Lessons Learned From Korea

By 1st Lt. Hannah Jones

Introduction

The future of warfare is ambiguous, and although the United States strives for decisive victory, the Army has a tendency to lose its first battles due to incomplete preparation. It is imperative for leaders to constantly re-evaluate global threats and preemptively create strategies for sustaining the fighting force in order to win the nation’s wars. Second Battalion, 20th Field Artillery, a Multiple Launch Rocket System (MLRS) battalion, deployed to the Republic of Korea (ROK) from February to November of 2018 as part of 210th Fires Brigade. The brigade is one of the northernmost units to the Demilitarized Zone (DMZ) and are pivotal in deterring North Korean aggression. The theatre of Korea poses challenges to the U.S. Army unseen in decades, and alludes to a future of near-peer, conventional warfare with high casualty rates. The leaders within 2-20th FAR and 210th Fires Brigade employed innovative medical training and techniques, such as whole blood transfusions in battalion aid stations and casualty evacuation with non-standard ground platforms, to mitigate the predicted treatment and evacuation shortfalls unseen by the U.S. Army since the Vietnam War.

Planning without air MEDEVAC

It is predicted there will be no air medical evacuation (MEDEVAC) for at least the first two weeks of hostilities due to the anticipated volume of artillery fire and the threat of North Korean air defense systems. There are approximately 50 ROK artillery battalions within 210th Fires Brigade’s area of operation (AO), spanning a 60 mile distance from Seoul to the Demilitarized Zone, and dozens of North Korean artillery battalions targeting weapons towards the AO. The predicted volume of fire is too massive for air controllers to de-conflict air space for air MEDEVAC. Additionally, the 210th Fires Brigade AO is close enough to the DMZ where air MEDEVAC is in range of North Korean Air Defense Artillery systems, both shoulder-fired weapons from special operations infiltrators and heavier ADA systems across the border. Until the North Korean air defense systems are destroyed and the artillery rates of fire decrease, ground vehicles will be the only means of medical evacuation.

Non-standard casualty evacuation

There are not enough ground ambulances or licensed drivers to accommodate the extremely high casualty predictions, so commanders must designate vehicles, such as light medium tactical vehicles and humvees, and practice loading and evacuating casualties from these non-standard platforms to augment the ground ambulances’ capabilities. All leaders should know where the closest aid stations are on the battlefield, at least two different routes to arrive there, and how long each route will take. This knowledge is essential in Korea because not only can a route potentially be obstructed by the destruction of artillery and chemical contamination, multiple roads will be off-limits to the U.S. Army due to civilian evacuation. Leaders will also have to make hard judgement calls when triaging casualties due to limited space. Soldiers with minimal or delayed injuries like simple fractures may have to stay forward to keep fighting, and only the most serious injuries with a chance of survival will be evacuated. A unit’s training reflects the priorities of a unit, and medical treatment and evacuation are imperative to ‘fighting tonight and keep fighting until we win.”

No golden hour

The golden hour is the first hour after a traumatic hemorrhage injury most critical for success in emergency treatment, so casualties have the highest likelihood of survival if evacuated to a treatment facility within one hour of injury. War in Korea means no more golden hour. Since casualties will only be evacuated by ground platforms, the rate of evacuation will be slow and cumbersome compared to recent U.S. combat zones with air MEDEVAC capabilities. The urban and natural terrain of the Republic of Korea canalize and highly restrict movement due to the dense populations and the mountainous terrain, further slowing the anticipated rate of travel during combat. Because there is no more golden hour, battalion aid stations will need creative solutions for holding and maintaining the lives of casualties in lieu of evacuation to higher roles of care.

Walking blood bank

The key to the golden hour is blood replacement, so 210th Fires Brigade adopted the Walking Blood Bank (WBB), an initiative to bring the blood to the Soldiers if the Soldiers cannot evacuate to the blood. Whole blood transfusions in pre-hospital settings are not new to war, but rather a diminished skill first used as early as World War II and deemed
unnecessary over the years due to advances in patient evacuation. In previous wars, helicopters air-dropped medical supplies and units of blood to the forward lines, but this luxury will not exist in Korea. Also, the Role 2 of 210th Fires Brigade only has the storage capacity for 50 units of blood, and will be located too far for most units to travel in wartime conditions. Although the transfer of whole blood is generally a Role 2 and higher capability, the WBB allows battalions to give whole blood transfusions in their aid stations.

The whole blood transfusion process is more complicated than matching blood types on dog tags and quickly sticking someone with an IV. Units proactively consolidate blood types via titer tests of every Soldier in the unit. Titer tests give physicians a more exact description of a Soldier’s blood type, beyond the general A, B, or O reading, and are imperative for a safe blood transfusion. Critics of the WBB believe a whole blood transfusion on the front lines will just take a healthy Soldier out of the fight, but a Soldier who donates blood will be physically capable of all activities within an hour. Although the Walking Blood Bank program will help 210th Fires Brigade units ‘Fight Tonight,” leaders are constantly researching better methods for blood replacement, such as using freeze-dried plasma.

**Battalion aid station (+)**

An MLRS battalion aid station has the capacity to only treat around 40 trauma casualties with their Modification Table of Organization and Equipment (MTOE) CLVIII allotment. All units stationed in Korea or units training to fight near-peer enemies must realize casualty evacuation might not be possible, so creating innovative methods during peacetime to enhance pre-hospital medical capabilities will save lives during combat. Outside of the WBB program, 2-20th FAR’s medical section also increased their aid station’s capabilities by ordering additional antibiotics outside of their MTOE amount, and planned to use factory buildings in predicted combat positions as patient holding areas. Units cannot let their MTOEs define their potential and leaders are urged to evaluate their different missions and environment to see how much medical supplies they actually need.

**Korean alliance**

210th Fires Brigade does not operate in a vacuum, so creating an alliance and understanding the surrounding ROK capabilities is essential for maximizing casualty treatment and evacuation. The medical rules of engagement for treating Korean nationals is only life, limb and eyesight. Additionally, because no formal rule of engagement prohibits it, U.S. Soldiers should evacuate their casualties to Korean hospitals in dire situations. There are a few reasons why evacuating through Korean channels should not be the primary method, even if a Korean facility is closer. In wartime conditions, Korean hospitals will most likely be overwhelmed with civilian casualties and unable to treat U.S. Soldiers. Also, there is no formal method of patient tracking or communication between Korean hospitals and U.S. units in 210th Fires Brigade’s area of operation, so it could be days before units find out the status of their Soldiers. Fortunately, each battalion within 210th Fires Brigade has around 40 to 50 Korean Augment to the United States Army Soldiers attached to their ranks to act as a liaison between the U.S. Army and the Korean populace, and they can be sent with casualties to help relay information back to the battalions. Even with these difficulties, evacuating to a Korean hospital is a better solution than nothing.

**Challenges and recommendations**

The future of combat medicine is in pre-hospital medical care: hospitals are just static targets. This alludes to more permanent medical MTOE changes. MLRS battalions in Korea are more front-line, wide-spread and mobile than traditional MLRS engagements. Their battalion aid stations need the manning and CLVIII to handle the predicted high level of casualty rates, especially if they are also receiving Korean civilian casualties. MLRS battalions’ MTOE should double the number of their medic (68W’s) and also assign both a physician’s assistant and a physician to the battalion. This will allow the aid station to handle more casualties and split into a forward and main aid station like other mobile units do in order to spread medical treatment capabilities over a larger area. MLRS battalions should also purchase more medical equipment sets geared towards treating an excessive number of trauma wounds and chemically contaminated casualties.

**Conclusion**

Leaders must remain proactive and not reactive, predicting the future friction points in warfare to remain the most lethal and sustaining fighting force. With air medical evacuation unlikely in a future war with North Korea, units must prepare for evacuation by non-standard ground platforms in order to augment the capabilities of the limited number of ground ambulances. Casualty evacuation will be extremely slow or even impossible during combat due to the heavily populated and highly restrictive mountainous terrain. Units must enhance their pre-hospital medical capabilities beyond their MTOE, like 210th Fires Brigade’s Walking Blood Bank program, in order to posture for injuries and destruction never seen in modern war.

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