Cyprus confronts its MANPADS menace

How to dispose of 324 ageing shoulder-fired missiles

OSCE/ANTON MARTYNYUK

BY ANTON MARTYNYUK AND F. DAVID DIAZ

12 June 2009, Kalo Chorio, Cyprus. *The animated conversation among the 50 or so guests of the Cypriot Government is interrupted by a giant explosion thundering across the expanse of the National Guard's demolition range adjacent to the small village of Kalo Chorio, near the coastal city of Larnaca. From our observation shed about one kilometre away from the actual blast site, the display of thick clouds of smoke billowing up over the area is awe-inspiring. Cypriot Defence Minister Costas Papacostas and his guests break out into spontaneous applause.*

Along with members of the diplomatic corps, including ambassadors and military attachés, United Nations and Cypriot officials, community representatives and journalists, we had just witnessed the destruction of 20 man-portable and defence systems (MANPADS) — the last in a surplus cache of 324 of these weapons that were detonated in multiple open pits over four days in early June.

The event marked the concluding phase of a project co-ordinated by the OSCE, with the United States and the United Kingdom as the main providers of technical expertise. The Defence Ministry of the Republic of Cyprus took care of most of the costs and the practical arrangements.

"Today's ceremony highlights the long-term commitment of the Republic of Cyprus to counter the illegal proliferation of small arms and light weapons as effectively as possible," Defence Minister Costas Papacostas told his guests. Referring to the 324 surplus MANPADS that had just been destroyed, he said that "even if they had long outlived their shelf life, there was always a danger that they could fall into the hands of criminals, terrorists and insurgents who could use them in harmful and destructive ways, resulting in the loss of human lives".

MANPADS were first introduced in 1967 for use by military forces as protection against aerial attacks. One look at these lethal short-range, surface-to-air missiles is all it takes to understand why they are particularly attractive to "non-State

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Photo above: Cypriot and US technical experts tape explosives to a launch tube containing a MANPAD missile. Photo right: F. David Diaz (extreme left) and Anton Martynyuk (extreme right) with the team of technical experts. Col. Georgios Georgiadis of the National Guard is second from left. Photo below: Cypriot air defence personnel unload a cache of MANPADS and carry out an inventory preparatory to their destruction.

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actors". Consisting of a launch tube, the missile itself and a launcher, MANPADS are highly portable, easy to conceal and simple to use. The model destroyed under the OSCE project — the "9M32M STRELA" — was designed to hit targets flying at an altitude of up to 5 kilometres.

According to expert estimates, more than a million of these missiles have been manufactured and thousands are out of the control of national governments and are readily available on the black market for as little as a few hundred dollars. Since the 1970s, there have been more than 40 incidents in which MANPADS were deployed against civilian aircraft, leading to 28 aircraft crashes and more than 850 deaths world-wide.

"We had been wanting to get rid of our stockpiles for years not least because we're in a politically 'hot' region and the island is served by two international airports, one right in Larnaca, not too far from here," said Col. Georgios Georgiadis, Director of Army Materiél in the National Guard. "You can imagine how relieved we all are now that we no longer have the burden of keeping watch over the stockpiles, which were stored in scattered warehouses."

The determined commitment of the Republic of Cyprus to safely dispose of the MANPADS stockpiles drove the fast-paced action that followed on the heels of the Defence Minister's request for technical assistance from the OSCE community. At a joint meeting of the Permanent Council and the Forum for Security Co-operation in October 2008, Minister Papacostas said that although "experts in our National Guard are capable of destroying small quantities of MANPADS by using detonators and simple explosives, so far they have not handled the mass

destruction of missiles and are keen to learn the best way to carry this out in line with international safety and environmental protection standards".

In March this year, our OSCE-led group of experts from the United Kingdom and the United States visited Cyprus to take a close look at the MANPADS, evaluate the threats they posed, study the available methods of disposal and visit the demolition range sprawled out over 20 square kilometres. Working hand-in-hand with the Cypriot National Guard's Explosive Ordnance Disposal Unit, we developed a detailed plan to eliminate the weapons. At the same time, we made sure that the activities would also build the capacity of the national experts to handle larger operations, following the best practices available.

By the time we returned in June for the demolition — amidst sizzling 40 degree temperatures — it was clear that months of intensive cooperation between Vienna, Nicosia, London and Washington, D.C., had paid off.

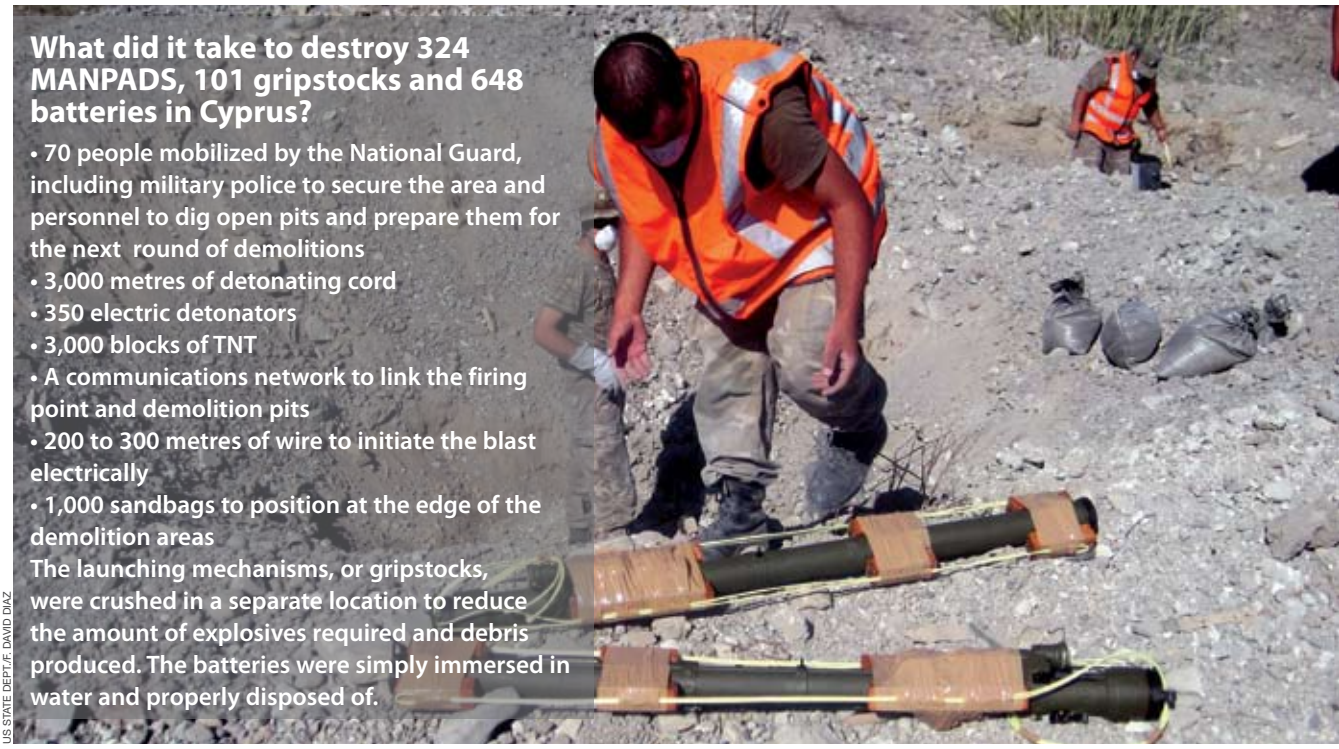
With Col. Georgiadis managing the activities on the ground, not a single human or environmental safety concern was left to chance. The National Guard and the specialists from the United Kingdom had already gone through a test run of the procedures by destroying the first two MANPADS. The help of the military police was enlisted to secure the demolition area, and the Larnaca Fire Brigade, military doctors and medical staff were at the ready in case of an emergency. Carefully following the safety standards recommended by the OSCE, the MANPADS were transported from military depots to the site. Precise accounting procedures were in place. Any items of ordnance remaining unexploded after the demolition were to be disposed of properly.

But it was the Defence Ministry's concern for the local communities in the vicinity of the firing range that left a positive impression. At the ceremony, the visibly pleased Mayor Angoulis Kyriakos of Kalo Chorio, which means "Good Village", said that the residents were consulted during the planning of the operation. Also among the guests were the mayors of three other nearby villages, representing about 1,700 residents.

"Kalo Chorio, the village closest to the firing range, is home to about 2,000 people, most of whom are refugees," said Col. Georgiadis. "We wanted to make sure that such a massive operation lasting several days would not have a negative impact on them and their farms. When we met village representatives, we discovered that the residents preferred one blast a day to several staggered explosions throughout the day, which they felt would be more disruptive."

Taking this wish into account, we abandoned our original plans to have several blasting operations using the existing ten open pits. Instead, we arranged for 50 demolition pits to be dug, with each pit holding two MANPADS. To carry out just one blast a day, the 50 pits were connected with "non-electric bi-directional short delay connectors", which held up the explosions between the pits by 25 milliseconds each.

"From a distance, we heard one spontaneous explosion but there was actually a sequence of 50 explosions", said Col. Georgiadis. "This was the first time we used this method and we were



Cypriot soldiers position two MANPADS deep into a demolition pit to prepare them for disposal.

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What did it take to destroy 324 MANPADS, 101 gripstocks and 648 batteries in Cyprus?

- 70 people mobilized by the National Guard, including military police to secure the area and personnel to dig open pits and prepare them for the next round of demolitions
- 3,000 metres of detonating cord
- 350 electric detonators
- 3,000 blocks of TNT
- A communications network to link the firing point and demolition pits
- 200 to 300 metres of wire to initiate the blast electrically
- 1,000 sandbags to position at the edge of the demolition areas

The launching mechanisms, or gripstocks, were crushed in a separate location to reduce the amount of explosives required and debris produced. The batteries were simply immersed in water and properly disposed of.

very happy that it did what it was supposed to do — destroy up to a hundred MANPADS all at one go while keeping the noise level down out of consideration for the residents of the surrounding communities."

Col. Georgiadis confessed that he and his team had first thought that the co-operation with the OSCE would merely be on a "superficial" level. "We found out that it went far deeper," he said. "One had to go through the experience to realize how much everyone benefited, especially our officers. On the spot, for example, we learned how to carry out the OSCE's recommended best practices in recording, photographing and verifying identification and manufacture markings on the MANPADS and grip stocks — which adds an important element of transparency to the process."

Col. Georgiadis agrees that the exercise boosted their self-confidence. "Since then, we've been destroying 85 tonnes of old artillery ammunition every month," he said. "We have also moved the blasting operations 3 kilometres deeper into the range to reduce the impact on the surrounding villages even more."

He pointed out that the project's confidence-building objectives also spilled over into the quality of interaction between the National Guard and the British Forces stationed in Cyprus, whose Commander had been invited to observe the demolition.

"This was one of the most efficient and most cost-effective projects we had ever been involved in," said expert Bob Gannon. "The National Guard demonstrated great professionalism, the logistical arrangements went without a hitch and we, in fact, also learned a great deal from them. There's no doubt in anyone's mind that the Explosive Ordnance Disposal Unit is now perfectly capable of conducting similar demolition operations on a massive scale in the future. Our role was merely to give them a helping hand in the form of safety oversight and technical advice."

We hope that we — the OSCE, the United States and the United Kingdom — can build on this first, fruitful co-operative venture with our Cypriot counterparts through other practical activities in line with the Defence Ministry's dynamic approach. A logical next step, for example, would be to pool our efforts to improve the storage facilities for retained stockpiles of small arms and light weapons and their management. This would make life far safer and more secure for the nearly 800,000 people on this beautiful island.

Not too many people realize that Cyprus is one of the original 35 signatories of the Helsinki Final Act and that it was a founding member of the neutral and non-aligned group of countries that contributed significantly to building bridges between the opposing interests of the East and the West.

Since that landmark event, "Cyprus has participated energetically in all the bodies of the OSCE and has been implementing its obligations with great determination," Minister Papacostas said. "As a member of the European family and the OSCE, we will continue working with the same zeal to promote global peace and stability."

Anton Martynyuk, CSBM/Project Officer in the FSC Support Section of the OSCE's Conflict Prevention Centre, was the team leader of this project. F. David Diaz is a Foreign Affairs Officer in the Office of Weapons Removal and Abatement in the Bureau of Political-Military Affairs, which is the U.S. Department of State's focal point for the destruction of conventional weapons, including MANPADS.

"Effective and comprehensive": Stemming the illicit spread of MANPADS

The participating States' commitment to curb the proliferation of "portable launchers of anti-aircraft missile systems" — as MANPADS are defined in the OSCE's Document on Small Arms and Light Weapons (SALW) — is embodied in the OSCE Document on SALW as well as in three supplementary decisions adopted by the OSCE Forum for Security Co-operation in 2003, 2004 and 2008. Taken together, these constitute an effective set of measures to strengthen control over exports, transfers and stockpiling of MANPADS.

In **FSC Decision No. 7/03: Man-Portable Air Defence Systems,** the participating States called for promotion of the application of effective and comprehensive export controls for MANPADS. It urged the participating States to "propose projects for tackling MANPADS-related problems" such as stockpile security and management, and reduction and disposal.

FSC Decision No. 3/04: OSCE Principles for Export Controls of Man-Portable Air-Defence Systems complemented and reinforced the implementation of the Document on Small Arms and Light Weapons by calling for stricter guidelines for the transfer of MANPADS, including a wide range of requirements for stockpile management and security of MANPADS in States that are potential recipients of exports of MANPADS. The participating States agreed to incorporate these principles into their national practices and to promote them in non-OSCE participating States.

FSC.DEC/5/08: Updating the OSCE Principles for Export Controls of Man-Portable Air Defence Systems introduced amendments aimed at improving the implementation of export controls by making them more easily understood by commercial exporters and licensing authorities. The updated principles also covered issues concerning the transfer of production.

Recommended reading

- *The OSCE Handbook of Best Practices on Small Arms and Light Weapons Concerning National Procedures for Stockpile Management and Security of MANPADS (Annex C), 2006*
- *Document on Small Arms and Light Weapons, 2000*