. At its 16th meeting held on 9 October, the Committee approved its report to the Conference, which was introduced by the Rapporteur of the Conference, Mr. Robert J. Akerman.

ANNEX I

SUMMARY OF THE TECHNICAL CONSULTATIONS IN THE INFORMAL WORKING GROUP ON SMALL CALIBRE WEAPONS SYSTEMS */

Submitted by Sweden

The purpose of the consultations was to provide for technical discussion and exchange of views on the question of small calibre weapons systems, using documents A/CONF.95/PREP.CONF./9, Annex 3 to A/CONF.95/8 and A/CONF.95/CW/5 as a basis for discussions, but without seeking to reach agreement on specific texts.

The philosophy on which the previous working group was based was the concept of relating wounding to energy transfer. This idea seemed potentially promising to some delegations, whereas others expressed reservations or confined their comments to the discussion of technical issues. These discussions sought to add to or clarify information available since the last working group met.

It continues to be the case that technical differences of opinion exist. A point-to-point discussion of the Annex of A/CONF.95/PREP.CONF./9 is attached and indicates not only where differences continue, but also where technical issues have now reached common understanding. In this context, comments are also provided relative to A/CONF.95/CW/5.

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*/ Previously issued under the symbol A/CONF.95/CW.8.

ATTACHMENT

Discussion of A/CONF.95/PREP.CONF./9.

This discussion was a point-by-point discussion of the Annex of the above report.

1. It was again questioned whether Sweden would propose to test bullets or combination bullet/weapon systems. It was generally agreed that the total combined system would have to be the basis for any testing and evaluation. It was also acknowledged that this would be a difficult and potentially expensive requirement, but nevertheless a logical one.

2. It was again questioned whether the Swedish delegates preferred the term bullets or projectiles. It was agreed that projectiles was the more encompassing term but that for the sake of simplicity at this point, the question should be limited to what is generally termed to be bullets.

3. Weapon system was determined to include all parts of the weapon/ammunition combination which may affect the performance of the bullet. For example, if a sighting system is sufficiently heavy enough, upon firing, to influence the bullet leaving the barrel, then that sighting system is considered part of the weapon/ammunition system.

4. It was agreed that barrel wear affects bullet performance, often substantially, and thus can significantly change the characteristics of the bullet at the target. It was also noted that the requirement to test weapon system combinations at various stages of barrel wear would be costly and time consuming. While new weapons would certainly be a primary concern, the barrel wear problem was deemed to be appropriate for consideration as a technical problem in that barrel wear is the rule rather than the exception on the battlefield.

5. Sweden indicated that their concept of "high energy transfer" may be demonstrated by the mm curve on page 3 of A/CONF.95/CW/5. They also explained that they felt that the change in shape of the curve at the top was due to the bullet achieving its maximum yaw and remaining at that yaw, followed by some deformation, followed by a decrease in velocity. Sweden stated that the specific definition of high energy transfer would be energy deposits exhibited after yaw or tumbling is initiated.

6. There was a question of whether armour piercing ammunition was to be considered within the limitation proposed. The Swedish delegation indicated that armour piercing bullets were generally not to be considered except to the extent that they would be also intended for use against personnel. It was also noted that "behind armour" effects of armour piercing ammunition were not to be considered.

7. It was agreed that indirect hits in the sense of ricochet were not to be considered. Considerable discussion ensued on whether body armour was to be considered in any testing and evaluation. The Swedish delegation indicated their opinion that body armour should be considered only to the extent that it would represent a typical situation. The United States delegation indicated their belief that any testing should include body armour because of the potential for inducement of yaw by the armour. All agreed that testing to include body armour would be more difficult and expensive.

8. There was continued agreement that such weapons as laser systems were not intended to be within the scope of document L.14.

9. It was generally agreed that simple reference to "energy transfer" is less ambiguous than such terminology as "tumble easily", "break up easily", and so forth.

10. There was no discussion as to the term close to the point of impact. Discussion of the question of length of wound tracks is noted below in paragraph 13.

11. Sweden re-emphasized, in reference to Annex 1 of A/CONF.95/CW.5, that yaw angle is particularly important in describing the nature of the bullet effects on a target. The United States agreed and noted that that is a reason why the United States is concerned about yaw angles induced as a result of bullets passing through body armour.

12. There still exists substantial technical disagreement as to the assumption of muscle tissue as the representative tissue of the human body. This is the most basic disagreement held by the United States in that the United States considers that at least 50 per cent of the hits can be expected to encounter at least bone in addition to muscle tissue or other tissue. Further, the United States considers that a substantial portion (perhaps over 50 per cent) of the hits can be expected in the head, neck, thorax and torso area. It is in these areas that the most serious wounds occur and yet it is in these areas that muscle tissue is the least likely to be encountered as compared to other tissue. However, the Swedish delegation indicated that the energy transfer caused by a certain bullet in various tissues would be relatively little affected by the composition of the tissues (with a few exceptions such as lung tissue which has a low density). However, the gravity of the wound caused by a certain energy transfer released in various parts of the body may vary greatly. Also, the damage criteria for various components of the body are much different.

13. It was generally agreed that a probability function, such as used by the United States, in considering the possibility of encountering tissue over all wound lengths in the human body should be applicable to any method of assessing energy transfer characteristics of bullets. It was also noted that the average thickness of the body, as a whole, is about 15 cm while average thickness of body parts may vary.

14. There is still some disagreement as to what might be the expected distribution of small calibre weapons wounds over the human body.

15. In relation to the Y and Z factors of the Appendix of document L.14, the Swedish experts referred to the curve on page 3 of document CW/5. As to the calibre .50 machine gun, there is still some question as to whether such weapons are within the scope of discussions on small calibre projectiles.

16. There was agreement that ammunition for peacetime law enforcement was not included in the scope of document L.14. It was generally agreed that "immediate incapacitation" (e.g. within one second) was not considered normally feasible as an incapacitation criterion for small calibre weapons system. It was noted that such immediate incapacitation could only be achieved by hits affecting the central nervous system. It was recognized that most commonly used incapacitation criteria reflects substantially longer times to incapacitation.

17. Both the United States and Swedish delegations indicated that simulated range methodology is feasible although such methodology requires expensive and sophisticated equipment. Disagreement still exists as to what ranges are relevant for testing.

18. Sweden presented document CW/5 as an indication that a specified soap composition can be used as a muscle tissue simulant. It was recognized that both soap and gelatin are acceptable muscle tissue simulants as regards density of material and its effect on bullets. There are still technical unknowns as to the relative acceptability of soap and gelatin as regards viscosity and strength of material.

19. The Swedish experts referred to document CW/5 as an indication that there is an easy method of estimating energy transfer characteristics in muscle tissue simulant. The United States disputed the applicability of that methodology for estimating severity of wounding for the whole body. There was a general agreement that the flash x-ray technology is an acceptable means of measuring bullet performance in a simulant medium. The Mexican delegation suggested such testing could be made on a comparative basis and that simulants could never exactly represent human beings. They further suggested that such comparisons could be made on a statistical basis.

ANNEX II

Draft proposal on fuel-air explosives submitted by Mexico, Sweden and Switzerland */

The States Parties to this Protocol,

Aware of the continuous development of new types of blast weapons, in particular of the fuel-air explosives,

Anxious to prevent the use of weapons in a manner which may cause unnecessary suffering to combatants or render their death inevitable,

Have agreed to abstain from the use of munitions which rely for their effects on shock waves caused by the detonation of a cloud created by a substance spread in the air, except when the aim is exclusively to destroy material objects, such as the clearance of mine fields.

Draft clause relating to the prohibition of the use of anti-personnel fragmentation weapons submitted by Mexico **/

Anti-personnel cluster warheads or other devices with many bomblets which act through the ejection of a great number of small-calibre fragments or pellets are prohibited for use.

Draft clause relating to the prohibition of the use of flechettes submitted by Mexico ***/

Munitions which act through the release of a number of projectiles in the form of flechettes, needles and similar, are prohibited for use.

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*/ Previously issued under the symbol A/CONF.95/PREP.CONF./L.2/Rev.2.

**/ Previously issued under the symbol A/CONF.95/PREP.CONF./L.6.

***/ Previously issued under the symbol A/CONF.95/PREP.CONF./L.7.