Korean War Anthology

Artillery in Korea:
Massing Fires and Reinventing the Wheel

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Cover Photo: *Red Legs of Battery C, 936th Field Artillery Battalion fire their 100,001st 155mm shell of the war at Chinese positions near Ch'orwon.* (U.S. Army, 10 Oct 51)

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The night attack was unexpected and unstoppable. A human sea had swept through the fire direction center as 'extraordinarily bitter hand-to-hand fighting' raged throughout the area. The artillery battalion's commander was one of the first men killed and the men of Battery I withdrew along a narrow-gauge railroad track to seek refuge in Battery G's position. Neither battery brought their guns into action.[1] *Battery H defended their position with carbines and anything at hand. Fuses were cut to four-tenths of a second to explode 105-millimeter (mm) shells at less than 50 yards, but could not be set fast enough and the muzzle of at least one gun was immediately depressed to spew ricochet fire off the foreground. Another section turned their weapon completely to the rear to engage targets, but as the fighting intensified, more and more cannoneers were literally shot from their guns.*[2] *A breakthrough at the wooded ravine on Battery H's left finally forced the survivors into a 'pell-mell' retreat. In their haste to get away, breech blocks and firing locks were left in place.*[3]

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 from the flanks or rear with, all too often, the same disastrous results. Trained to fight a linear war in Europe against conventional Soviet forces, field artillery units were unprepared for combat in Korea, which called for all-around defense of mutually supporting battery positions, and high-angle fire.[4] Ironically, these same lessons had been learned the hard way during recent fighting against the Japanese as the vignette above—which describes a 1944 action on Saipan, not Korea—aptly demonstrates.[5] Pacific theater artillery tactics were discarded as an aberration after War World II, but Red Legs soon found that they "frequently [have] to fight as doughboys"[6] and "must be able to handle the situation themselves if their gun positions are attacked."[7]

A second problem with artillery in Korea was felt most keenly by the soldiers that the artillery was supposed to support—the infantry. Commanders at

all levels had come to expect that in any future war, they would conduct operations with fire that equaled or even surpassed the lavish support they had recently enjoyed in northwest Europe.[8] It was clear almost from the beginning, however, that this was not going to happen in Korea because there was a shortage not only of artillery units but also of the basic hardware of the cannoneers' craft—guns and munitions. Until the front settled down into a war of attrition in the fall of 1951 (which facilitated the surveying of reference points and positioning of "an elaborate grid of batteries, fire direction centers, [and] fire support coordination centers"[9]), massed fires were achieved by shooting at unprecedented speed.[10] This tactic, in turn, exposed the fact that the huge surplus of World War II munitions was actually deficient in some calibers, and strict ammunition rationing became the norm until production caught up with demand in the last days of the fighting.[11]

When the North Korean People's Army swarmed south across the 38th Parallel on 25 June 1950, America's arsenal of artillery was little different than it had been when Germany invaded Poland and was identical to our inventory at the end of World War II.[12] While it was identical in terms of hardware and doctrine like the rest of the postwar Army, the number of combat-ready field artillery battalions had shrunk radically in both number and even tubes per unit. After the war, a variety of reorganizational schemes had been proposed for the field artillery, but they all agreed on certain basics: the need to improve mobility, fire direction, command and control, and, above all, firepower. On this last point, it was a question of how to best achieve the desired end—add an additional four-gun battery to each battalion; keep the same number of batteries but give them six guns each; or simply increase the number of battalions at division and corps.[13] The bottom line was that the Army had derived huge benefits from its massive and effective use of artillery during the last war and that a future war against our only likely enemy, the Soviet Union, would require even more firepower.

The Army ultimately adopted the six-gun battery since it would clearly be more economical than adding more battalions. Divisions were to increase from 48 to 72 cannons apiece, with beefed-up support from corps artillery groups as well.[14] The actual situation at the outset of the Korean War was somewhat different, however. Taxpayers and their representatives in Congress had little interest in strengthening America's 10 remaining combat divisions. Although the equipment existed in artillery parks, the additional guns remained unissued since no divisions received enough men to make the changeover from four-gun to six-gun batteries.[15] Indeed, many battalions could only field two of their three batteries, and this was particularly true for the units on occupation duty in Japan. The table of organization may have called for divisions to employ a robust 72-cannon force of 105mm and

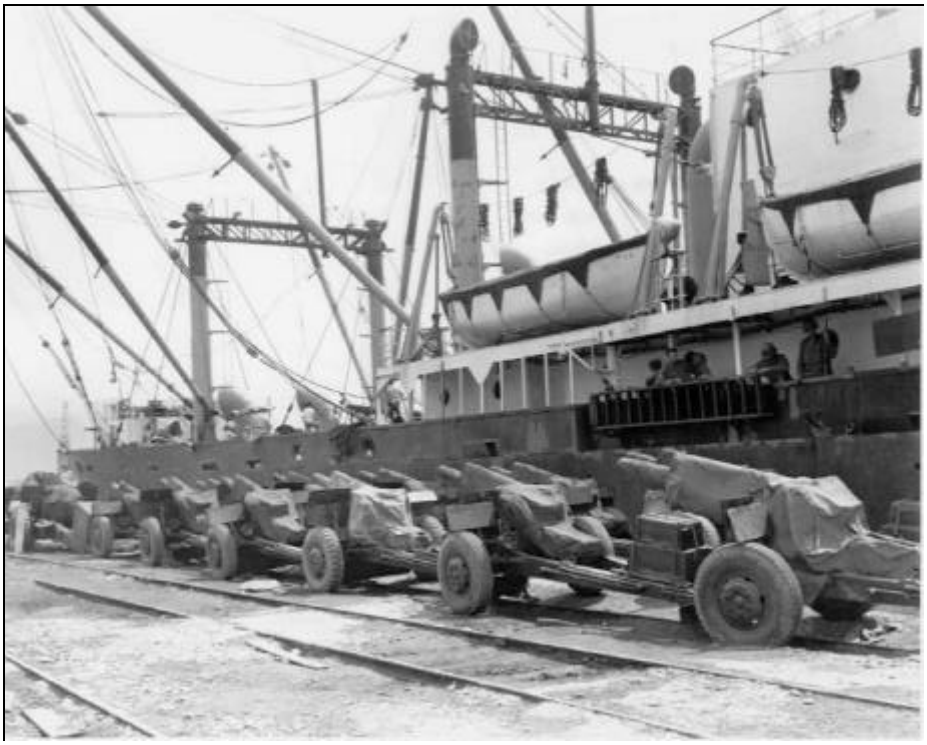
155mm, but the reality was that most contained 48 howitzers, and those in Korea could not maintain anything above 24 in peacetime.[16]

To the newly created South Korean army, even this amount of artillery looked positively lavish. Their eight divisions contained only 15 105mm howitzers apiece and their ammunition supply was kept on a very tight leash by General Douglas MacArthur's Far East Command in Tokyo because of the very real fear that the South would attack the North if given half a chance.[17] By contrast, North Korean divisions were built along Soviet lines and contained 12 122mm howitzers and 36 76mm guns, 12 of which were self-propelled. Both the 122s and 76s outranged the South Korean 105s; in the case of the 76mm gun, by some 2,300 yards. Additionally, each North Korean division contained 40 45mm antitank guns, which were commonly employed as field artillery, plus 150 tanks mounting 85mm guns added to their firepower and maneuverability as well.[18]

With such an overwhelming force at its disposal, the Communists could and did dominate the battlefield and would for nearly two months. Before his capture, the U.S. 24th Infantry Division (ID) commander even remarked to one of his staff that he "had seen as much incoming artillery fire at Taejon Airfield . . . as he had ever seen in one day in Europe."[19] As for the South Koreans, outranged, outgunned, and with little ammunition, they pleaded for more 105mm shells. In a magnificent effort, 119 tons of munitions were immediately shifted from Ikego Ammunition Depot near Tokyo to Tachikawa Air Base and then airlifted to Suwon—where they were promptly overrun by the North Koreans.[20]

U.S. field artillery battalions arriving from Japan found themselves in much the same position as the South Koreans. And although the venerable M1 155mm howitzer had plenty of range, there were too few of them.[21] Further, until the front stabilized as the Pusan perimeter, they were largely nullified by North Korean infiltration tactics, which took advantage of the Eighth Army's very thin infantry strength and the resultant dangerous dispersal across the front. Time and time again, artillery units found themselves in danger of being cut off, under direct attack, or both. Over 40 guns were lost or abandoned—11 of them the big 155s—and the understrength batteries could barely provide even limited support while constantly being displaced.[22]

The worst hit of several field artillery units was the 63d Field Artillery Battalion. Strung out along a secondary road south of Kongju on the morning of 14 July 1950, its mission was to supply fire support for two infantry companies and a South Korean cavalry troop guarding 12 miles of the Kum River front. A regiment of the North Korean 4th Division crossed the river unopposed and in daylight two miles from the nearest American troops and immediately headed for the line of communications running out of Kongju.



Artillery belonging to the 24th Infantry Division on a Pusan quay. The arrival of these 105mm howitzers helped make up for Task Force Smith's recent losses, but most of this equipment would itself be destroyed or captured in subsequent months. (U.S. Army, 6 July 50)

Units at the center of the elongated battalion position were struck first after a machine gun outpost was overrun. Concern that South Korean troops in the area might be fired upon by mistake had led to orders that the outpost not fire unless attacked, and their captured gun was turned on the Headquarters Battery. Battery A, some 250 yards to the north, was struck almost simultaneously. Mortar rounds fell among the gun positions and both the battalion switchboard and radio truck were destroyed at the outset of the attack. Battery A's five 105mm howitzers were abandoned intact.[23]

Forty-five minutes after the assault began, Battery B was attacked. The extra time had allowed this unit to prepare for the ground assault, and it fought back effectively with cannon and machine gun fire. Seeing that the position could not be easily taken by the storm, the North Koreans then kept it under fire and concentrated their mortars on the 105mm guns as well as the vulnerable trucks and prime movers. The battery had no way to respond to the mortars, and the commander ordered a withdrawal after two guns were

disabled and the radio jeep destroyed. Firing locks and sights were removed from the remaining guns, and the men of Battery B made their escape. Barely an hour and a half after the 63d Field Artillery Battalion had come under attack, 10 howitzers and up to 80 vehicles had been lost with 136 missing in action, including the battalion and Battery A commanders.[24] Quickly reconstituted into a battalion of two three-gun batteries, the 63d lost more men and weapons to North Korean roadblocks six days later during the night withdrawal from Taejon, with only Battery B escaping intact.[25]

The combat experience field artillery officers brought to Korea was gained almost exclusively in northwest Europe. And while they quickly understood the need for units to protect themselves through all-around defense and coordinate their activities with nearby infantry and armor units, putting this into practice after years of training for linear warfare was another matter entirely. There was little realization that the force had only recently "been there before" in the Pacific fighting.[26] However, it was perceived that something could be learned from the field artillery of parachute units since they obviously had to be able to provide fire support in any direction and while surrounded.[27] As best they could, Red Legs moved quickly to absorb infantry techniques for defense and integrate them with the unique needs of their battalions.[28]

Basic limitations in equipment also had to be reconciled. For example, a battery of 155mm howitzers west of Taejon arrayed itself with its weapons pointed in three different directions. When warned by an infantry officer that the enemy was advancing on his position from the southwest, where no guns were directed, the battery commander claimed that he could not turn the guns without authority from the battalion operations officer. Rumors and false alarms were common during the confused, early fighting in Korea, and the battery commander was not about to turn his 13,000-pound (lb) cannons on the word of a second lieutenant whom he'd never laid eyes on before.[29] A 155mm gunner not from this unit later remarked: "A good artilleryman . . . should be prepared to shift trails to engage targets in almost any direction. This is all very easy for the infantryman, or even artilleryman, not familiar with the 155mm howitzer to say."[30] In this case, however, not making the effort was costly. The position soon came under attack and several soldiers were killed almost immediately. It was later reported that "the artillerymen had shown no desire to limber up the pieces under fire," and the North Koreans failed to capture all of the guns only because an infantry commander sent a counterattack force to retrieve as many guns as possible.[31]

Ad hoc efforts to improve perimeter defense met with some success but were nevertheless hampered by the fact that there were simply too few guns and too few boots on the ground. Typical of the challenge faced at this stage

M4A3 Sherman tanks of the 2d Infantry Division, operating as artillery, have backed into excavated fire positions to give their relatively flat trajectory guns more elevation for greater range, Pia-ri area. (U.S. Army, 18 Sep 51)

of the fighting was that of the 24th ID's field artillery, which had to cover 32 miles of the Naktong River front. In 1944 and 1945, such an expanse would have been covered by perhaps 250 divisional and corps guns, sometimes less, sometimes considerably more.[32] In early August 1950, the 24th ID had just 17 105mm and 12 155mm howitzers to do the job. Doctrine may have called for as many as three to four artillery battalions available to support each infantry battalion in combat, but the inverse had become the killing reality just five years after World War II.[33]

General of the Army Douglas MacArthur was painfully aware of his artillery's shortcomings and, on 8 July, reminded the Joint Chiefs that his divisions were "at neither war strength nor at full authorized peace strength." Among other things, he wanted 11 fully manned 105 battalions sent from the United States as quickly as possible.[34] Of course, if the Army didn't have these extra units in June, it certainly didn't have them in July. Fully half of the Army's combat-ready divisions were either already committed or very soon would be. Batteries were stripped away from existing units (the 2d Armored Division, for example, gave up three), but shipping limitations prevented any from arriving until late August.[35] The situation with heavy, nondivisional artillery was even worse. Corps in Korea had virtually *no* cannons. MacArthur requested an initial shipment of 15 battalions and implied that the force would not reach World War II standards until he had 24 battalions. But again, the units simply did not exist. Despite the most vigorous

protests from MacArthur, all that could be shipped were three 155 battalions and the single 8-inch battalion in the general Reserve.[36]

In the meantime, though, Eighth Army divisions had to work with what they had. To cover its extended front, the 1st Cavalry Division placed individual batteries 7,000 yards behind the lines and, depending on terrain, approximately the same distance apart.[37] How were they able to do this and live to tell about it? Isolated instances of effective North Korean counterbattery fire occurred as late as 22 August,[38] but for all practical purposes the first month of grueling combat had seen the Communists' field pieces steadily chewed up by our longest-range artillery—the F4U Corsair, F-51 Mustang, and F-80 Shooting Star.[39] Still, the North Koreans had plenty of good infantry, and the wide expanses meant that our artillery could never truly mass fires, but by shifting trails, two and sometimes three batteries could be brought to bear on a single threat.[40] Ultimately, though, the truncated units found that the best way to achieve an appropriate volume of ordnance on targets was to shoot at exceptionally rapid rates and keep the ammunition coming.[41] Fires massed in this manner were a common feature during the defensive battles of August and September, and the unrelenting pounding of one 105 battalion in the desperate perimeter fighting damaged its gun tubes, yet was key to eliminating the dangerous enemy bridgehead at Yongp'o.[42]

Mobile warfare returned with the invasion at Inchon and breakout from Pusan. The long-sought medium and heavy artillery battalions arrived in the theater, and new combat divisions such as the 2d ID and 1st Marine arrived on the scene with their full complements of howitzers.[43] This was none too soon.

Chinese artillery played a minor role during the initial months of its intervention, primarily because it could not be sneaked across the frozen Yalu River in quantity and hidden as effectively as infantry, and also, frankly, because it was unable to keep up with the speed of our "retrograde movement" into the southern peninsula.[44] Between the 1st Cavalry Division, several South Korean divisions, and the 2d ID (which itself lost 64 howitzers), some 200 field pieces were wiped from the force structure in the west.[45] In the east, the Marines organized their withdrawal as they would an attack, and but for some extremely bad luck near the end would have been able to extricate all of their 155s. Unfortunately, the freezing temperatures had required that their prime movers' engines be kept running during delays along the road, and gas tanks ran dry short of an air-dropped supply of diesel fuel. Eight of the heavies were lost in addition to another that slipped off the icy road.[46]

The loss of so many field pieces during the Chinese onslaught was a significant blow, but weapons could be replaced. One ironic aspect of the situation was not fully appreciated at the time. Perhaps as many as 150 of the lost

7th Infantry Division 155mm self-propelled howitzers near Sinhung protect the perimeter around the seaport city of Hamhung during the withdrawal of the 1st Marine Division from the Chosin Resevoir. (U.S. Army, 2 Dec 50)

105mm howitzers fell into Chinese hands with little or no damage and were not destroyed by subsequent air strikes. The North Koreans had little interest in the American-made artillery when they overran much of the South the previous summer because their Army was a totally Soviet-equipped and supplied force.[47] However, the mainstays of Chinese field artillery in 1950 were Japanese 75mm field guns and 105mm howitzers and guns, Soviet 76mm guns, and the "made in USA" 105mm.[48] For obvious reasons, the Chinese were more than happy to add the captured weapons to their inventory.

When Soviet forces withdrew from Manchuria in 1946, they left behind some 6,000 pieces of captured Japanese artillery ranging from 70mm to 150mm and a vast store of ammunition.[49] Only a relatively small portion of this materiel was destroyed when the civil war between the Communist Chinese and the Nationalist Chinese heated up after Japan's surrender, and that amount was dwarfed by an even bigger windfall when the U.S.-equipped Nationalist armies were destroyed, scattered, or defected en masse between 1947 and 1949.[50] The exact amount of equipment which fell intact into Communist hands is impossible to pin down, but it is worth noting that so

Above: *Chinese troops with trucks and 105mm guns of the 1st Cavalry Division or Republic of Korea II Corps in the Unsan area. This photo was probably staged since all or most lost artillery was overrun between 27 Oct and 2 Nov 50 in actions that occurred in early morning darkness.* (DA Pamphlet, 1955)

Below: *Chinese Communist artillery unit equipped with made in USA M2A1 105mm howitzers captured during China's civil war. The Chinese army in Korea principally used captured U.S. and Japanese weapons but received a steady stream of Soviet-built artillery throughout the war.* (DA Pamphlet 30-51, *Handbook on the Chinese Communist Army*, Sep 52)

many 105s were harvested from the "running-dog lackies of Yankee imperialism" that the Chinese actually went into the export business. For example, the Viet Minh 351st Heavy Division, a formation patterned along the lines of a Soviet artillery division (and which pummeled the French garrison at Dien Bien Phu), was equipped with 48 105s.[51]

But just because the Chinese now had more artillery in reserve than many armies possessed in total, this did not mean that the force could be effectively employed in Korea anytime soon. The see-saw warfare of January to October 1951 placed the limited Chinese artillery in Korea at a mobility and logistic disadvantage until politics stabilized the front late that year.[52] Even then, the pace of the artillery buildup was slowed by the need to place the weapons in individual, deep bunkers that were safe against all but a direct hit.[53] Another factor was the U.S. air interdiction campaign, which was far more effective than it is fashionable to admit.[54] By May 1952, some 710 active pieces were able to fire approximately 102,000 rounds, and the final month of the shooting war, July 1953, saw over 375,000 rounds fired on UN positions by nearly 900 pieces.[55] While this may not appear to be a high rate of fire (a daily average of 16 rounds per tube), it must be appreciated that bombardments were highly focused and much more violent than what the Eighth Army had previously experienced. In any event, in July 1951, when the front was still quite fluid, it was estimated that the Chinese fired fewer than 8,000 artillery and mortar rounds.[56]

The appearance of Lieutenant General Matthew Ridgway as Eighth Army commander in December 1950 meant that there would be no more grand, division-size drives up the main roads. This general sent foot soldiers into the hills, and in a series of deliberate, limited-objective operations beginning in January 1951, he edged his forces forward literally battalion by battalion in set-piece assaults employing air strikes, tank support, and very heavy artillery preparations.[57] By this time the corps had nearly all the heavy artillery they were going to get.[58] These units were activated from Reserve and National Guard sources during a partial mobilization that did not include a corresponding mobilization of industry to get it on a war footing.[59] Within a short time this was to have a pronounced impact on the munitions available in Korea.

Attacks and counterattacks characterized this period, but tighter control of the front, even in the face of major Chinese efforts, lessened the hemorrhage of field guns to the enemy. In one instance, though, 28 105s and a half dozen 155s were lost in the X Corps area during the Communists' February offensive.[60] When the same area was retaken a month later, all of the 105s, as expected, were long gone. However, air strikes had purposely not been sent to destroy the 155s and, sure enough, X Corps was able to

Eighth Army cannoneers reloading their 8-inch howitzer during a fire mission against Chinese targets. (U.S. Army, 10 Jun 51)

recover five of them.[61] This episode saw the last U.S. field artillery lost to enemy action during the war.

By the spring of 1951, Chinese tactics had become as predictable to the Eighth Army as the Eighth Army's had been to the Chinese just several months earlier. When it became apparent that the Communists were preparing a second major offensive in the X Corps area in May, the newly appointed Eighth Army commander, Lieutenant General James Van Fleet, canceled his own planned drive and prepared to receive the enemy forces on ground of his choosing.[62] It was his opinion that, by World War II standards, his Army's artillery was short by some 70 battalions.[63] It was equally clear to him that the coming Chinese offensive offered an opportunity to eliminate much of its infantry in Korea, and Van Fleet stated his intent in clear and simple terms: "We must expend steel and fire, not men. . . . I want so many artillery holes that a man can step from one to the other."[64]

Van Fleet had his staff calculate the maximum amount of ammunition that could be fed into the coming battle with the limited available truck transport making the 60-mile round trip from the primary Eighth Army supply center to the X Corps dump, and thence to the artillery units. It was determined that if transportation of all other supplies was essentially halted, a truly stunning rate of fire could be maintained for approximately seven days—or roughly the amount of time that the Chinese army could effectively maintain an offensive before its own strained logistic system, savaged by

A snowstorm blowing out of Manchuria doesn't stop the crew of this 155mm howitzer from pounding Communist troops on the central front. (U.S. Army, 21 Feb 52)

U.S. airpower, would force it to consolidate.[65] Of course, Van Fleet had no intention of even letting the Chinese get that far.

To say that the U.S. Army's daily authorized rate of fire was thrown out the window does not come close to doing justice to what was planned and executed. The per-gun 105mm daily rate was raised from 50 to 300 rounds, the 155mm from 33 to 250, and the 8-inch from 20 to 200.[66] The offensive opened on the evening of 16 May, but it was not until late the next day when the exact positions and avenues of approach of all Chinese units were clearly known, that the order was issued for X Corps artillery to open up with its "Van Fleet loads."[67] In spite of considerable gains against the South Korean divisions to the east of X Corps, the Chinese abruptly called off the offensive on 20 May and attempted to quickly fall back north to get beyond cannon range. The U.S. supply system had been stretched almost to the breaking point but had enabled the field artillery to inflict crippling losses on six divisions.[68] The last major Chinese offensive until 1953 was over and UN forces

fought their way some 40 miles north to a defensible line that nearly approximates the Demilitarized Zone today.

Artillery use remained high throughout the long, self-imposed stalemate that followed. Great quantities of ammunition were consumed even in limited operations to straighten out portions of the front and particularly in the defense of the string of outposts designed to keep the Communists out of key positions near the Eighth Army main line of defense. As it had proved over and over again in the mobile phase of the war, when massed fires were used to protect cut-off units, field artillery—not to minimize the soldiers' own tenacity—was the determining factor in preventing the destruction of exposed, isolated outposts.[69] Moreover, with ground offensive operations curtailed and the Air Force pushed to the fore in the new war of attrition, artillery was literally the only weapon at the Army's disposal that could keep pressure on the enemy.[70] By October 1951, however, after 16 months of unrelenting combat and no end in sight, it was alarmingly clear that our surplus of World War II munitions might not hold out until new production caught up with demand. It was also evident that if a second major ground war developed in Europe, we would quickly find ourselves in a precarious position.[71]

Although our rate of fire remained substantially higher than that of the Communists, it was far below what commanders desired because strict ammunition rationing was imposed and continued into the summer of 1952, even as Communist bombardments increased in volume and accuracy. In fact, it was not until early 1953 that theater stocks began to finally see the increase in munitions from money authorized years earlier, because of the extended time it took to gear up additional production.[72] Later, during congressional hearings into the matter, Van Fleet would maintain that rationing did not extend to troops in the front lines, but pointedly stated: "The only pressure the Army can put on, without advancing is firepower."[73] He believed that increased activity at the front would force the Communists to increase their resupply effort, forcing them to move more men and supplies during vulnerable daylight hours. "If the Army had been adequately supplied with ammunition, and could put a fire pressure greater than it does now," said Van Fleet, "it would consume more of the enemy, the enemy supplies, create more problems for him which, in turn would help our air service."[74]

Once the Chinese and revived North Korean forces were able to dig in, the utility of the Army's trusty 105s had lessened appreciably since they were not effective against bunkers and were useful only for interdiction of supply routes close to the front and for massed fire during enemy assaults. Heavier artillery, particularly the 8-inch howitzer, was required to reduce the bunkered artillery appearing only 2,000 to 6,000 yards from forward positions, yet the 105s were wastefully employed in this largely futile

"Long Tom" 155mm self-propelled guns fire in support of the 25th Infantry Division near Munema on the west central front. (U.S. Army, 26 Nov 51)

effort.[75] By fall 1952, the Eighth Army had 36 155mm howitzers plus 44 8-inch guns after a battalion of 105s converted to the 8-inch. Unfortunately the 155s in particular were plagued by ammunition shortages.[76] While defensive fires never failed to be fully employed, useful limited operations that would have saved lives in the long run, such as a planned attack in the Triangle Hill complex by the South Korean 2d Division, had to be canceled.[77] However, since an adequate supply of 438 lb, 240mm rounds existed in Army stocks, two battalions were switched away from the 155mm and given the massive 240mm howitzers in May 1953.[78]

Van Fleet's boss in Tokyo, General Ridgway, frequently found himself going to bat for his aggressive Army commander. While not convinced that the artillery was being used in the most efficient manner, he stated in the fall of 1951 that "Whatever may have been the impression of our operations in Korea to date,

Young porters lugging 105mm shells on A-frame carriers to an artillery unit in the mountains, circa summer 1952. The lack of any road system in the Heartbreak Ridge-Punchbowl area necessitated that the Eight Army supplement air drops by employing thousands of Koreans to move supplies forward. (U.S. Army, 19 Jan 53)

artillery has been and remains the great killer of Communists. It remains the great saver of soldiers, American and Allied. There is a direct relation between the piles of shells in the ammunition supply points and the piles of corpses in the graves registration collection points. The bigger the former the smaller the latter and vice versa."[79] Six months later the budget question still raged and Ridgway was just as adamant: "The only alternative is to effect savings of dollars by expenditure of lives."[80]

In later years, military scholars, safely removed in time from the conflict, would ruminate over whether the Army learned the "right" lessons from Korea, but however applicable attrition warfare, in some degree, was to later conflicts, it was the best that could be done at that time without risking either America's position in that theater or elsewhere in the world.

Numerous factors contributed to the Communists' willingness to wrap up the war in 1953: first, the death of Stalin in March of that year and the apparent willingness of the new Soviet leadership to let things cool down;[81] second, a worsening Chinese economy largely tied to its war effort;[82] and finally, the warning to China in May that supply bases in its Manchurian sanctuary would be attacked coming immediately on the heels of our destruction of North Korea's irrigation dams.[83] The new administration of President Dwight D. Eisenhower was already beginning to rattle the nuclear

saber of what would soon be called "massive retaliation," but it is highly unlikely that the Chinese feared we would wipe out some of their cities over a stalemate on the Korean Peninsula. Enter the 280mm "atomic cannon."[84]

The development of the weapon had been well publicized. Harry S. Truman's secretary of defense lauded its revolutionary potential and senior military, including the Army chief of staff, stated specifically that "in the not too distant future" it could be used to obliterate "massed ground troops."[85] Now that's attrition. Of course, all kinds of fanciful claims are made for weapons, projected or real, but in the midst of the Eisenhower administration's bombing of the irrigation dams and warning that the war might be expanded into China came the highly publicized development and firing of a nuclear round from a 280mm cannon appropriately named "Atomic Annie."[86] What did the decision makers in China think of this? The large quantity of picked documents recently released by the Chinese government principally covers China's entry into the war and provides few insights into decisions made during the two-year Battle of the Truce Tent at Panmunjom. What is clear, however, is that the Chinese understood very well the U.S. Army's long-established policy of employing utterly massive fire support. While they frequently misinterpreted U.S. and world opinion, they also appreciated that a cannon-fired—and obviously tactical—use of nuclear weapons in *response* to an attack had a political palatability in the West that air-delivered nukes did not possess, because of the public perception that air operations could easily be expanded beyond Korea's battlefields.[87]

Items that had been sticking points in the negotiations literally for years were worked out with breathtaking dispatch[88] and in an "agreeable fashion."[89] The final Chinese offensive of the war was launched in July as much to give the South Koreans a final bloody nose to remember as to leave the impression that the Communists had triumphed on the field of battle and forced a UN capitulation. In by far their largest sustained effort of the war, the Chinese fired some 705,000 rounds, including much of the remaining stock of 105mm munitions captured during their civil war. UN field artillery fired a total of 4,711,120 rounds in return, with the guns of both sides falling silent at 2200 on 27 July 1953.[90]

Almost immediately after the guns stopped firing, the Eisenhower administration announced that, henceforth, any further assaults on our interests or Allies would result in massive nuclear retaliation. To many in the Army, this widely trumpeted "new look" in America's military policy bore an uncomfortable similarity to the pre-Korea old look of the Truman administration when atomic deterrence was the name of the game and the Army very rapidly shrunk to 10 understrength divisions. By the end of the 1950s, the Army indeed found itself down to just 11 active divisions.[91] And although

the cuts had come more gradually this time around, they and other policy disagreements still provoked a rash of senior officer resignations and early retirements that eventually included virtually every surviving general who commanded the Eight Army in Korea: Van Fleet, Ridgway and Maxwell Taylor.[92] Field artillery, meanwhile, grappled with the problems of the projected nuclear battlefield as well as combat divisions reorganized to operate in widely dispersed battlegroups, a setup that theoretically provided a semblance of safety from nuclear attack, yet effectively prevented any true massing of fires.[93] The practical techniques of all-around defense developed during World War II's Pacific fighting—and relearned the hard way in Korea—did not figure into the "pentomic" and subsequent reorganization objective Army division concepts, but were not forgotten by a generation of Red Legs who remembered all too well batteries and even whole battalions being overrun. Ironically, however, the sudden change to a battle of attrition behind a comparatively thick main line of defense and outpost system in the last years of the Korean War had also meant that the often-elaborate perimeter defenses of artillery units were never really tested against either sustained assault or large-scale infiltration. Such tests would have to wait for yet another Asian war.[94]

Notes

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2. Carl W. Hoffman, *Saipan: The Beginning of the End* (Washington, DC: Historical Division, U.S. Marine Corps, 1950), 224-25; Shaw, Nalty, and Turnbladh, 341.
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11. Walter G. Hermes, *Truce Tent and Fighting Front*, USAKW (Washington, DC: Office of the Chief of Military History, United States Army, 1966), 336-40.
12. Dastrup, 237, 250-51, 263.
13. Ibid., 241-42.
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15. James F. Schnabel, *Policy and Direction: The First Year*, USAKW (Washington, DC: Office of the Chief of Military History, United States Army, 1972), 43-46; Dastrup, 250.
16. Schnabel, 54, 89-91; Dastrup, 251. Divisions on occupation duty in Japan generally contained three field artillery battalions, each containing two four-gun batteries. When deployed to Korea, some battalions were able to scrape together enough personnel to bring their batteries up to five guns, and the last occupation division to enter the Pusan perimeter fighting, the 25th, deployed with at least one six-gun battery in its 90th Field Artillery Battalion.
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18. Appleman, 11-12, 17; Schnabel, 36.
19. Appleman, 154.
20. Robert F. Futrell, *The United States Air Force in Korea*, revised edition (Washington, DC: Office of Air Force History, United States Air Force, 1983), 25-26; Appleman, 56. The discrepancy in presented tonnage figures in these two volumes is the result of the Army figure representing only 105mm munitions, while the Air Force figure accounts for total ammunition shipped.
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83. Hermes, 460-61; Futrell, 667-70.
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86. George C. Reinhardt, "Notes on the Tactical Employment of Atomic Weapons," *Military Review*, September 1952, 28-37; "Van Fleet Said to Favor 'Limited' Atomic Attacks," *New York Times*, 9 March 1953, 8; "New 280-mm Gun Can Fire Atomic Projectile," *Combat Forces Journal* (November 1952), 29; "The Shot Heard Round the World: More Pictures of the 280 Gun," *Combat Forces Journal* (June 1953) 20-21; "The Atomic Gun Fires First Atomic Shell," *Combat Forces Journal* (July 1953), 1. Robert A. Doughty also notes that President Dwight D. Eisenhower's January 1953 inauguration parade pointedly included a 280mm gun in his *The Evolution of U.S. Army Tactical Doctrine, 1946-76*, Leavenworth Papers No. 1 (Fort Leavenworth, KS: Combat Studies Institute, 1979), 26. See also Reinhardt and W.R. Kintner, *Atomic Weapons in Land Combat* (Harrisburg, PA: Military Service Publishing Co., 1953).
87. Such perceptions remained strong throughout the coming decades, and nuclear artillery shells were never turned into an effective rallying point for protests by anti-American groups.
88. Hermes, 411-13, 419-21, 425.
89. Ibid., 435.
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92. Ibid.; See also A.J. Bacevich, *The Pentomic Era: The U.S. Army Between Korea and Vietnam* (Washington, DC: National Defense University Press, 1986).
93. Doughty, 18-19; Dastrup, 268, 272-73.
94. Scales, 136-141; Dastrup, 281, 283-84.