## **Clearing the Way in Azerbaijan**

The expansion of clearance activities in Azerbaijan has been largely due to the creation of an Emergency Response Team and the implementation of new tools. Thanks to these additions, ANAMA has been able to respond quickly to requests for clearance in residential areas and in the field.

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A NAMA continuously receives requests from affected communities as well as humanitarian aid organizations for clearance of houses from mines and unexploded ordnance. Due to the absence of a specialized team able to react quickly and eliminate such problems, a limited amount of explosive ordnance disposal tasks were dealt with until late 2005, when a 12-man ANAMA Emergency Response Team was established. The U.S. European Command and ArmorGroup EOD Specialists trained the team. During this training, basic principles of booby-trap and house-clearance operations were covered. Since completion of its training, the ERT has been actively deployed to five war-affected districts of Azerbaijan to perform house-clearance operations.

## **Residential Area Clearance**

Initially, 95 houses in Yukhari and Ashagi Kurdmahmudli villages of Fizuli region that were requested by Norwegian Refugee



A rocket hit the wall of this house and lodged underneath the bedroom. ALL PHOTOS COURTESY OF ANAMA



UXO uncovered inside a house to the depth of five meters.

Council for further reconstruction activities were cleared of explosive remnants of war. This operation allowed reconstruction of houses for more than 100 local families, who then could live free from the threat of explosive devices. Besides this operation, ANAMA continues to react to a number of requests for the removal of UXO fired during the war and lodged in the basements of houses, in the walls or in the adjacent yards. Normally, clearance of one house takes about three working days. House-clearance operations are very labor-intensive. The majority of UXO is found subsurface, which requires excavation efforts sometimes to the depth of five meters (16.4 feet).

Clearance of residential areas is also complicated by the large amounts of metal contamination that slow progress due to the high

Models of machines	Date of deployment	Total opera- tional hours	Total period of exploitation (months/work- ing days)	Area cleared (sq.m)	Total fuel consumption (metric tons)	Missed working days	Exploitation expenses for the machine (AZN) <sup>1</sup>	Fuel cost per sq.m. cleared (AZN) <sup>1</sup>	Total cost per sq.m. cleared (AZN) <sup>1</sup>
Bozena-4 (1)	09/2004	2,100	28 / 448	1,746,384	17	28	77,353	0.0025	0.044
Bozena-4 (2)	05/2006	556	8 / 128	488,800	4.5	5	22,542	0.0033	0.046
Bozena-5	06/2005	1,020	19 / 304	1,035,845	18	100	66,321	0.0055	0.064
V-4	09/2006	384	4 / 64	61,500	1.8	31	5,650	0.010	0.091
Rhino	09/2005	300	16 / 256	237,600	23.8	200	58,427	0.03	0.245

Table 1: Comparative analysis of mechanical-demining machines.

number of false signals. During clearance operations, local authorities and police help evacuate the inhabitants to ensure their safety. Establishment of the Emergency Response Team has allowed ANAMA to respond more effectively to requests from affected families and local authorities. All those who benefited from the project had been living with explosive devices in their houses or yards for more than 12 years. In one case, a man and his family had left their house after the war and believed they would never be able to come back. This family returned to their village immediately after their house was cleared. The presence of explosive devices in yards has also prevented locals from cultivating their land. House clearance was quite beneficial in terms of socioeconomic impact on affected families as well as their psychological rehabilitation after years spent with fear of unexploded ordnance.

## **High-priority Clearance**

Besides house-clearance operations, ANAMA is currently implementing a demining project in support of governmental initiatives to repatriate internally displaced persons. Last year ANAMA signed a contract with the Social Development Fund for IDPs concerning clearance of 19 million square meters (4,695 acres) of suspected mined area in Zobjug village, Fizuli region. This project is a high priority for the government, as cleared land will be used to construct a huge settlement that will allow more than 2,000 displaced families to leave temporary residences in tent camps and move to Zobjug. The duration of clearance for the project is projected to be 19 months.

Since the beginning of the project, 53 deminers, 17 mine-detection dogs and five mechanical demining machines have been involved in operations. This mined area has been identified by General Survey and Landmine Impact Survey. Several mine incidents have occurred in the northern part of the area; however, most of the land is classified as a low-threat, suspected anti-tank



Removing subsurface UXO from house yards.

mined area. In order to ensure operations are conducted in the most efficient manner, ANAMA has conducted a field test of various clearance methods and developed a new system where all three tools are integrated in a most time- and cost-effective manner. The system stipulates 100-percent clearance where demining machines cut lanes (every 10-15 meters [32-50 feet]) with a subsequent quality-assurance check by dogs or magnetic locators in between the lanes (see photo X). The Foerster magnetic locator with four probe attachments, known as the FEREX 4.032 DLG, is continuously used for clearance of Zobjug area. This tool continues to show excellent results-daily productivity of the locator can reach 15,000 square meters (3.7 acres). As a result of the employment of a new area-reduction methodology, overall productivity at the Zobjug site has reached approximately one million square meters (247 acres) per month.

Based on past experience with demining machines in Azerbaijan, ANAMA mechanical demining specialists completed a comparative analysis of the machines' performance. Table 1 reflects summary results of the analysis undertaken.

## Conclusion

Following the war, hundreds of Azeri families were unable to return home due to mine and UXO contaminations in residential areas. New clearance projects from ANAMA, however, have helped make Azerbaijan safer by eliminating the threat of UXO and landmines from affected houses, yards and villages. A combination of technology and human commitment has been necessary for the successful clearance of residential areas and the safe return of displaced families. **Φ** 

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Samir Poladov holds a bachelor's degree in international relations and international law. He began working with ANAMA as an interpreter during its establishment in 1999. After holding several other positions, he became Acting Operations Manager of ANAMA in October 2006. In this capacity, Poladov is responsible for planning, tasking, coordination and control of all survey and clearance operations within the program.

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