Part I

Upon the conclusion of World War II, the Korean Peninsula has served as a physical and ideological battle ground between two drastically opposed systems of government that have both sought to assert influence throughout the Asia-Pacific domain.

Communism, today in the form of an increasingly disruptive China, has successfully propped up the North Korean regime enabling its nuclear and ballistic missile programs to challenge United States security objectives while creating massive regional instability.

Nicholas Eberstadt, a political economic specialist at the American Enterprise Institute, said in 2014 alone, China accounted for two-thirds of all North Korean exports valued at 2.6 billion dollars and almost as much of North Korean imports valued at 3.9 billion dollars.1 The United States, a democratically led nation and the region’s historically dominant security leader, currently has on or about 28,000 Soldiers, Marines, Sailors and Airmen stationed in South Korea. These men and women work closely with the Republic of Korea military during annual command post exercises and field training exercises such as Operation Ulchi Freedom Guardian, Warfighter, Operation Foal Eagle and Operation Key Resolve. Both the United States and South Korea profess all military drills are defensive in nature, a statement summarily rejected by North Korea who views all U.S./South Korean drills as aggressive invasion plans.

Recent events involving North Korea, South Korea, Japan, China and the United States as well as combative rhetoric from both North Korean and U.S. senior political leaders portray a sharp increase in the likelihood of military conflict on the peninsula. In 2017, North Korea, under Kim Jong Un’s leadership, fired no less than 14 ballistic missiles. Of note, one of those was an intercontinental ballistic missile (ICBM) fired July 28, 2017, which traveled 45 minutes entering Japan’s Exclusive Economic Sea Zone. A KN-17 Intermediate Range Missile flew over the Japanese mainland Aug. 28, 2017, sparking the country’s emergency alert system. And finally, an unidentified missile entered Japanese airspace Sept. 14, 2017. Partially in response to increasingly aggressive North Korean missile tests, South Korea has allowed the U.S. to install a Terminal High Altitude Air Defense system. This has drawn sharp criticism from both China and North Korea. As we write this article, in a show of strength, the U.S. Navy has stationed three aircraft carriers in the western Pacific for the first time in the last decade. Tensions have exponentially increased with seemingly no diplomatic solution in sight.

In the following pages we’ll outline why the U.S. is unable to extract itself from an Asia-Pacific Thucydides trap suggesting imminent conflict on the Korean Peninsula.

Consequently, we’ll reinforce why U.S. Pacific Command Fires units must be able to fight and win tonight in the event of a military conflict with North Korea and possibly China. Relying heavily on “This Kind of War: The Classic Military History of the Korean War,” a book Defense Secretary James Mattis recently urged “We all pull out and read … one more time,” we’ll seek out historical artillery challenges from America’s first experience with limited warfare on the peninsula. Upon isolating those challenges faced by Redlegs during the Korean War, we’ll then transition into how we can incorporate new technologies and concepts to posture for what we may face on the peninsula. However, prior to achieving this understanding, we will begin first with why our artillery’s next challenge resides within the Korean Peninsula.

The Thucydides trap idea originated from the ancient Greek Thucydides himself who, in reference to the Peloponnesian War stated “What made war inevitable was the growth of Athenian power and the fear which this caused in Sparta.”2 Increasingly assertive Athenian political and economic interests projected across Greek city-states by the peerless Athenian Navy, inevitably clashing with historical Spartan regional dominance. Thus, the Peloponnesian War was the result of Sparta attempting to curtail a growing Athenian threat to traditional Spartan dominance over ancient Greece. The Thucydides trap concept portrays an established state reacting violently to halt the growth of a strengthening state who seeks to no longer be considered a near-peer. Graham T. Ellison, an American political scientist, first coined the phrase “Thucydides trap,” while applying it to

---

2The History of the Peloponnesian War, Thucydides, 431 B.C., translated by Richard Crawley.
U.S.-Asian security relations in the Pacific. Its common theme depicts the established U.S. Pacific bilateral security alliance system consisting of Australia, Japan, Republic of Korea, Philippines and Thailand being challenged by two nations: a near-peer China who has enjoyed explosive economic growth enabling it to project an expanding political, economic and military dominance throughout the Asia-Pacific and a North Korean rogue state who continues to develop its nuclear weapon and ICBM programs in the face of widespread world condemnation. Today, influential U.S. figures warn against the negative implications of a resurgent China and North Korea able to counter U.S. security objectives within the Asia-Pacific domain. Adm. Harry B. Harris, PACOM commander, appeared before the House Armed Services Committee April 26, 2017, and said, “China has fundamentally altered the physical and political landscape in the South China Sea through large-scale land reclamation and by militarizing these reclaimed features. Beijing continues to press Japan in the East China Sea, is stepping up diplomatic and economic pressure against Taiwan, and is methodically trying to supplant U.S. influence with our friends and allies in the region.

Furthermore, China is rapidly building a modern, capable military that appears to far exceed its stated defensive purpose or potential regional needs. China’s military modernization is focused on defeating the U.S. in Asia by countering U.S. asymmetric advantages. China’s military modernization cannot be understated, especially when we consider the Communist regime’s lack of transparency and apparent strategy... China’s near-term strategy is focused on building up combat power and position- al advantage to be able to restrict freedom of navigation and overflight while asserting de facto sovereignty over disputed maritime features and spaces in the region.”

China has expanded its formidable military footprint within the Asia-Pacific domain causing justified unease amongst senior military figures. However, in today’s complex world it’s very difficult for a country’s military to unilaterally change the global U.S.-dominated security hierarchy without a powerful national economy capable of sustaining a lasting political influence.

Numerous economic experts note how China’s expanding economic influence empowers the country to further its political objectives within the Asia-Pacific. China’s newly minted Asian Infrastructure Investment Bank and One Belt One Road policy are soft-power challenges to the West’s Bretton Woods institutions, namely the International Monetary Fund and the World Bank. These new Chinese institutions have the potential to erode American security agreements as historical U.S. Asia-Pacific partners fall under the sway of Chinese economic influence. Along similar lines, China’s robust economy directly translates into a more aggressive military stance in the Asia-Pacific. Upon realizing their economic might, People’s Liberation Army commanders have found their government can “back their statements with timely displays of military firepower.” This instance mirrors how Athenian economic might fueled their ability to project power through the Aegean via its vast naval fleet. Today, China has leveraged its economy to develop a military capable of mounting an increasingly sophisticated response toward any foreign incursion into its perceived domain.

This Chinese posture is what makes the preemptive U.S. military invasion of North Korea so dangerous. North Korea’s continued development of nuclear ICBM’s is the lynchpin of the Asia-Pacific Thucydides trap. During a time of unprecedented simmering tension between the U.S. and North Korea, both countries are poised to re-enter into a war which technically never ended on the 38th parallel. During Mattis’ recent trip to the Korean Demilitarized Zone he pointedly stated “I cannot imagine a condition under which the U.S. would accept North Korea as a nuclear power.”

The U.S. would enter on the premise of disarming a rogue nation of its nuclear ICBM’s. China, seeing a foreign power aggressively operating in its domain, would enter the war, similar to why it did in 1950, aiming to halt U.S. and ROK forces from unifying Korea, thus establishing a pro U.S. democracy on its border. The continuation of the Korean War could act as the catalyst for the world’s two largest economies to enter into conflict on opposing sides. Consequently, the Asia-Pacific Thucydides trap would be sprung. In light of this potential occurrence, we will now pivot toward historical analysis of the Korean War in order to glean how our artillery of the past fared against North Korean and Chinese tactics within a mountainous peninsula during the Korean War.

The Korean War is commonly split into four distinct phases. Phase I was the initial invasion of South Korea by North Korea resulting in allied forces retrograding to a small foothold on the southeastern edge of the peninsula termed the “Pusan Perimeter.” Phase II consisted of reinforced allied troops regaining the initiative as they broke out of the Pusan Perimeter decisively destroying North Korean forces and pushing them near the Yalu River along North Korea’s northern border. China, recognizing the dangers of a united Korean Peninsula, entered the war beginning Phase III with brilliant deception tactics catching General of the Army Douglas MacArthur by surprise, pushing allied forces south of the 38th parallel. Phase IV introduced a stalemate between a numerically superior Chinese force, remnants of North Korean Army

---

units, and fatigued allied troops around the 38th parallel resulting in the Armistice being signed on July 23, 1953.

During all four phases one factor continued to play a lasting role in America’s inability to apply continuous combat power: that of mountainous terrain. The Korean Peninsula consists of roughly 70 percent mountainous terrain which immediately places wheeled, tracked and an offensive-minded brigade combat team at a disadvantage. Korean War experiences of the past show an American Army woefully unprepared for operating within this environment.

Sgt. James Daly, a forward observer for the 10th Field Artillery Battalion from 1950-51, recounted, “I remember the admonition ‘lock your knees’ as I [b] lurched up a seemingly vertical mountain looking for a top I don’t remember ever reaching ... the hills in Japan were only mole hills compared to Korea.”

Soldiers and Marines like Daly were unaccustomed to the rigors of physically navigating the terrain. This sentiment is captured further in a monograph published by Eighth Army Headquarters during the Korean War. The Eighth Army Headquarters noted that, “Troops arriving in Korea after the Korean War. The Eighth Army Headquarters stated during the onset of the conflict showed an American Army woefully unprepared for the rugged terrain of Korea. The strenuous climbing required and the need to hand carry equipment, supplies, individual and crew-served weapons long distances over mountain trails demanded a high degree of physical fitness.”

During the war’s first phase, the chaotic retrograde to Pusan, seasoned company and field grade leaders, who had previously served during World War II in the more unrestricted terrain of Western Europe, did not fully comprehend the vulnerabilities sharp peaks, long ridgelines and low valleys created for troops on the move. This fault is shown repeatedly during the onset of the Korean War.

T. R. Fehrenbach, an Army officer during the Korean War, said “Again and again, officers were simply not able to organize against the enfilading hills to clear the way. It wasn’t that the men were afraid, they were simply unable to walk up the hills to engage the North Koreans.”

Today’s artillery consisting of towed and self-propelled cannons as well as wheeled and tracked launchers will be limited to a small selection of improved and unimproved roads, making whoever is traversing them vulnerable to enemy fire from adjacent ridgelines. This vulnerability is best depicted by Fehrenbach's description of 2nd Division’s catastrophic march through the six-mile long “Valley of Death.” Following the advent of Chinese forces the 2nd Division commander, Maj. Gen. Laurence Keiser, recognizing the need to extricate his division from a Chinese envelopment, decided to retrograde south via the north-south running road between Kunu-ri and Sunch’on. The division’s priority of movement was as follows: (1) 38th Infantry Regiment (2) 2nd Recon Company, Division Headquarters, Military Police Company, 2nd Signal Company, (3) Division Artillery (4) 2nd Engineer Battalion (5) 23rd Regimental Combat Team consisting of 23rd Infantry, 15th Field Artillery Battalion, and 72nd Tank Battalion. Reportedly tens of thousands of Chinese leveraged the high ridgelines paralleling the 2nd Division’s route to enable a continuous linear ambush.

“The 2nd Division Artillery ... was the last element of the division to come through the gauntlet on the south ... The first artillery battalions in the column came through best. The 17th leading, came out in good shape. The 37th following, lost ten guns. The 503rd fought most of the night to save its 155’s, finally losing them. The 38th FA, at the end of the column, lost every gun and truck, and its men came out as stragglers over the hills, if they came out at all... the guns were undeniably lost,” said Fehrenbach.

During the march into “Death Valley,” leaders had marginalized mountainous terrain resulting in a tactical catastrophe reducing nearly an entire division’s worth of combat power. Seasoned Chinese leaders of a historically dismounted Army, recognized the capability gap in an enemy reliant on wheeled and tracked vehicles. This recognition enabled Chinese forces to seize decisive terrain and inflict massive casualties upon a retrograding foe. Along with restricting our battery’s mobility, mountainous terrain constrains our firing point selection making the occupation force more vulnerable to counter fire.

With only 15 percent of the Korean Peninsula being categorized as lowlands, adequate battery firing points during the Korean War were scarce when compared to the large swaths of Western European grasslands available during World War II. Due to mountainous terrain, those positions that did exist were difficult to mass primarily because firing points were separated by multiple sets of valleys and ridgelines.

Furthermore, Capt. Ronald K. Kylel, Jr., an Ohio State post-graduate student who studied artillery performance within the Korean War, found mountainous terrain forced “units to position the guns closer to each other than desired to make room in a given area for the entire unit. These close formations made the unit more vulnerable to counter-battery fire.” Thus, in hindsight, mountainous terrain did present a challenge for America’s artillery formations during the Korean War. However this is a challenge that remains to this day constant and unchanging. We as an artillery community can acknowledge, plan for, and train for the constraints mountainous terrain imposes on how we provide support to our maneuver brethren. This point proven, we’ll now shift focus to how U.S. artillery responded to fluid North Korean and Chinese infantry tactics.

Perhaps the most defining aspect of North Korean and Chinese offensive tactics is what makes it so different from how the U.S. seeks to apply offensive combat power. Whereas U.S. offensive doctrine dictates a more straightforward approach; often fixing an enemy and then overwhelming him with a fast-moving flankin force. Chinese and North Korean infantry tactics during the Korean War championed flowing around and behind an opposing force in order to cut off lines of supply and envelope a semi-independent adversary. During Phases I and III of the Korean War, North Korea and China used this envelopment tactic to infiltrate thinly held United Nations forward line of troops (FLOT) with catastrophic results for U.S. Artillery. The Eighth Army Headquarters stated during 1952:

“Infiltration was a major enemy tactic and the constant threat to rear area units from guerrillas made it necessary for all units to be thoroughly trained in the use of..."
arms ... Artillery battalions were directed to train against enemy ground attack.”  

The threat of infiltration tactics observed by Eighth Army Headquarters is brought to life repeatedly by Fehrenbach. He recounted one such instance that occurred during the 63rd Field Artillery Battalion’s defense of the Kum River, “The NKPA [North Korean People’s Army] regiment that had crossed the Kum hadn’t wanted Joe Hicks and Company - their scouts had filtered to the American rear and located a far richer target, the 63rd Field [Artillery]... Mortar shells crashed into the Headquarters Battery area ... Headquarters Battery disintegrated into chaos, with men running in all directions. Machine guns flayed them ... A Battery, only 250 yards away [due to restrictive terrain no doubt] drew fire at the same time ... Four hundred enemy infantry surrounded the B Battery Area ... The 63rd Field [Artillery] had now lost all 10 guns and 80 vehicles. The five howitzers from A [Battery] had been abandoned intact. Many men were missing.”  

North Korea’s and China’s ability to leverage terrain American forces considered non-trafficable resulted in thousands of successful infiltration raids and developments such as the one described above. Opposing forces sought to cut supply lines and destroy support formations. This tactic degraded U.S. frontline infantry and armor units’ ability to close with and destroy a numerically superior adversary. Therefore, oftentimes battalions of maneuver formations and batteries of field artillery formations fought independent battles void of support from adjacent units. According to D. M. Giangreco, an acclaimed security speaker, author and 20-year veteran editor of Military Review, “The first nine months of the Korean War saw U.S. Army field artillery units destroy or abandon their own guns on nearly a dozen occasions. North Korean and Chinese forces infiltrated thinly held American lines to ambush units on the move or assault battery positions on the flanks or rear with, all too often, disastrous results.”  

Consequently, if we, as an artillery community, wish to retain combat power while locked in conflict involving infiltration and envelopment tactics, we must harden battery defensive perimeters. Having examined both terrain and infiltration tactics during the Korean War, we’ll shift focus to the third and final challenge undergone by U.S. Artillery: that of artillery’s available supply rate (ASR).

During the first three phases of the Korean War under Gen. Douglas MacArthur and Gen. Matthew Ridgway, a strict ASR was adhered to for two reasons. First, batteries found themselves acting semi-independently without support from adjacent firing units due to mountainous terrain, the sheer length of the FLOT assigned to them, and the relatively low number of field artillery units available. To counter the effects of firing semi-independently, a single battery would rapidly fire large amounts of ammunition at a single target. This resulted in acutely felt ammunition shortages during the opening phases of the Korean War, as well as smaller ASRs. The second reason for strict ASRs during the Korean War rests with strategic planners. They held a large majority of WWII artillery ammunition in reserve for a possible conflict in Europe against who they perceived to be the real enemy, the Soviet Union.

When rounds per tube per day are compared for the first and fourth phases of the war, there is a correlation to how U.S. forces fared against their adversaries. In September 1950, three months into the war, Lt. Col. Leroy Zimmerman, stated “Eighth Army was still rationing ammunition [resulting in] 50 rounds per tube per day.”

He goes on to state during this time, “Gross ammunition shortages were experienced ... Combat units had permanently stationed personnel at the ammunition supply point to spot ammunition needed.”  

Maneuver units unable to stop advancing enemy formations stemmed from guns unable to provide shaping Fires which in turn stemmed from little to no ammunition per tube in support. A large factor contributing to our inability to halt the initial North Korean invasion rests with the lack of ammunition available to artillery units.

Now we’ll fast forward to the final phase of the war during the Chinese attempt to seize Seoul with the First Step, Fifth Phase Offensive. Lt. Gen. Van Fleet, the new Eighth Army commander, recognized he was severely outnumbered by a vastly larger Chinese force. He leveraged “air attacks, naval and artillery indirect Fires to inflict approximately 75,000 to 80,000 enemy killed or wounded.” During his repulse of the First Step, Fifth Offensive Fleet authorized an astounding rate of fire for U.S. artillery. They fired 105 mm and 155 mm howitzers with 300 and 250 rounds respectively, successfully balancing the superior Chinese attacking force ratios. When we compare these robust rates of fire with those during the first months of the Korean War we see the importance of readying large amounts of ammunition in order to halt a numerically superior force.

Perhaps no other vignette illustrates the power of the artillery’s ability to forcibly assert the will of the American military than the massive barrage of 105 mm, 155 mm, and 8-inch projectiles used to secure Pork Chop Hill. Fehrenbach said in relation to Pork Chop Hill, “The United States Army had expended more than 130,000 rounds of artillery ammunition within 24 hours.”
resulting in its denial to Chinese forces.16 During the later phases of the war, the American supply system in close coordination with operational planners were able to stockpile vast amounts of ammunition making artillery barrages possible. Fleet exploited his artillery to the fullest extent by realizing the amount of artillery ammunition available to his battalions directly correlated with the success of operations.

Part II

In light of the three Korean War artillery challenges we’ve highlighted above, we’ll now examine how the Fires community can rapidly evolve in order to prepare for the semi-independent operations we can expect in the event of conflict on the peninsula. We’ll argue for the Army’s integration of the Mandus/AM General Humvee-mounted 105 mm self-propelled howitzer (SPH). We’ll touch on how the Picatinny Arms’ M777 extended range (ER) barrel postures the 155 mm towed artillery piece to better shape the division deep fight between the coordinating fire line (CFL) and the fire support coordination line (FSCL). And finally, we’ll conclude with recommending a change in force structure, consolidating all M777 howitzers with corps who will combine them with High Mobility Artillery Rocket System (HIMARS) battalions. This will create a more lethal general support M777/HIMARS composite battalion able to enact killing machine tactics under a division artillery headquarters supporting multiple maneuver brigade penetration operations of an in-depth North Korean defense.

The Hawkeye, a 105 mm Humvee mounted SPH, boasts several Korean conflict specific advantages over the Army’s current M119A3 platform. Whereas other self-propelled howitzers such as the M109A6 rely on heavy armor to absorb large amounts of recoil, engineers at Mandus Group have leveraged soft-recoil technology, putting the guns on a much lighter Humvee chassis. The Hawkeye’s M20 cannon is encased in a recoil/cradle sub-assembly enabling 70 percent reduction in recoil force allowing for its firing from a M1152A1 Humvee chassis.

This gun-prime mover combination has enormous potential for service in moun-

---

16 Ibid.

U.S. Marines with C Battery, 1st Battalion, 10th Marine Regiment, 2nd Marine Division, fire a M777A2 155 mm howitzer during the 10th Marines Top Gun Competition for Rolling Thunder at Fort Bragg, N.C., March 15, 2018. The Marines were evaluated on their timely and accurate fire support capabilities and overall combat effectiveness. (Lance Cpl. Nghia Tran/U.S. Marine Corps)
tainous Korean terrain. For example, we can reasonably assume a brigade will perform large amounts of artillery air assaults to move guns over non-trafﬁcable ridgelines, high peaks and dangerous valleys. In today’s military, a battery commander can sling-load two full howitzer sections (one towed M119A3 and one prime mover per section) with four CH-47 Chinook helicopters. However, with the Hawkeye platform, a brigade can double its ability to project indirect Fires forward in support of a maneuver formation by sling-loading one Hawkeye SPH under each CH-47. For the first time in history the U.S. military will be able to airlift a self-propelled howitzer able to inﬁll, ﬁre and displace all under its own power.

In the event of resumed conﬂict on the peninsula we can undoubtedly expect our adversaries, in an effort to delay progress north towards Pyongyang, to destroy key terrain such as load-bearing bridges able to transport our heavy armored formations. To this effect, in the recent Russian/Ukrainian conﬂict we watched Russia expertly canalsie Ukrainian armored formations resulting in the eventual annexation of Crimea.

As the Hawkeye retains the title of lightest 105 mm SPH, it can traverse secondary bridges deemed un-trafﬁcable by retrograding North Korean forces. The Hawkeye’s increased tactical maneuverability, when compared with other near-peer light SPH platforms, maximizes the potential routes available to it.

The gun-prime mover combination also lends itself to a smaller firing point “footprint” as each Hawkeye howitzer section consists of 33 percent less rolling stock (gun-prime mover and ammo truck as opposed to prime mover, gun and ammo truck).

In support of this point, the vice president of business development at Mandus Group, Rear Adm. (retired) Sam Kupresin, said there is a need for a very lightweight self-propelled howitzer to counter the improved counterﬁre threats from potential adversaries such as China and North Korea.27 The Hawkeye, with its gun-prime mover combination, presents a smaller, more armored target for the formidable array of North Korean indirect Fires assets.

Yet another crucial advantage this new weapon system poses over its conventional 105 mm cousin is its ability to rapidly ﬁre 360 degrees. Out-of-traverse missions can certainly be achieved with current M119A3 crews, but tend to cost a lot of time as Soldiers race to shift trails and ﬁnd the correct gun target line. This creates large time differences between experienced and inexperienced crews.

In the Hawkeye weapon system, out-of-traverse ﬁre missions are conducted in an automated fashion, severely decreasing time between the crew’s receipt of ﬁre mission and rounds ﬁred. Due to the adversary’s exploitation of inﬁltration and envelopment tactics, an eﬃcient out-of-traverse shooter with increased tactical maneuverability becomes critical to our howitzers survivability during a conﬂict on the peninsula.

Therefore, we suggest the Hawkeye 105 mm howitzer ﬁnds its place amongst the U.S. military’s direct support battalions in order to support the brigade knife-ﬁght between the FLOT and the CFL. In an eﬀort to portray how the artillery community can better posture for shaping operations between the CFL and FSCL on the peninsula, we’ll describe how the Fires community can make the best use of Picatinny Arsenal’s Extended Range Cannon Artillery (ERCA) program.

Since November 2016, the Picatinny Arsenal has teamed with the dual Army and Marine ERCA program to create an ER M777A2 (XM907 Cannon) able to ﬁre on or about 70 kilometers.28 When viewed through a Korean Peninsula lens, this increase in range will assist in countering the current standoff North Korea enjoys with systems such as the 240 Multiple Rocket Launchers (M1991/M1985), the 300 mm MRL (KN09), and the 170 mm SP Koksan Gun.

In a linear ﬂight, the problems with the M777’s mobility and survivability (in its current capacity) would be countered by its increased range. The ER M777A2 could emplace further behind the FLOT partially negating enemy inﬁltration techniques and counterﬁre in theory. The ER M777A2’s decreased maneuverability, as evident in its inability to keep pace with Stryker brigades, is canceled out by its extended reach which doubles as its protection.

Of note, upon realizing the advantages of Mandus’ Hawkeye SPH, the Fires community can expect the production of “The Brutus,” a wheeled 155 mm SPH version mounted on a medium tactical vehicle (MTV) chassis, to counter the inherent mobility flaw in the M777A2. Transitioning back to Picatinny Arsenal, following the ﬁnal demonstration exhibiting the merits of their ER M777A2 howitzer system we can project if and/or when the U.S. military will begin incorporating this new technology.

However, due to the impressive initial range extensions, the ER M777A2 as well as the entire ERCA project to include the XM1113 rocket-assisted projectile, the XM654 Supercharge, new autoloader, and new ﬁre control system will change how division artillery shapes the division deep ﬂight.

Keeping the Hawkeye and ERCA programs in mind, we’ll now argue for numerous artillery alignment changes amongst the brigade, DIVARTY and corps levels. We imagine most maneuver commanders will have negative views at the thought of seeing their direct support M777A2 howitzers disappear.

However, M777A2s should be initially consolidated at the corps level, integrated into HIMARS battalions, and powered down to DIVARTY in a general support role to set conditions for cannon and rocket massing Fires in support of the division deep ﬂight. The increased range found in the ER M777A2 will absolutely make them more relevant to the division deep ﬂight as DIVARTY seeks to attain the correct force ratios in the division deep ﬂight needed to move the CFL forward and transition battle space over to maneuver brigades.

The Fires community must bring all its long range assets under one headquarters to create the necessary conditions for the softening of a meticulously built North Korean in-depth defense.

By consolidating long-range shooters under one DIVARTY, the division actually gains needed Fires-centric control during operations such as wet gap crossings, brigade air assaults and brigade breaches. As brigades lose their 155 mm formations from the composite M119A3 and M777 battalions, an opening is left for the integration of one Hawkeye battery per battalion.

Ultimately, corps has the responsibility to set the FSCL appropriately in order to give the division adequate time to shape beyond the division CFL.

This alignment allows a DIVARTY to leverage the increased ranges found in composite ER M777A2 and HIMARS battalions (respectively 70K and 45K M26A2)

---

to adequately team with its combat aviation brigade (CAB) in order to enact the killing machine as described in the Center for Army Lessons Learned February 2017 article titled “An Integrated Division Deep Fight, Deep Battle 2.0.”

Critical to a division’s ability to shape the deep fight is the inaction of the killing machine, specifically the utilization of manned-unmanned-teaming, often in the form of multiple lines of Grey Eagle systems, to identify enemy air defense artillery and fire support (FS) assets between the CFL and FSCL.

For maximum efficiency, the Grey Eagle feed must be located inside the DIVARTY tactical operations center (TOC) immediately next to the fire control element in order to immediately process targets as acquired.

The DIVARTY will then exploit the extended ranges found in its ER M777A2 and HIMARS systems to destroy ADA and FS targets, allowing freedom of maneuver for the CAB to find and destroy enemy armored maneuver formations.

In conclusion, the DIVARTY headquarters must take the lead in always advocating for increased range and fire power to ease its fellow maneuver brigades forward. By studying our experiences during the Korean War, the Fires force can project what we may face in the event of resumed conflict on the Korean Peninsula. By remaining open to current technological advances we can gradually phase out old systems in favor of new platforms granting greater responsiveness to an increasingly sophisticated threat.

And finally, by looking inward we can set the necessary conditions to provide both timely responsive Fires for our maneuver brethren while simultaneously providing our DIVARTY TOCs with the tools needed to create a catastrophic problem for any adversary: that of overwhelmingly accurate and destructive Fires ruthlessly massed upon any and all weapon platforms meant to delay our inevitable advance forward.

Capt. Joseph Schmid is the 3rd Brigade, 25th Infantry Division assistant fire support officer. Schmid attended Field Artillery Basic Officer Leaders Course at Fort Sill, Okla., prior to serving in the 82nd Airborne Division as A Troop, 1st Squadron, 73rd Cavalry Regiment fire support officer and B Battery, 2nd Battalion, 319th Airborne Field Artillery Regiment fire direction officer, platoon leader and executive officer. He attended the Captains Career Course at Fort Sill and is now stationed at Schofield Barracks, Hawaii.

Capt. Adam Wilson is the 3rd Battalion, 7th Field Artillery Regiment fire support officer. Wilson attended the Field Artillery Basic Officer Leaders Course at Fort Sill, Okla. Prior to serving in the 82nd Airborne Division, Wilson was the A Battery, 2nd Battalion, 319th Airborne Field Artillery Regiment fire direction officer, platoon leader and executive officer. He also served previously as the Headquarters, Headquarters Battery, 2nd Battalion, 319th Airborne Field Artillery Regiment battalion fire direction officer. Wilson attended the Captains Career Course at Fort Sill and is now stationed at Schofield Barracks, Hawaii.