Protection of Soft Vehicles Against ERW

Thomas Hvidtfeldt
Scanfiber Composites A/S
Taking into account that 15 years have passed since the warehouse explosion, clearance of this ammunition is a complicated yet extremely important task.

In addition to planned clearance projects such as those mentioned, ANAMA also provides rapid response to mine/UXO-related emergencies. When one Agafa steel-mesh workshop set up by local experts exploded approximately 200 metres (219 yards) from a residential area, the workshop itself was totally destroyed and, according to official information by local authorities, three people were killed and 23 injured.

Additionally, the explosion damaged houses as far as three kilometres (two miles) from the workshop. Immediately following the explosion, ANAMA established a team of UXO operators to carry out emergency marking and clearance operations in the incident area. Operations lasted for one month and as a result, 175,000 square metres (42 acres) of land were cleared and more than 5,007 items of UXO (among these 1,261 pieces containing white phosphorus) were removed from the area and destroyed. ANAMA has continued to react quickly to any mine- and UXO-related emergencies.

Conclusion

As the Japanese might say, “Toko peri saka mo nozu nai!” (We have to pay much more for something we got free of charge!).

It is important to figure out how to solve the existing problem of UXO and abandoned ammunition and how to protect ourselves from ERW in the future. Human beings created the problem—dropping the bomb and abandoning the ammunition “for free” on Azerbaijan—and now they must correct it at great cost by cleaning up the country and making it safe again.

See Endnotes, page 109

News Brief

Death Valley Challenge to Raise $100K

Mines Advisory Group, in partnership with CEIA USA, will sponsor a 423-kilometre (263-mile) bike trek across Death Valley, USA. Event organizers hope to raise nearly $40,000 ($87,445) to support mine-action efforts around the globe.

From 4-11 March 2007, 40 participants will travel and cycle to raise money and awareness. The registration fee for the event is only £175 ($325), but each participant is asked to raise $2,750 ($5,100) in sponsorships, half of which will cover the cost of running the event.

Included in trek costs are London-to-Las Vegas airfare, accommodations, nearly all meals, the use of bicycles and other sundry expenses.

For more information on this trip, visit www.mageclearmines.org.
Explosive Remnants of War and Their Consequences

This article examines the post-conflict situation of Tajikistan, which has not only anti-personnel mines but various kinds of explosive remnants of war. Recently Tajikistan signed Protocol V of the Convention on Certain Conventional Weapons, which includes a commitment to clear the nation’s ERW. The author highlights some of the different sources of ERW in Tajikistan as well as the progress being made by authorities to clean and destroy ERW.

by Jannnahmad Ralabas [Tajikistan Mine Action Centre]

Impact of ERW in Tajikistan
In addition to the landmine problem, items of UXO also pose a great challenge in Tajikistan. It is presumed that more ERW remains in the country due to the civil war (1992–1997). The UXO in Tajikistan that remains on the ground is the result of being fired from military planes and helicopters, as well as shelling. A large number of Tajik citizens have reportedly died or been seriously injured.

It is necessary to note that items of UXO also appear in the country for reasons other than combat, including armed conflict and attempted revolts. In Tajikistan, as in many other countries, mandatory military service requires continued and regular military training for the Armed Forces. It has been the case in Tajikistan that during training, some shells have been fired and accidentally landed outside the military training zones. These shells remain unexploded in areas where access to the public remains open, putting the local population at risk.

In addition to the landmine problem, items of UXO also pose a great challenge in Tajikistan. It is presumed that more ERW remains in the country due to the civil war (1992–1997). The UXO in Tajikistan that remains on the ground is the result of being fired from military planes and helicopters, as well as shelling. A large number of Tajik citizens have reportedly died or been seriously injured.

It is necessary to note that items of UXO also appear in the country for reasons other than combat, including armed conflict and attempted revolts. In Tajikistan, as in many other countries, mandatory military service requires continued and regular military training for the Armed Forces. It has been the case in Tajikistan that during training, some shells have been fired and accidentally landed outside the military training zones. These shells remain unexploded in areas where access to the public remains open, putting the local population at risk.

Build-in Ballistic Blankets
Most retrofit solutions to protect SUVs are based on aramid fabric, such as Twaron® or Kevlar®, which is hard to be protected for the same soft vehicles, like ballistic blankets. Ballistic blankets are available from several sources and are a system of tailor-cut and overlapping blankets that cover as much of the interior of the vehicle as possible up to the windows.

Ballistic blankets offer a good level of protection against fragments coming from below or from the sides. They are installed below the carpet and inside the side panels and doors and require a complete rewrapping of the vehicle. After reinstallation, the interior of the vehicle looks the same as before, with no visible signs of it being protected.

The protection level of the blankets is normally specified according to a North Atlantic Treaty Organization standard STANAG [Standardization Agreement] 2920 and the standard level by most non-governmental organizations is a level referred to as 600 m/sec. It is not possible to connect this directly to any specific mine or grenade as the actual conditions have an enormous influence on the real threat. However, a level of 600 m/sec can be directly compared to other means of protection; for instance, standard body armour (without vest-insert plates) represents a level of protection of 450 m/sec and contains only about half the amount of ballistic material. A passenger in a vehicle that is fragmenting ERW is much better off if the vehicle is equipped with ballistic blankets than if he is wearing body armour; in addition to a higher ballistic level, the ballistic blankets will offer protection of the extremities and not only the torso.

In turn, these options and those developed and implemented in the future will continue to better conditions of personnel exposed to such risks.

Tommaso Hildtholdt is the Sales Manager for Scanfiber Composites A/S where he has been since 2002.

Tommaso Hildtholdt
Manager
Scanfiber Composites A/S
Niels Bohrs Vej 11
DK 8710 Sildg. [Denmark]
Tel: +45 98 03 44 43
Fax: +45 98 03 45 44
E-mail: thi@scanfiber.dk
Web site: http://www.scanfiber.dk

ALL PHOTOS COURTESY OF CLEAR PATH INTERNATIONAL

Explosive Remnants of War and Their Consequences

This article examines the post-conflict situation of Tajikistan, which has not only anti-personnel mines but various kinds of explosive remnants of war. Recently Tajikistan signed Protocol V of the Convention on Certain Conventional Weapons, which includes a commitment to clear the nation’s ERW. The author highlights some of the different sources of ERW in Tajikistan as well as the progress being made by authorities to clean and destroy ERW.

by Jannnahmad Ralabas [Tajikistan Mine Action Centre]

Impact of ERW in Tajikistan
In addition to the landmine problem, items of UXO also pose a great challenge in Tajikistan. It is presumed that more ERW remains in the country due to the civil war (1992–1997). The UXO in Tajikistan that remains on the ground is the result of being fired from military planes and helicopters, as well as shelling. A large number of Tajik citizens have reportedly died or been seriously injured. It is necessary to note that items of UXO also appear in the country for reasons other than combat, including armed conflict and attempted revolts. In Tajikistan, as in many other countries, mandatory military service requires continued and regular military training for the Armed Forces. It has been the case in Tajikistan that during training, some shells have been fired and accidentally landed outside the military training zones. These shells remain unexploded in areas where access to the public remains open, putting the local population at risk.

In addition to the landmine problem, items of UXO also pose a great challenge in Tajikistan. It is presumed that more ERW remains in the country due to the civil war (1992–1997). The UXO in Tajikistan that remains on the ground is the result of being fired from military planes and helicopters, as well as shelling. A large number of Tajik citizens have reportedly died or been seriously injured. It is necessary to note that items of UXO also appear in the country for reasons other than combat, including armed conflict and attempted revolts. In Tajikistan, as in many other countries, mandatory military service requires continued and regular military training for the Armed Forces. It has been the case in Tajikistan that during training, some shells have been fired and accidentally landed outside the military training zones. These shells remain unexploded in areas where access to the public remains open, putting the local population at risk.

In addition to the landmine problem, items of UXO also pose a great challenge in Tajikistan. It is presumed that more ERW remains in the country due to the civil war (1992–1997). The UXO in Tajikistan that remains on the ground is the result of being fired from military planes and helicopters, as well as shelling. A large number of Tajik citizens have reportedly died or been seriously injured. It is necessary to note that items of UXO also appear in the country for reasons other than combat, including armed conflict and attempted revolts. In Tajikistan, as in many other countries, mandatory military service requires continued and regular military training for the Armed Forces. It has been the case in Tajikistan that during training, some shells have been fired and accidentally landed outside the military training zones. These shells remain unexploded in areas where access to the public remains open, putting the local population at risk. There is no immediate danger. This level of protection is designed to provide an increased level of protection against ERW and other small-arms ammunition.

New technologies with in-field arming options can be fitted and remedied when there is no immediate danger. This type of protection is designed to provide an increased level of protection against ERW and other small-arms ammunition.