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Mines and ERW

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feature

that the CCW’s Protocol V should be sufficient, the Belgians have changed the States Parties regarding their views if not, and the problem “only increases in sh...because it has broader implications than just operational combat failure rates of U.S. munitions. This is a remarkable admission because it has broader implications than just concerning cluster munitions. But consistent with non-governmental organisation and field-based evidence, it also confirms actual CBU failure rates might have little relationship with official “est” claims.5

In March 2006, Timothy McCormack, a professor of international humanitarian law at the University of Melbourne Law School, led a review of the response to a survey by CCW States Parties regarding their views of the relevance of IHL principles to explosive remnants of war. McCormack concluded that the CCW’s Protocol V should be sufficient to address the problem of ERW—but if not, and the problem “only increases in severity,” the call for a ban on cluster bombs should not be unexpected. Significantly, the report also argued that whatever the outcome, “the onus is on user states to demonstrate that such weapons can be used consistently with the binding obligations of IHL” (emphasis added).25

The announcement that the Belgian government had adopted a comprehensive ban on cluster munitions sent a ripple of optimism through the Cluster Munition Coalition, and thanks to good Belgian timing, it arrived just in advance of the CCW meeting of States Parties in March 2006. In one swoop, the Belgians have changed the context for those considering the APM campaign. While they have set the bar high, they have also reinforced the belief that an international ban on something, not just a clean-up measure, is now possible. The final ban text has been adopted by both houses of parliament in Belgium as of this writing. While the most comprehensive ban is in Belgium, the Eritrean government (in a separate, non-military-related debate on a cluster moratorium), several other states have made their reservations known: “Austria, Belgium, Canada, Denmark, France, Germany, Republic of Ireland, Italy, the Netherlands, Norway, Poland, Switzerland, the United Kingdom and the United States have plans to withdraw from service or have destroyed certain types of cluster munitions.”52 Germany and Belgium are considering a strategy of narrowing the definition of cluster munitions so that a ban excludes advanced models that are not expected to be problematic.53

The United States is not Belgium, but even the U.S. military, having distributed its own fact-sheet report in advance of the CCW, seems to be willing to consider major changes in its arsenal. For the first time in a long time, a significant international restriction on certain cluster munitions appears to be within reach.

Continuing Debates From the start, many ICBL campaign- ers had difficulty condensing technical measures to address high cluster-munition failure rates. They campaigned against self-destruction, self-destruction and self-destruction and self-neutralisation solutions for APs and worry that supporting technical fixes now may compromise an absolute principle defended earlier. However, what if major players refuse to join an all-out ban on cluster munitions, even if they support a comprehensive ban on anti-personnel mines?

Controversy also surrounds the debate about what an “acceptable” failure rate might look like. Less than 1 percent failure in a typical cut-off point, but it is also arbitrary. A very small percentage of a very large number can still be a humanitarian disaster, albeit a much-reduced danger compared that produced by a 10- to 30-percent failure rate. Yet, there may be a harm-reduction im- possibly to precluding destruction of certain more problematic “worst culprits” munitions, whatever the future holds for a complete ban. There is consensus within the CMC for a moratorium on use, production and trade of cluster munitions until their human- itarian problems have been resolved— but not everyone has been in favour of prioritizing.53 Does highlighting the bulk of the problem legitimise what remains? Some worry that humanitarian law will be ignored and they have suggested that cluster munitions might be banned unilaterally if their failure rates are “fixed.” Will mili- taries switch to other bombs, causing more casualties, if cluster munitions are banned entirely?54

An interesting reverse-onus framework outlined by Landmine Action (UK) and consistent with one of the conclusions of the McCormack report is that governments should recognise all cluster munitions are assumed prohibited unless users can “opt in” with a guarantee that the particular munition can be used safely.55 Might that approach fit nicely with the destruction of legacy munitions with the highest failure rates?

A final point: If the failure rates of cluster munitions were reduced to nil next to nil, would there remain a humanitarian problem on a scale sufficient to sustain a campaign for a comprehensive international ban?

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Mines and ERW

Mines and explosive remnants of war continue to affect many parts of the world. One such area is the Horn of Africa, where wars have continued for the better part of the 20th century. U.N. Security Council Resolution 1325 formally established the United Nations Mission in Ethiopia and Eritrea in November 2000. At the same time, the U.N. Security Council formally established a Mine Action Coordination Centre within the United Nations Mission in Ethiopia and Eritrea. The resolution requires the MCC to coordinate and provide technical assistance for humanitarian mine action activities in the TSZ [temporary security zone] and area adjacent to it.

History of the Mine and ERW Problem

The mine and ERW problems of Ethiopia and Eritrea stem from the long-standing conflict. Eritrea was colonised by the Italians in the 19th century. During the Second World War, Italian and British forces fought a number of battles across Eritrea, culminating in a major siege on the town of Keren in 1941, which lasted nearly three months. These battles were fought in a conventional manner, consisting of aerial bombardments, artillery, small-arms fire and mine emplacement. Certain areas around Keren are considered hazardous today due to suspected contamination by mines and unexploded ordnance, particularly in the hills surrounding the township. Keren was the scene of a major battle again during the independence war years between 1961 and 1991.

After the Second World War, Eritrea was governed by Great Britain until the early 1950s, when it was handed over to Ethiopia to become part of the federation system. Reunited by Ethiopia, Eritrea became its northernmost province. There was a resurgence of Eritrean nationalism in the early 1960s when the Ethiopian population began an insurgent campaign for independence against Ethiopian forces. This rebellion gradually developed into a more conventional war as the Eritreans gained support for their cause, won key battles and held ground. This struggle for independence lasted 30 years and affected the entire country. The Eritrean struggle for independence is possibly one of the most successful examples of a liberation war. Eritreans are justifiably proud of the establishment of their country, as it was won at great cost to the population and without “outsiders” help or support from other nations.

After the state of Eritrea was established in 1993, following a U.N.-monitored referendum in which the population voted overwhelmingly for independence, the relationship between Eritrea and Ethiopia was cordial. This relationship continued until several issues soured it, including the introduction of a new currency, the nakfa, which replaced the Ethiopian birr. The situation eventually deteriorated into a war lasting from 1998 to 2000 over non-demarcated bor- ders. Then in 2000, Algeria brokered a peace accord.

This border war was an intense conflict, with both sides em- ploying conventional war strategies that developed into a carefully planned and executed military operation reminiscent of World War I. The war was fought at terrible cost with an estimated 70,000 people killed and thousands more displaced. As a result of this conflict, the entire border area between the two countries from the Sudan in the west to the Djiboutian border in the east remains contaminated with mines and ERW today.

Interrelationship between Mines and ERW

In the interrelated mine and ERW problems of Ethiopia and the northern areas of Ethiopia remain contaminated with mines and conventional ERW. In a recent incident, a truck driver collecting stones for a build- ing site was killed when his vehicle drove over a landmine on a vacant site just off a main road near the capital, Asmara. This mine was a remnant of the independence war years, quite possibly leftover when the area was vacated.

In examining the history of the conflicts that have engulfed the region, mines and ERW are intertwined phenomena rather than separate entities. It is not safe to just walk out to unexploded ordnance or an abandoned tank and attempt to remove or destroy items without

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Kudyba Mine and ERW

due to the history and nature of conflicts in the Ethiopia/Eritrea area, cleanup presents specific considerations and hazards. The lessons learned by the United Nations Mission in Ethiopia and Eritrea Mine Action Coordination Centre in mine/explosive rem-nants of war cleanup are presented, as well as recommendations on clearance operations for situations with mixed mine/ERW like that in Ethiopia and Eritrea.

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first establishing the fragility of the area and what military actions occurred there. This problem presents a dilemma: destroying land and explosive-ordnance-disposal teams operating in the UNMEE area. Deminers conducting clearance operations sometimes encounter UXO and other ERW, including submunitions, identified without live ammunition still on board. For example, during battle-area clearance, a number of vehicles with ammunition scattered around them were found. The vehicles had been set on fire by retreating forces and the contents exploded, scattering the ammunition around the burning vehicles. In such cases, a path has to be cleared to and around the vehicles to enable teams to work safely.

Demining operations within a post-conflict situation involving all aspects of conventional war scenarios will generally encounter a mixed threat of both mines and ERW. As the battlefield clears, large vehicles abandoned by both sides are cleared for economic necessity. The organization has begun reconnaissance work to locate and identify more.

Fields demined by INAD were given to local populations for farming and other agricultural purposes. The organization has begun reconnaissance work to locate and identify more.

ERW Encountered within UNMEE

Most conventional ERW items encountered within the UNMEE’s operations consist of small-arms ammunition, mortars, artillery shells to 155 mm and聂este Machine/rockier-propelled grenade-type rockets. These items have caused a number of casualties among the local population living within the TSZ and adjacent areas. Often the casualties are children, who are curious by nature and play with the items they encounter. These items, although usually small, can inflict quite horrific injuries to the child. A number of submunitions and aerial bombs have also been encountered during field operations. Submunitions have streamers and are an attractive shape and colour that readily attract a child’s curiosity.

Table 1 gives an overview of ERW items encountered within the UNMEE.

<table>
<thead>
<tr>
<th>ERW Item</th>
<th>Recorded in Incident*</th>
<th>Quantity Found Following Incident</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 hand grenade</td>
<td>Yes—2</td>
<td></td>
</tr>
<tr>
<td>Chinese wooden HG (type unknown)</td>
<td>Yes—1</td>
<td></td>
</tr>
<tr>
<td>M 75 Yugoslav HG frag</td>
<td>Yes—1</td>
<td></td>
</tr>
<tr>
<td>FH HG fuse</td>
<td>Yes—3</td>
<td></td>
</tr>
<tr>
<td>Russian HG RPGK3</td>
<td>Yes—1</td>
<td></td>
</tr>
<tr>
<td>RPG rocket</td>
<td>Yes—2</td>
<td></td>
</tr>
<tr>
<td>A fuse from an RPG rocket</td>
<td>Yes—1</td>
<td></td>
</tr>
<tr>
<td>Anti-aircraft bullet</td>
<td>Yes—1</td>
<td></td>
</tr>
<tr>
<td>POIMZ</td>
<td>Yes—1</td>
<td></td>
</tr>
<tr>
<td>PMN</td>
<td>Yes—2</td>
<td></td>
</tr>
<tr>
<td>TM-46</td>
<td>Yes—5</td>
<td></td>
</tr>
<tr>
<td>TM-57</td>
<td>Yes—1</td>
<td></td>
</tr>
<tr>
<td>Belgian plastic PRBM5</td>
<td>Yes—13</td>
<td></td>
</tr>
<tr>
<td>Czechoslovakian PT-MJ-BA III</td>
<td>Yes—1</td>
<td></td>
</tr>
<tr>
<td>Unidentified HG</td>
<td>Yes—3</td>
<td></td>
</tr>
<tr>
<td>Unidentified UXO</td>
<td>Yes—4</td>
<td></td>
</tr>
<tr>
<td>Unidentified AT mine</td>
<td>Yes—24</td>
<td></td>
</tr>
<tr>
<td>Unidentified explosive</td>
<td>Yes—1</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>67</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: ERW Encountered in the UNMEE.

*Source: UNMEE MACC Preliminary Investigation Reports 2001–2005

Clearance Operations

Recommendations

As a result of identifying and mitigating the ERW problems in Eritrea, UNMEE MACC has several recommendations for developing a good clearance operation. A thorough investigation is critical. A great deal of the information can be gleaned from discussions with various parties, including local inhabitants, militia, police and military personnel. Past operational reports from the area will also be of assistance. If the region was the subject of an Impact Survey and/or Technical Survey, it is also extremely important to consult the data presented in these reports. The clearance operation should examine the following:

- What is the history of the area?
- What forces and equipment were involved? This will give an indication of the type of ERW likely to be encountered. For example, tanks and artillery will mean larger ERW; submunitions can be delivered by artillery. Aerial bombardments would suggest the need to be conscious of larger munitions and the possibility of submunitions.
- What was the intensity and duration of the campaign? A lengthy campaign means the likelihood of a greater number of ERW being present.
- Did the contained land change hands? It is the experience of UNMEE MACC that contained areas that changed hands resulted in many of the mines laid by one side being recovered and re-laid in other areas by the new owners.
- What are the items of ERW encountered in operations to date? This will determine the level of expertise required to deal with similar items.

Incidents

Recorded in Incident* and Quantity Found Following Incident

- Abandoned military vehicles need to be checked for ammunition and other explosive devices. The presence of any potentially hazardous substances needs to be considered.

Conclusion

The experience of the UNMEE MACC is that mines and conventional ERW are an interwoven part of many clearance operations. However, it is essential to factor in a worst-case scenario into any plan. The types of ERW encountered will determine the level of expertise required to complete the task and deal with any finds in the course of it. It is important that any clearance operation has adequately trained personnel to deal with ERW likely to be encountered during the course of any task.

Staff members of the UNMEE MACC provided valuable assistance in the preparation of this article.

Footnotes

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30,000 Square Meters Demined in Angola

Instituto Nacional de De minesagem (The National Institute for Demining) in Angola recently announced that it has demined more than 30,000 square meters (7.41 acres) of mine-affected land in the country. INAD reported 12 anti-personnel mines, one anti-tank mine, 206 mortar shells and various other explosive devices were destroyed as part of the clearance.

Fields demined by INAD were given to local populations for farming and other agricultural pursuits. The organization has begun reconnaissance work to locate and identify more mine-affected areas in need of clearance.