Albania Makes Progress in Demilitarization

With the goal of destroying all excess munitions by 2013, the Albanian government is working to eliminate stockpiles of excess military munitions. Following a 2008 deadly explosion at a munitions dismantling factory, the government established safer mandates and successfully destroyed thousands of tons of munitions.

by Captain Matt Goodyear [United States Army]

wo years after the 2008 deadly explosion at a demilitarization² facility on the outskirts of Tirana, Albania's capital, the Albanian government has made significant progress in reducing excess stockpiles and demilitarizing hazardous and obsolete Gërdec Depot ordnance. Although ridding the country of more than 100,000 tons (9,072 metric tons) of outdated and dangerous munitions and weapons has been a formidable challenge, the government's efforts, in conjunction with the international community, have resulted in a robust and effective demilitarization program. Another 5,000 tons (4,536 metric tons) is expected to be destroyed by the end of 2010. This notable improvement in the management of Albania's excess munitions stockpiles reflects the government's commitment to the process and illustrates the impact of international contributions and collaboration.

Albania's History of Explosives

The communist period of Albania's history (1946-91) was marked by a massive build-up in munitions and weapons of Albanian, Chinese and Soviet origin. Hundreds of depots were placed in every corner of Albania and were stocked with more than 100,000 tons (9,072 metric tons) of munitions. Each depot housed various types of munitions that became potentially dangerous after years of degradation. With the fall of communism in 1991, maintenance and management of the depots was neglected, and when anarchy enveloped the country in 1997, many depots were damaged, destroyed or looted. After stability was restored, the return of reclaimed munitions to depots was not handled systematically, further exacerbating an already dangerous storage environment. Now, two years after the explosion, ordnance has been consolidated into 44 depots. Because of their age, poor maintenance and lack of proper storage, some of these munitions are unstable. In addition, due to residential encroachment, several depots are located close to civilian populations, endangering the lives of many people.

Some demilitarization efforts began in 2001, including an assistance project by the NATO Maintenance and Supply Agency, which destroyed more than 8,700 tons (7,892 metric tons) of munitions between 2002 and 2007. Then, on 15 March 2008, a massive explosion occurred at an ammunition dismantling facility in Gërdec, 30 kilometers (19 miles) west of Tirana and 3 kilometers (2 miles) from the national airport. Previously home to a tank division, the site had been converted to allow a private company to demilitarize ordnance and sell the scrap residue. The residents of the area were unwittingly living too close to the factory, and the blast killed 26 people, injuring more than 300.1 The explosion's exact cause is still unknown; however, unsafe standards and practices were clearly being used at the Gërdec facility. As a result of this disaster, the Minister of Defence, along with 29 other people, was subsequently charged with abuse of office. The explosion and the public outcry that ensued brought demilitarization efforts in Albania to a standstill and created an atmosphere of paralysis in the Albanian Ministry of Defence. During the months immediately following the disaster, Albania, with technical assistance from the international community, worked to establish the necessary legal framework to demilitarize munitions and upgrade the decrepit facilities to reduce risk.

In the summer of 2008, the Albanian government established a plan to demilitarize the remaining 85,000-90,000 tons (77,111-81,647 metric tons) of various



Shells from demilitarized 82mm mortars. PHOTO COURTESY OF WILLIAM WADE, STERLING INTERNATIONAL, LLC

ordnance types. According to the plan, three primary factories would be used for industrial dismantling and destruction, including cutting open the mortars and removing the explosives, and eight demolition ranges would be used for open detonation³ and burning. To realize this goal, significant financial and other contributions would be needed not only by the Albanian government, but also by foreign donors and international institutions. An ongoing demilitarization project managed by the Office of Weapons Removal and Abatement in the Department of State's Bureau of Political-Military Affairs (PM/WRA) was expanded to provide an additional US\$2 million for the Gërdec munitions cleanup."4 In addition, the international community⁵ offered financial support and expertise to safely clear the explosion site and demilitarize the remaining stockpiles. Industrial demilitarization finally commenced in January 2009 and open detonation began several months later. Since then, the Albanian government has prioritized its demilitarization efforts.

Mjekes Explosives Factory

During its 2001-07 project, NAMSA developed part of the communist-era Mjekes explosives factory (just east of Elbasan in central Albania) to destroy smallarms ammunition. As a result of the project and a successful business in reprocessing explosive material, the Mjekes explosives factory received significant investment and was developed into a modern facility. In 2008, the Mjekes factory purchased two band saws to destroy 3,400 tons (3,084 metric tons) of 160mm mortars. After cutting the mortars and revealing the explosives, the workers used a steam generator to remove the explosives, and the shells were either discarded or sold for scrap. The explosives were then either burned or reprocessed to sell as low-grade explosives.

The Mjekes factory began processing the 160mm mortars in January 2009, and by June 2010, had successfully completed the project without incident. The factory line is now being adjusted to dismantle the approximately 11,000 tons (9,979 metric tons) of excess



The Mjekes demilitarization facility.

Photo courtesy of Anthony Baird

120mm rounds. The government of Denmark through the Organization for Security and Co-operation in Europe recently donated to Mjekes four more band saws to establish a second dismantling line to handle other large-caliber munitions.

Polican Munitions Factory

While the communist-era Polican munitions factory near Berat in Southern Albania was part of the original NAMSA project, it did not receive capital investment, and its technology and upkeep were significantly behind Mjekes. PM/WRA assisted the government of Albania by funding a U.S. contractor, Armor Group, to supervise demilitarization operations there. Polican did not have the capital to buy band saws, and thus, demil-

itarization occurred through simple dismantling (unscrewing the heads and steaming out the explosives). In May 2009, Polican began the demilitarization of 82mm Chinese-made mortars with TNT explosives. In early 2010, Polican received a donation of four band saws from Denmark. With these band saws, the factory is developing a dismantling line to demilitarize the more sensitive Amatol-filled Soviet mortars. So far, Polican has destroyed 2,300 tons (2,087 metric tons) of Albania's 15,000 tons (13,608 metric tons) of 82mm mortars.

Polican also benefits from a PM/WRA-funded portable incinerator for use in destroying small caliber ammunition, beginning with 7.62mm bullets. The incinerator heats the bullets until the gunpowder explodes, leaving the melted brass and lead for scrap.

The incinerator, which went into use in January 2010, can burn between five and eight tons (5.54 and 7.26 metric tons) of bullets per day. To date, it has destroyed approximately 360 tons (327 metric tons) of 7.62mm bullets.

Gramsh Factory

Solely run by Albania, the Gramsh factory also does industrial demilitarization. The government has established a line there to demilitarize 37mm ammunition. Due to its proximity to the local population, the factory must maintain a very low production rate and explosive-storage capacity. The process does not use band saws and involves manually dismantling the 37mm projectile from the fuze and steaming out the explosives. The Albanian government expects to complete destruction of all 4,000 tons (363 metric tons) of 37mm projectiles before the end of 2010, when the plant will retool the line to handle up to 100mm projectiles.

Albanian EOD and Ranges

Due to previous accidents on ranges, all open detonation of munitions in Albania was suspended in 2007. However, open detonation plays an integral part in the new national demilitarization plan. Thus, in 2009, the government of Albania designated eight ranges and began training its explosive ordnance disposal unit for detonation activities. The Albanian Armed Forces EOD units also received training from the U.S. Defense Threat Reduction Agency and U.S. EOD Navy experts. Despite various setbacks (including sometimes resistant civilian populations, theft of scrap and minor accidents on site), the EOD company

has made impressive progress, destroying up to 900 tons (817 metric tons) of ordnance per month. With support from the Dutch government, AAF EOD received three electrical firing devices to improve its safety on demolition ranges. Additional EOD safety and personal protective equipment was provided to Albania by the U.S. European Command. This equipment was used to train EOD operators, and it will increase safe operations through communication and positioning data with GPS-enabled radios. Since beginning work in 2009, the AAF EOD teams have destroyed approximately 4,400 tons (3,992 metric tons) of various size munitions.

In 2009, Albanian Prime Min-

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ister Sali Berisha announced the demilitarization of all hazardous ordnance by 2013. With 75,000 tons (68,037 metric tons) of ordnance identified for destruction, experts concur that this is an ambitious goal. To support demilitarization, the Albanian government and PM/WRA jointly funded a NAMSA feasibility study to assess a possible NAMSA project built upon the success of its 2002-07 project. In March 2010, NATO members approved the project and opened a NAMSA office in Tirana in September 2010. While the memorandum of understanding between NAMSA and the government of Albania is still under review, experts anticipate demilitarization under this long-term project will begin in January 2011, funded primarily by the United States, following the signing of the MOU.

Through these projects, Albania is developing specialized EOD and demilitarization capabilities that are

in high demand throughout the region. As the country completes its national demilitarization plan, the Albanian government and military will end up with a viable skill set that could be beneficial to NATO and other countries with deteriorating stockpiles. Likewise, the Mjekes factory, with minor upgrades in equipment and training, could become a regional hub for demilitarization. While the prospect of regional weapons destruction cooperation may seem ambitious, a regional approach to stockpile reduction is beginning slowly to take shape. By taking advantage of assistance from the international community, Albania is strengthening its expertise, gaining proficiency in munitions and ordnance handling, and is establishing appropriate munitions dismantling and destruction facilities. ▶

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