DEMINING IN THE DMZ

By Colonel John P. Lloyd and Major Mark S. Born

Korean DMZ

At 10:00 a.m. on 27 July 1953 in Panmunjom, Korea, the Korean War Armistice Agreement was signed under the authority of the Commander in Chief, United Nations Command (UNC); the Supreme Commander of the Korean People's Army; and the commander of the Chinese People's Volunteers.[1] The first article of the Armistice Agreement created a military demarcation line and the Korean Demilitarized Zone (DMZ). Approximately 4 kilometers wide, the DMZ separates North and South Korea—from the Yellow Sea (on the west) to the Sea of Japan (on the east). The UNC retained administrative authority of the 2-kilometer strip of the DMZ south of the military demarcation line, and the Democratic People's Republic of Korea (DPRK) retained control of the 2-kilometer strip of the DMZ north of the military demarcation line. Although the armistice called for the retreat of all combat forces from the DMZ, continued skirmishes after 1953 served to transform the area into a fortified barrier running the width of the Korean peninsula.

Through manmade fortification, revegetation after massive bombing during the Korean War, and inclement weather that has reshaped the terrain, the DMZ has become a large obstacle belt, developed and modified for more than 67 years, creating significant safety hazards to demining. The area of the DMZ south of the military demarcation line comprises 100.3 million square meters and contains a significant number of landmines (estimated at more than 1 million) as well as a significant amount of unexploded ordnance. Beyond the sheer number of explosive devices present, three factors increase explosive-hazard risks in the DMZ—time, mine drift as (a result of weather), and a lack of detailed documentation on minefield locations.

Overview of the Panmunjom Declaration and the CMA

On 27 April 2018, an inter-Korean summit was conducted between President Moon Jae-in of the Republic of Korea (ROK) (representing South Korea) and Chairman Kim Jong Un of the DPRK (representing North Korea). The summit took place in the Joint Security Area (JSA) at the historic South Korean Panmunjom Peace House. The two leaders publically declared a plan for the establishment of a "peace regime" for the Korean peninsula; the historic meeting resulted in signing the Panmunjom Declaration for Peace, Prosperity, and Reunification of the Korean peninsula.[2]

The Panmunjom Declaration paved the way for a second summit between the leaders in Pyongyang, North Korea, in September 2018. There, delegates from the two governments signed the "Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain," otherwise known as the Comprehensive Military Agreement (CMA), on 19 September 2018.[3] Among the provisions of

the agreement is a call for the transformation of the DMZ into a peace zone and the establishment of consultation on military assurance measures for—

- The mutual withdrawal of guard posts.
- JSA demilitarization.
- Inter-Korean joint remains recovery.

With the support of UNC, the ROK government has proceeded with its implementation of the CMA.

Vision

At the 74th Session of the United Nations (UN) General Assembly, on 18 October 2019, President Moon Jae-in proposed the idea of transforming the DMZ into an international peace zone to the UN and its member states. "The DMZ is the common heritage of humankind, and its value must be shared with the whole world," said President Moon.[4] His words generated a sense of urgency among the ROK peace supporters as well as the momentum necessary to begin the historic process of demining within the DMZ for the first time since 1953. He also created an opportunity for global support, stating, "Cooperation with the international community, including the UN Mine Action Service, will not only guarantee the transparency and stability of demining operations, but also instantly turn the DMZ into an area of international cooperation."[5]

Arrowhead Hill

The location that was agreed upon by a trilateral body comprised of ROK, UNC, and DPRK officials for the construction of a connecting road for conducting mine clearance was Arrowhead Hill, also known as Hill 281. Arrowhead Hill, located in Cheorwon Valley, was a site of considerable fighting between UNC forces (namely, the United States, France, and South Korea), China, and DPRK during the Korean War. It is estimated that the north side suffered 6,700 losses, while the south side lost 14,332. Over 9 days of fighting, it is estimated that the U.S. Air Force dropped 2,700 bombs, China fired 55,000 shells, and South Korea fired 185,000 shells. In 2019, ROK military engineers located 455 mines and 5,754 unexploded ordnance items at Arrowhead Hill.

Recovery Operations

On 1 October 2018, soldiers from the ROK and DPRK armies began clearing operations in both JSA and Arrowhead Hill, in accordance with the CMA. (According to ROK law, only the military is authorized to conduct demining operations.) In the JSA, both sides focused on clearing areas of potential mines and unexploded ordnance.

Although the CMA included a requirement for the verification of cleared areas, it did not specify the standard for clearance or who would conduct the verification. Due to the absence of agreed-upon demining standards between ROK and DPRK, comprehensive minefield documentation, mine action programs, and an organization that represented mine action within the international community, UN command engineers and U.S. Forces Korea, Camp Humphreys, South Korea, engineers agreed to support ROK mine action program development and to utilize the UN International Mine Action Standards (IMAS) as the foundation for mine action development.[6]

To achieve IMAS-compliant mine clearance, UNC enlisted the help of a U.S. Army Corps of Engineers quality control team from the Engineering Support Center, Huntsville, Alabama. The U.S. Army Corps of Engineers provided on-the-job training for ROK engineers, monitored ROK quality control operations, supplied external quality assurance measures, and provided certification for surface area clearance.

Clearance of the north side of the JSA, administered by the DPRK, was never verified to the same IMAS. Verification (or lack thereof) proved extremely critical, as two low-metallic box antipersonnel mines were detonated on the DPRK side of the JSA following the claimed clearance of mine hazards. Luckily, there were no injuries in those cases; however, these incidents, coupled with continued UNC insistence on clearance to the IMAS, served to highlight the lack of documentation on exact mine placement.

Upon completion of the first demining season in 2018,[7] UNC learned multiple critical lessons on mine actions in Korea. The first lesson learned regarded the value of published National Mine Action Standards, which are

Demining on Arrowhead Hill

Area clearance operations

standards that are developed by countries based on IMAS—but are more specific than IMAS. They also provide a cradle-to-grave process for demining, from planning to disposal to land turn-over. The next lesson learned focused on the development of an internationally recognized National Mine Action Authority[8] and a National Mine Action Center.[9] The creation of a National Mine Action Authority and National Mine Action Center established international legitimacy for countries' mine action policies, procedures, and coordination with international governmental and nongovernmental organizations. A final lesson learned was that the U.S. military does not execute demining operations unless they are deemed operationally essential—which can lead to gaps in demining knowledge and experience. As a learning organization, it became critical for the UNC to understand this limitation and seek subject matter experts from the field.

UN command engineers and U.S. Forces Korea engineers focused on developing opportunities to increase knowledge, learn from international governmental/nongovernmental agencies, and provide a mine action plan with support and oversight from subject matter experts in the mine action field. These actions support the achievement of a safe, transparent, and effective South Korean mine action program. Successful mine action initiatives have built a foundation to ensure that, in the future, the DMZ can indeed be transformed into a peace zone, as envisioned in the CMA and in President Moon's UN General Assembly speech.[10]

UN command engineer initiatives over the past year have included—

- Hosting a UNC demining workshop.
- Attending the National Directors of Mine Action Conference in Geneva, Switzerland.
- Visiting national mine action centers.
- Standing up a U.S./ROK/UNC demining steering committee.
- Visiting nongovernmental mine action organizations.
- Providing state engineers with mine action experience for the UNC staff.
- Enforcing standards for demining operations in the DMZ.

Even as a small engineer staff, UNC engineers were able to use available resources to help transform national policies and standards, which resulted in a successful 2019 Korean DMZ demining season.

Conclusion

For the past 67 years, the DMZ has been one of the most densely mine-laden and dangerous areas in the world. The CMA created an opportunity to facilitate change in the DMZ and ignited a spark that initiated the historic acts of strategically removing combat-related obstacles and recovering the remains of fallen heroes. These small steps led to immense results.

Peace is a process. UNC engineers and the Multinational Demining Committee continue to work across multiple lines of effort to socialize with countries affiliated with UNC, to send subject matter experts to observe and participate in demining efforts, and to continue working closely with ROK on creating mine action policies in accordance with international standards. These efforts include upgrades in the

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operations. After all, detention operations is a military police function, right? Well, partially. The maneuver force must have a plan to hold detained persons until they can be handed over to the military police. This may mean that the maneuver force is responsible for operations at the detainee collection point and, potentially, at the detainee holding area.[3]

All echelons must have a thorough understanding of how to execute the care, custody, and control of detained persons in accordance with Army regulations and the Geneva Conventions.[4] Improper execution at the tactical level can have detrimental effects at the strategic level, negatively impacting joint and partner operations and perceptions throughout the world. Additionally, crime does not necessarily stop just because elements are moving against the enemy and commanders are responsible for stopping and controlling criminal actions (whether normal crimes or war crimes) as they occur or are brought to light.

Protection at the level of brigade and below is not focused solely on the tactical-level subtasks listed in ADP 3-37, although those are important in guiding planning. Brigades must include deliberate protection planning and support to the division protection cell in order to ensure that the plans remain comprehensive, integrated, layered, redundant, and enduring—the principles of protection. Brigades need clear guidance and a complete understanding of the vision and desired end state of division and corps level operations in order to understand their responsibilities in the scheme of protection. The Army Strategic Education Program–Commander Program provides division, corps, and Army commanders with the commanders and subject matter experts from the various centers of excellence and a forum for deliberate planning for some of the most dangerous operations our future Army will face.

Endnotes:

[1]ADP 3-37, *Protection*, 31 July 2019, p. iv.

[2]Ibid, p. 1-8.

[3]Ibid.

[4]"Geneva Conventions Relative to the Treatment of Prisoners of War," United Nations, 12 August 1949, <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/INTRO/375?OpenDocument>, accessed on 10 August 2021.

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latest mine and unexploded ordnance technological advances and creating partnership synergy with professionals in nongovernmental organizations. Lastly, and most importantly, UNC engineers contribute to reconciliation on the Korean peninsula through the removal of mines.

Endnotes:

[1]*Agreement Concerning a Military Armistice in Korea*, UN, 27 July 1953, <https://peacemaker.un.org/koreadprk-militaryarmistice53>, accessed on 3 August 2020.

[2]*Letter Dated 6 September 2018 From the Representatives of the Democratic People's Republic of Korea and the Republic of Korea to the United Nations Addressed to the Secretary-General*, UN, 6 September 2018, <https://digitallibrary.un.org/record/1640603?ln=en>, accessed on 3 August 2020.

[3]"Agreement on Implementation of the Historic Panmunjom Declaration in the Military Domain," National Committee on North Korea, 18 September 2018, <https://www.ncnk.org/sites/default/files/Agreement%20on%20the%20Implementation%20of%20the%20Historic%20Panmunjom%20Declaration%20in%20the%20Military%20Domain.pdf>, accessed on 3 August 2020.

[4]"Full Text of President Moon Jae-in's Speech at the 74th UN General Assembly Session," Yonhap News Agency, 25 September 2019, <https://en.yna.co.kr/view/AEN20190924010500315>, accessed on 3 August 2020.

[5]Ibid.

[6]International Mine Action Standards, IMAS Organization, 2001, <https://www.mineactionstandards.org/>, accessed on 3 August 2020.

[7]The demining season is determined by weather conditions that permit the activities necessary for removal of mines and unexploded ordnance. The length of the season depends on the location, but the season generally consists of warmer months with little precipitation, as lower temperatures can cause freezing and excess precipitation can cause unsafe conditions.

[8]"Full Text of President Moon Jae-in's Speech."

[9]"UN Officials Discuss Support for President Moon's Vision for DMZ Mine Removal," Yonhap News Agency, 17 February 2020, <https://en.yna.co.kr/view/AEN20200217003600325>, accessed on 3 August 2020.

[10]"Full Text of President Moon Jae-in's Speech."

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