A Study of Manual Mine Clearance

Manual mine clearance is the fundamental tenet of mine action and yet it has never been completely analyzed. To that end, the GICHD, at the request of the United Nations Mine Action Service, commenced a detailed study into manual mine clearance in late 2003. The Study of Manual Mine Clearance sought to define a set of parameters that affect the efficiency of manual mine clearance and use in to develop benchmarks or planning figures for manual mine clearance (clearance rates, costs, etc.). The study also examined in detail the drills, techniques, equipment and procedures used for manual mine clearance, and considered the risk-management approach to the process of manual mine clearance. The study was developed in five specific areas and each section forms a stand-alone publication that complements the others.

- Historical survey and conclusions
- Management of manual mine clearance
- Operational systems in manual mine clearance
- Case studies and experimental trials
- Risk assessment and risk management of mined areas
- Costs of manual mine clearance

The study found today's "humanitarian demining" is much safer than the major military-supervised "mine clearance”. The Study proposed a number of new drills and techniques that would help improve the efficiency of manual demining. However, it found the greatest productivity gains could be made with improvement at the middle-management level, through better training and empowerment of middle managers and tools to decide. Finally, it recommends consideration of a risk-avoidance approach when setting priorities in situations where clearance resources are limited.

The study was released in September 2005 to coincide with the UNMAS National Directors’ meeting. A series of briefings and workshops will widely disseminate the findings of the study. Copies of the study can be obtained via the GICHD Web site (see contact information, left).

Ongoing Work at the GICHD

The GICHD continues to undertake a wide range of work on the use of dogs for mine detection. The International Mine Action Standards on mine-detecting dogs have been reviewed and the new draft document of dogs for mine detection. A study of MDD operations, consisting of four case studies, is available on the GICHD Web site, along with three new videos on the training of MDDs. Guidebooks on the training of dogs and on the use of Remote Explosive Scent Tracing have also been published.

The development of the IMAS is undertaken by the GICHD, and has for its responsibility all operational, technical and research activities of the Centre. It develops and provides support to the Anti-personnel Mine Ban Convention. The Study provides support to the Anti-personnel Mine Ban Convention. The development of the IMAS is undertaken by the GICHD, and has for its responsibility all operational, technical and research activities of the Centre. It develops and provides support to the Anti-personnel Mine Ban Convention. The Study provides support to the Anti-personnel Mine Ban Convention.
Uganda. Two clearance teams are start- ing operations in western Uganda (Kasese district). Forty police officers are under- going a humanitarian demining training program sponsored by the United Kingdom at the International Mine Action Training Centre in Nairobi, Kenya. In early 2006, completed clearance teams will begin operations in areas of northern Uganda affected by mines and explosive remnants of war. Needs assessments will be conducted in two northern districts that have been cleared. UNICEF has been implementing an MRE project in partnership with the National Humanitarian Demining Office and national non-governmental organizations, with activities including a knowledge, attitude and practice (KAP) survey, minefield marking, and training of 100 community-based organizations. In accordance with Mauritania’s National Completion Plan and the Ottawa Convention, the overall objective for the mine action program is for Mauritania to be mine-free by 2011. An assessment revealed an absence of real demining or MRE activities and a lack of national mine action capacity. To enable Mauritania to achieve the objectives of its completion plan, an investment of $14.5 million (U.S.) is required between 2006 and 2010, including $1.6 million in 2006.

Tajikistan. On the Tajik-Afghan border and in central areas of Tajikistan, 89,949 square meters (22 acres) of land have been manually cleared. Since the beginning of the program in 2003, the total amount of cleared area is 164,386 square meters (36 acres), but about 25 million square meters (about 10 square miles) remain to be cleared. Survey operations reached 27 landmined areas on the border. UNDP’s Mine Action Completion Project begins in 2006, and it will aim to assist Tajikistan in meeting its obligations in the international community. Tajikistan is currently host to 300,000 IDPs who plan to return to their fields to begin planting and harvesting their crops. To raise awareness of the dangers, the first weeks of July and August have been designated National Mine Action Weeks across Tajikistan. This year, demining and survivor assistance NGOs participated actively in the national event. Local and interna- tional media covered the Mine Action Weeks; the press release developed by UNICEF got wide coverage as an Associated Press story and was repeated in many national and interna- tional papers and Web sources. UNICEF staff has also trained local disability organizations in MRE for an ongoing external monitoring capacity.

Update from UNICEF

Afghanistan. UNICEF is the coordi- nating agency for MRE for the Mine Action Programme for Afghanistan and under the umbrella of the U.N. Mine Action Centre for Afghanistan and the government of Afghanistan. Standardization of MRE activities throughout the country began in 2002, and new MAPA training methodologies for community-based MRE activities have been included. Peer education activities, police train- ing and direct implementation of MRE in IDP camps and at border crossing points and encampment centers. MRE activities have been integrated into Ministry of Education teacher training programs that have trained and pro- vided materials for some 63,000 formal and informal primary school teachers. A self-ad- vocacy and rights awareness training program for landmine survivors and people with disabilities was piloted in early 2005 to over 180 people. Due to the demand for additional training opportunities, this program has been expanded to four other regions and hopes to target at least 400 people in 15 provinces.

Bosnia and Herzegovina. UNICEF Bosna and Herzegovina continues to provide technical, financial and logistical support to the RH Mine Action Centre and other organizations. BHMAC recently ran an MRE management course for 25 participants to add- rly MRE planning at the community level, conducted MRE presentations for UN, security staff in five municipalities and a border coordination meeting regarding the transfer of the International Committee of the Red Cross/Mine Victim Database to BHMAC. UNICEF supported the local NGO Genoom Project in conducting 120 workshops on topics of MRE integration for teachers and peer educators; a young Nigerian NGO INTEGRATION conducted MRE training courses for loc- al civil protection departments, communi- ty-based NGOs, and other institutions of private and public companies, aimed at improving the public awareness of mine action campaigns for endangered groups in rural areas. Local NGO Ani-Mine Initiative began work on developing a project to develop a MRE plan for communities. The current financial situation of the UNICEF Bosnia and Herzegovina Mine Action Program is of serious concern as no funding is available under 2006. UNICEF Bosna and Herzegovina ur- gently requires $800,000 for 2006.

Cambodia. In August 2005, the Cambodia Mine/UXO Victim Information System reported 36 new casualties. This shows a decrease of 27 percent compared to the 49 casualties reported in August 2004. Of the 36 casualties, 75 percent were men, 23 percent women or children, 2 percent were under age and 2 percent were women. UXO injured or killed 42 percent of the casualties, while the other 58 percent were mine casualties. Thirty-four percent of the victims were in- jured or killed while tending UXO and 19 percent were injured or killed while farming. For the last 12 months, the number of casualties totalled 905. UNICEF provides financial and technical support for national MRE coordination through the Cambodian Mine Action/Victim Assistance Authority and community-based mine risk reduction, mass media and school MRE campaigns. Profes- sional, wheelchair and assistance for re- habilitation to children and women victims of landmines/UXO continued.

Russian Federation. According to infor- mation UNICEF gathered in each district of Chechnya, no new mine/UXO-related incidents involving civilians were reported in August. Since 1995, UNICEF has re- corded 3,031 mine/UXO civilian victims (2,140 wounded and 641 killed), including 737 children (612 wounded and 125 killed). Meanwhile, UNICEF and its partner or- ganizations continue to disseminate MRE messages. Some 450 children from Grozny secondary schools participated in MRE drama presentations/groups. The Republican Clinical Hospital completed the treatment of 27 mine/UXO-affected children. Additional medical equipment has been provided, improving the quality of care and services. UNICEF’s recent monitoring mission to Grozny assessed the need for additional training for medical staff. Meanwhile, some 18 mine/UXO-affected children started school with new orthopedic appliances pro- vided by Grozny’s Prosthetic Workshop.
Endnotes
2. One square metre is approximately equivalent to 1.2 square yards.

Mine Action Support Group Update, October 2005. MASG Newsletter [from page 85]

Endnotes
2. The United Nations and other humanitarian organizations are urging the use of the term “minefields,” while others are opposing the term “mines safe” or “impact free.” “Minefields” connotes a condition where all landmines have been cleared, whereas the term “mines safe” and “impact free” refer to the condition in which landmines no longer pose a credible threat to a community or country.

IHR System Allows Remote Disposal, Barthold [from page 89]

Endnote
1. Patent pending.

How Deminer Position Contributes to Injury, Jetté, Dionne, Maah, Makris, Ceh and Bergeron [from page 93]

Endnotes
6. The International equals approximately 4 inches.
7. Fractured sand is sand that has been pulverized by explosive forces, with silica dust as the main by-product of this process.
8. SAE J211 refers to the SAE Recommended Practice J211, Instrumentation for Impact Tests (MAR95). It provides standards for the performance of equipment in impact tests.
13. 1 g = 9.8 m/s².

QR Hits a Homerun: Landmine-Detection Systems Based on Quadrupole Resonance Technology Show Progress, Turner and Williams [from page 95]

Endnotes

Rats to the Rescue: Results of the First Tests on a Real Minefield, Verhagen, F. Weertjes, Cox, B. Weertjes and Billet [from page 100]

Endnotes
2. The Tuberculosis Project is a study hoping to change the way Tuberculosis is diagnosed using the exceptional sniffing abilities of rats. For more information, please see http://www.un.org/Depts/medical/health/3486559.stm. Accessed 11 Nov. 2005.

Blast Protection For UXO Operations Including Demining, Miles [from page 103]

Endnotes
3. In collaboration with INSVIS Ltd. in the United Kingdom.

Notes
The editorial staff of the Journal goes to great effort to make sure that what is printed in our magazine is accurate, properly documented and unbiased. However, in Issue 9.1 there were two errors for which we feel we must apologize. In the staff-written profile of Afghanistan (pages 66–67), our writer misinterpreted something that was written in an earlier article by Patrick Fruchet (http://maic.jmu.edu/journal/8.1/features/fruchet/fruchet.htm) and we alluded to a conflict, which apparently does not exist. Mr. Fruchet wrote to us to clarify, saying, “Our deminers are NOT in ‘conflict’ with ISAF…” We humbly apologize for this accidental error, and thank Mr. Fruchet for calling it to our attention. We mistakenly attributed the article, “Mine Action in Yemen An Example of Success” (pages 10–11, 17), to Mansour Al Azi. It was actually written by Faiz Mohammad, UNDP Mine Action Specialist for the Yemen Mine Action Programme. We apologize to Faiz Mohammad for this error and thank him for letting us know about it.

If you find errors in the Journal of Mine Action or disagree with anything we have published, please send your comments to “Letters to the Editor” via e-mail to Lois Carter Fay at edward@butterworth.com.