The Belgian NR 413 fragmentation mine can be initiated by any of four tripwires.

Other Mines

Other mines present in Libya include the Belgian NR 413 stake mine and NR 442 bounding mine, both of which are AP fragmentation weapons with significant ranges. The NR 442 is normally buried and uses a pressure fuze to initiate a propel cant ranges. AP fragmentation weapons with significant

The plastic collar retaining the striker is fore capable of functioning at any time. The plastic collar retaining the striker is vulnerable to deterioration in hot dry conditions, making this mine extremely dangerous to handle. This mine was believed to have been responsible for a number of casualties during the First Gulf War (1990–1991) and is definitely a blow-in-place item.

Conclusion

The mine threat in Libya could create a significant challenge for deminers, with a combination of unrecorded minefields, difficult detection, the presence of tripwires and the potential deterioration of fuze mechanisms. Demining nongovernmental organizations have already begun clearance operations with the United Nations Mine Action Service Joint Mine Action Coordination Team, working to coordinate operations. In addition to the standard process of survey, minefield delineation and clearance, a major stockpile de struction program will also be needed. Sadly, despite widespread adop tion of the AP Mine Ban Convention,4 mines have once again played a role in modern conflict. They bring with them the dangerous, costly and laborious process of demining, along with the dis heartening prospect of long-term socioeconomic impact on the communities where they are found.5 See endnotes page 83

Decades of conflict have left Kabul City, Afghanistan ravaged by war and contaminated with landmines and unexploded ordnance. Despite the great achievements of mine-clearance operations to date, 82 confirmed hazardous areas (which were recorded in a polygon survey) remain within Kabul’s city limits, rendering approximately two people every month are fatally or seriously injured. The KCCP is working to clear Kabul City of mines based on a two-phase plan. Phase 1, which is underway, consists of 44 of the confirmed hazardous areas; Phase 2 consists of 48 additional CHAs and will be implemented in early 2012. The KCCP continues clearance at the current rate of progression, meeting or exceeding their target timeline, and they receive adequate funding for the second phase, they could completely remove all known hazards in Kabul City within an operating period of 18 months.
progress has been made toward ridding the city of these hazards, including the following:

- Almost 60,000 anti-personnel mines, 2,000 anti-tank mines and more than one million items of UXO were located and destroyed.1
- More than 25 sq. km. (9.65 sq. miles) of minefields were cleared and more than 168 sq. km. (64.87 sq. miles) of battlefields were cleared.2

The map in Figure 2 shows where clearance has taken place in Kabul City. Despite these successes, more than 23 years of conflict have resulted in Kabul becoming one of the world’s most heavily mined capital cities, and Kabul City has experienced massive population growth since 2002, with a yearly increase of about 400,000 people, or 55,000 households, which urgently require access to land and services. Mines and UXO pose the threat of death and injury, and also block access to vital needed resources for this rapidly growing city. These hazards directly impact approximately 584,703 men, women and children.2

The presence of mines and UXO significantly affects resettlement and development within the city limits, and contributes to restricted economic growth and opportunity for the city’s most vulnerable and disadvantaged communities. Though many minefields were cleared in the central and high-profile areas of the city, until funding is available, KCCP will wait to clear minefields in peripheral communities, such as mountainous areas and other locations that appear deserted or unused. The mines in these areas, however, threaten the rising urban-poor population. Communities forced to live on the edges of established society put themselves at increased risk of mine/UXO accidents out of necessity as they search for fuel (e.g., grasses, wood), medicinal plants, food (e.g., mountain rhubarb) and graze their animals in areas suspected to be unsafe.

Operational Methodology

Kabul City’s remaining hazards are located in ward numbers 3, 5–8, 14–16 and 19–22. The operational methodology is based on an integrated approach to demining using manual-demining teams supported by mine-detection dog teams and mechanical assets, plus a roving explosive-ordnance-disposal capacity. The KCCP was designed for completion in 18 months, with operations suspended between December and March (winter season). Through analysis of the minefields in each cluster (size, location, contamination type, etc.), the assets required to most efficiently remove mine and UXO contamination were determined. Complete clearance of all known hazards in Kabul City will be achieved through the deployment of the following:

- Nineteen manual demining teams
- Three mine-detection dog teams
- One mechanical demining unit
- One EOD team

The KCCP will clear known recorded hazards in 12 out of 22 contaminated districts of Kabul City within wards 3, 5, 6, 7, 8, 14, 15, 16, 19, 20, 21 and 22 (see Figure 1). The direct beneficiaries of this project are the members from 36 mine- and UXO-affected communities. The cleared land will be used for a variety of purposes, including residential housing, livestock grazing, leisure activities and implementation of rehabilitation and development projects.

Current Situation

The project area has been divided into two phases in which the high-priority areas will be cleared during Phase 1 and the medium- and low-priority areas will be addressed during Phase 2.

The project’s first phase is funded through a contribution to the Voluntary Trust Fund made by the European Union. Clearance started 6 January 2011 and should be completed 5 March 2012. During the one-year period (two months training and 10 working months) of Phase 1, 19 community-based demining teams and one EOD team are working to clear the high-priority areas.

ATC recruited deminers from the affected communities through extensive community-liaison activities, explaining the project objectives and expected outcomes. Community elders nominated eligible candidates who then completed demining training courses conducted by Afghan Technical Consultants. The trained deminers are now busy clearing their village areas from mine and UXO hazards.

These are the projected outcomes for this clearance project:

- ATC will clear all 30 CHAs in the project area classified as first-priority tasks.
- Twenty-four CHAs classified as second-priority minefields will be cleared and then removed from the MACCA hazard list.
- Mine clearance of known hazards in Kabul City’s Dih Sabi and Bagrami districts will be completed.
- A total area of 2,340,769 square meters (579 acres) will be cleared during the project and will be handed over to villagers for agricultural and construction purposes.
- A total of 266 people from the affected communities have been provided with job opportunities as deminers, section leaders, guards, drivers, etc.
- Following the project’s completion, 10,609 families from 15 villages in Kabul City will directly benefit from the mine-clearance activities, and the region’s community as a whole will indirectly benefit.

Deminers during the selection process. Photo courtesy of ATC.

Deminers in a training class. Photo courtesy of ATC.
special focus on livelihood support such as food security and the alleviation of poverty.

- The K CCP will contribute toward Afghanistan’s States Parties’ obligation to the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and their Destruction (also known as the Anti-personnel Mine Ban Convention or APMBC). It is expected that by March 2013 all known mined areas will be cleared from Afghanistan.

During the project implementation, ATC is building demining skills of the recruited community members by conducting on-the-job as well as off-the-job trainings. The off-the-job trainings include review of demining techniques, lessons learned, mine-risk education and first aid at their base camps after leaving demining sites. During the first 12 months, the selected deminers and section leaders underwent capacity-development training, and if the project continues through a second year, section leaders will be trained to take over team-leader positions.

Conclusion
Following completion of the K CCP, all known recorded hazards will be removed from the city (except some residual threat from exposure of any subsurface UXO that appears during construction work, movement of ERW from other areas or identification of new hazardous areas), and civilian accident rates are expected to substantially decline. Also, a number of people trained as deminers during the implementation of this project will be given opportunities to be hired as deminers on other projects or to advance to higher positions such as section leaders or team leaders. As soon as funds are provided for Phase 2 of this project, and Phase 2 is completed, 22 wards in Kabul will be announced free from hazards of known minefields. The cleared land will be used for housing, agriculture, livestock pasturing, leisure activities, development projects and industrial revitalization, and the people who live close to the cleared areas will be able to live safely.

See endnotes page 83

Mohammad Alikor Dirakhili was born in Kabul and graduated from Habibia High School before immigrating to Pakistan where he studied under the International Mine Action Committee Construction Engineering Program. In August 1995, he joined Afghan Technical Consultants and worked as Assistant Operations Officer, Assistant Site Officer, Supervisor, and Operations Officer until February 2003. He then joined MACCA as Operations Assistant and he was promoted in 2008 to Area Manager. He is also a graduate of James Madison University’s 2010 ERW Senior Managers Course.

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Deminer working in a minefield during K CCP operations.

Deminer working in a minefield during K CCP operations. Photo courtesy of ATC.

Thailand and Compliance with the APMBC: Mission Impossible ... Or a Feasible Task?

This article addresses the mine-action challenges Thailand faces in maintaining compliance with the Anti-personnel Mine Ban Convention. Given the uncertainty of mine locations and the Thailand Mine Action Centre’s limited capacity, the delegation of Thailand’s mine-action resources can be an issue, as hazardous areas can be difficult to determine. The emergence of a new national land-release mine-action standard, however, means that Thailand’s ability to efficiently identify hazardous areas will allow limited resources to be appropriately assigned to areas needing clearance.

by Håvard Bach | APOPO |

The Khmer Rouge claimed yet another victim in July 2011, this time in Thailand’s Trat province near the Cambodian border. This recent incident stemmed from the legacy of fierce fighting played out between Khmer Rouge and Vietnamese forces on both sides of the Thai-Cambodian border in the 1980s. The war is finished, but casualties continue.

Fighting between the Khmer Rouge and the Vietnamese typically occurred on and around rocky hillocks and densely vegetated ridges, leaving grim conditions for survey and clearance. Most of Thailand’s mine-suspected areas are heavily overgrown with large sections scarcely populated and rarely visited because of the risk of potential landmines and explosive remnants of war. During the war, front lines regularly shifted, thus leaving a blurred picture of where mines may be located. While evidence of mines in many areas exists, other currently suspected areas have no real evidence of mines other than a general suspicion stemming from past warfare.

A Landmine Impact Survey was undertaken in Thailand from 2000 to 2001. More than 2,000 square kilometers (772 square miles) were enrolled in the TMAC database and misinterpreted as a real representation of the mine problem.

Subsequent efforts to resurvey these areas have resulted in the cancellation of almost 1,500 sq. km. (579 sq. mi.) of land. Today 540 sq. km. (208 sq. mi.) of land remains suspect.

Despite the good effort, Thailand cannot meet its APMBC deadlines without a radical change of direction and a structured approach to resolving the problem.

APOPO, a Belgian nongovernmental organization, partnered with a local Thai organization, Peace Road Organisation (later referred to in this article as APOPO-PRO), and developed a survey and land-release methodology for Thailand, which is being implemented in full cooperation with the Thailand Mine Action Centre, Thailand’s military, Thai Civilian Deminer Association and Norwegian People’s Aid. The process raises interesting questions related to how mine-affected states will comply with the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and on Their Destruction (also known as the Anti-personnel Mine Ban Convention or APMBC).

The newly endorsed system challenges a common perception of how to resolve a mine problem for convention compliance. By analyzing how European countries justify compliance with the APMBC, Thailand developed an approach that could enable full compliance within a reasonable timeframe, and breaches traditional belief that it would take more than 100 years to rid Thailand of landmines. Thailand’s solution may be an example of how similar problems could be addressed in other countries.

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