

## Korean War: In the View of Cost-effectiveness

This year marks the 50th anniversary of the signing of the Korean Armistice Agreement (KAA) of the Korean War (1950-1953) at Panmunjom on July 27, 1953. Though both sides claimed their triumph, the Chinese People's Volunteer Army won more admiration and reputation judged by modern war cost-effectiveness perspective.

When the Korean War was fought, the astounding gap between Chinese and US forces in both technology and equipment was rarely seen in the world's military history. In 1950, the national income of the United States was US\$240 billion, but that of China counted for only US\$10 billion; the United States owned 31,000 military planes, China had no more than 200; the US army was equipped with one truck for every four soldiers in average, the Chinese volunteers had only one truck out of 500 soldiers in average; the firepower of a single American regiment well outstripped that of a Chinese army! Though China received aids from the Soviet Union, arms were strained and had to be paid.

During the wartime, 70 percent of the forces of the People's Liberation Army (PLA) were dispatched to Korea as the Chinese People's Volunteers (accumulated to 2.97 million), along with more than 600,000 civil workers. The Chinese People's Volunteers suffered 148,000 deaths altogether, among which 114,000 died in combats, incidents, and winterkill, 21,000 died after being hospitalized, 13,000 died from diseases; and 380,000 were wounded. There were also 29,000 missing, including 21,400 POWs, of whom 14,000 were sent to Taiwan, 7,110 were repatriated. China spent 6.2 billion yuan in the war and owed US\$1.3 billion to the USSR. The total national income of the newly established People's Republic of China in the three years was 200 billion yuan, with a government expenditure of 60 billion yuan. The recovery of its national economy was not severely influenced by the war.

The Korean People's Army had 290,000 casualties and 90,000 POWs. There was a large number of civilian deaths in the northern part of Korea, but no accurate figures were available.

The after-war joint declaration of the Chinese People's Volunteers and the Korean People's Army claimed that they "eliminated 1.09 million enemy forces, including 390,000 from the United States, 660,000 from South Korean, and 29,000 from other countries." The vague "eliminated" number gave no details to that of dead, wounded and captured. This was because it was too difficult to assess killing effectiveness in battlefields at the moment and the unclear number may provide some leeway in negotiations for POW repatriation. .

Compared with the number released by the United States and South Korea, the results of the battlefield tallied by the Joint Command of China and North Korea was conservative, except the over-estimation of the US casualties. The US and South Korea side claimed 1.13 millions of casualties, including 141,000 US forces, 970,000 South Korean forces, and 20,000 from other countries, along with 100,000 missing.

As the commander of the UN forces Gen. Mark W. Clark said, he had "the

unenviable distinction of being the first US Army commander to sign an armistice without victory." During the three years, the United States had sent 1.17 million troops to Korea and spent US\$20 billion directly in the war. Adding up war preparation and aid to South Korea, the total US war expenditure counted for US\$64 billion. The US military declared 33,000 were killed, 108,000 wounded and 3,700 captured. Along with those died in accidents and hospital, altogether 53,000 US soldiers died in the Korean War, all their names having been carved on the Korean War Memorial built in the 1990s in Washington D.C.

In order not to dampen the morale, the South Korean government once shrunk their casualty number to 300,000 and that of missing, 90,000. After the demise of the dictatorship of Park Chung Hee, the more-open South Korean government revamped the numbers as 220,000 killed (in addition to 30,000 indirect deaths) and 750,000 wounded.

Viewing the war by modern scientific conceptions in terms of cost-effectiveness, similar to the assessment to an economic project, the Chinese People's Volunteers fought the war in a more marvelous way and produced more splendid results in regard of fighting skills and war arts, therefore they have every reason to won reverence of modern military men.

(The author Xu Yan is a researcher of military history at the Academy of National Defense)

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#### **How was the PLA equipment in the Korean war?**

PLA was basically a rifle infantry with almost no heavy weapons beyond mortars, their rifles were mostly captured from Japanese and KMT armies in the anti-Japanese war and the civil war, and they lacked ammunition. When the Korean war started, PRC was less than one year old, and it was focusing on reconstruction of a nation which suffered 8 years of Japanese aggression and plundering. China's steel production was a meager 0.6 million tons (in comparison, US figure was 87 million tons). China had almost no industry, it could not make weapons at large quantity, especially heavy weapons and their ammunitions. A PLA army then had less than 10% of the fire power of a US Corps, it had only 36 artillery pieces of 76mm or larger, while a US Corps had over 300 guns of 105mm or larger, PLA army had no tanks. PLA also lacked transport, a PLA division had only scores of trucks, and its supply had to be carried by porters.

After PLA's first successful campaigns in Korea, PLA bought Soviet weapons enough to equip 20 divisions, thus improved its fire power. At the final stage of the war, PLA was able to mass up a good number of heavy artillery to break an ROK/US defense line by brute force.

#### **What were PVA's tactics and strategies in Korean war?**

PVA's tactics were designed to void UN's advantage of air power and artillery.

PVA used night fighting tactics. It would start an attack when night fell, withdrew and went to cover at dawn, so US airplanes could not harass them. It also used close combat, threw its units into enemy line, so the enemy artillery could not operate. Another PVA tactics was to infiltrate deep into enemy positions, attack their command posts and artillery positions directly from inside.

During the truce talks, PVA invented the bunker war, they would dig very long and deep bunkers in the hills and stock supplies there, when enemy shell the hills, they would withdraw into the bunkers, when the shelling stopped, they came out to fire on the attackers, after the surface positions taken by enemy, they would withdraw back into the bunkers, then PVA artillery would shell the enemy on the surface and they came out the bunkers again to assist the retaking of the hill.

PVA's main strategy at the beginning was the so-called "movement war", the main objective was to divide the enemy into isolated pieces and then use superior strength of force to annihilate the encircled enemy piecemeal before enemy reinforcement could be brought in, to do this, PVA uses frontal attacks and simultaneous penetrations to cut directly into enemy rear, cutoff MSR (main supply route) and withdraw routes, trap enemy units when they tried to redeploy.

To understand PLA strategies, one must study the grand campaigns in which PLA wiped out 8 million KMT troops in 2 years, with small casualty of its own.

#### **How did PVA's strength compare to that of US/UN forces at the second campaign?**

The PVA had their first campaign against US forces during Oct. 28 to Nov. 5 1950. The second campaign was from Nov. 25 to Dec. 24 1950.

The man power on both sides were almost equal.

At the time, PLA had 13th Army Group and 9th Army Group in Korea, total of 30 divisions. The 13th Army Group had about 150,000 men and the 9th had about 120,000 men.

US frontal forces consisted of Walker's Eighth Army and Almond's X Corps, totalling around 240,000 men. The Eighth Army's combat forces numbered 118,000 men [Blair], it has: Shrimp Milburns' I Corps which consisted of the 24th division, ROK 1st division and the Commonwealth Brigade(about 5000men); John Coulter's IX Corps which consisted of 25th Division, 1st Cavalry Division, 2d Division and Turkish brigade (about 5000); ROK II Corps which consisted of ROK 7th Division, ROK 8th Division and the ROK 6th Division (mangled in the first PVA campaign with 5000 men left). X Corps was under direct command of MacArthur, its combat strength was about 120,000 men, including: O.P. Smith's 1st Marine Division, 7th Infantry Division, 3d Infantry Division and ROK I Corps.

#### **What was the PVA and UN numerical strength at various stages of the Korean war?**

Both sides had about the same numerical strength.

The first batch of PVA consisted of the 13th and 9th Army Group plus 3 artillery divisions, about 270,000 men.

At the peak time, total PVA and NKPA strength reached 1.2 million during the Korean war.

In June 1951, right after the 5th campaign, UN total strength was 695,110, with 520,850 ground force (US 253100, ROK 229600, other 38150), 80340 navy (US 66700, ROK 6000, other 7640) and 94520 air force (US 90000, ROK 4000, other 520). At the same time, PVA strength was about 240,000, much lower than total UN strength.

At the end of war, from PVA statistics, UN total strength was 1,111,340 (1.11134 million), ground force 904,550 (US 373,500, ROK 491,000, other 40050), navy 101,180 (US 73000, ROK 20000, other 8180), air force 105,610 (US 95000, ROK 10000, other 610). From western source (Korean Almanac), UN ground forces strength was slightly higher with a total of 932,539 (US 302483, ROK 590911, other 39145). PVA counted 70000 more US troops, this was probably because many ROKs (KATUSAs) were serving in US forces and counted as US strength by PVA.

In the war, PVA rotated about 2 million troops, US used 86% of its infantry and 14% of its Marine Corps, rotated over 1.319 million troops .

#### **What is "human wave" tactics?**

During battles, western forces were usually incapable of correctly estimating the strength of PVA forces, often times, they greatly exaggerated the number of attacking PVAs, such as taking a PVA regiment as a PVA division. PVA mostly attacked at night, blowing bugles and wistles, shouting thrills, even play "sweet music" to cause psychological stress, the PVA tactics made western forces feel that the enemy was everywhere from every direction. Moreover, PVAs were masters of infiltration, they often sneaked in and attacked directly on command posts, generating shock and chaos. Western combat history always refered PVA attacks as "swarm of Chinese", "human waves", "Chinese hordes", as if PVA simply threw its men into the fire and let itself slaughtered, such a description indicated a great misunderstanding of the PVA tactics. As some military analysts pointed out, PLA rarely use dense formation in their attacks, it seeks to inflict maximum damage with minimum casualty. At various stages of the Korean war, PVA nevered had a commanding numerical superiority against UN forces, in fact, during the 4th campaign, it was greatly outnumbered by UN (it was always outgunned), yet it could still outmaneuver UN forces and even managed to counter attack at X Corps. PVA could achieve all these with inferior firepower because it had smarter tactics and strategy.

### **How many casualties did PVA suffer?**

Western sources gave assertions such as "it seems reasonable to assume that China cannot have lost less than half a million men", "China suffered at least 900,000 casualties", etc. However, such numbers were based on arbitrary estimates which were greatly inflated.

For example, US estimated that in the battle of Chosin reservoir, the Marines air power killed 10,000 Chinese and wounded 5,000, the numbers were artificially high and no evidence could be found to back up these claims. From western combat histories, PVA always cease the fighting at dawn and went to cover, and their white clothing made it very hard to detect even by the Marines at close distance let alone by aircrafts. US estimated that the Marines killed a total of 25,000 PVA troops and wounded 12,500 in the Chosin battle, one has to wonder that if the Marines alone could kill 20% and wound 10% of the entire PVA 9th Army Group, why did the X Corps have to abandon Task Force MacLean and put itself in such a vulnerable situation at the Hungnam beachhead, and then bug out North Korea. For another example, 2d division historian wrote that 2d division alone had "killed more than 65,000 enemy soldiers", this was based on figures from individual regiments, such as 9th Infantry, which claimed "total enemy casualties to be 16505, of which 2200 were counted". In the "Wonju shoot" of February 14 1951, 2d division claimed killing 5000 PVA troops with artillery alone, and wounded 3 times more. For another example, Van Fleet claimed that UN had inflicted a communist casualty of 234,000 from August to October 1951 during which truce talks were in recess, such an estimate is considered "far too high" by western historians. There are a lot of such cases, when a western historian quoted communist casualty numbers, he had to qualify it with words such as "arbitrary", "far too high", etc.

From the overly inflated numbers, it seems that US generals are not accountable for their battle results, while in PLA, it is a serious misconduct to report false casualty numbers of either side, since such false reports would result in wrong calculations by the nation's leaders. On the US side, American statisticians calculated that in the 8 months ending June 25 1951, PVA suffered a casualty of 600,000 (which would imply that every PVA soldier entered Korea became a casualty), and UN suffered 290,000 (among which 78,800 were American), such gross miscalculations by Washington led to the illusion that US was winning and prolonged the war.

It is understandable that US could not get a accurate estimate of the communist casualties, UN forces were on the run for escape most of the time, they could not have the chance to count their kills.

From official Chinese sources, PVA casualty during the Korean war was 390,000. It breaks down as follows:

KIA: 110,400

DIED OF WOUNDS: 21,600

DIED OF SICKNESS: 13,000

CAPTURED & MISSING: 25,600

WOUNDED: 260,000

### **How many casualties UN suffered?**

From reports published by PVA on August 15 1953, UN suffered a total casualty of 1,093,839, in which 397,543 were Americans, 667,293 were ROKs, and 29,003 were others.

PVA's portion of the score was: kill and wound, 671,954; capture, 46,088; persuaded surrender, 435; total 718,477, in which 290,000 were Americans. PV destroyed or damaged 2,006 enemy tanks, 3,165 vehicles, 44 armored vehicles, 10,629 aircrafts, 583 artillery pieces; captured 245 tanks, 5,256 trucks, 51 armored vehicles, 11 aircrafts, 4,037 artillery pieces, 73,263 small arms.

From western sources, UN combat casualty totalled 1 million. It breaks as follows: US 144,173, ROK 844,000 (415,000 killed, 429,000 wounded), Commonwealth 6,000, others 8,800 (Hastings). US suffered another 20,000 or so fatality. From military history authored by ROK Defense Department, ROK total casualty was actually 984,400.

Detailed US casualty was: KIA 33,629, accidental death 20,600—wounded 103,248, captured and repatriated 3,746, MIA 8,142.

The total count from both sources matched very well, some historians acknowledged that PLA was very honest in their statistics. However, PVA counted 220,000 more US casualties, and about 200,000 less ROK. This discrepancy was partly due to the fact that many ROKs were serving as attachments to US armies and they were counted as US force by PVA.

Why did ROK suffer such a greater casualty? One of the reasons was that they were placed on the first line of defense in a lot of the cases, and they suffered the initial blows by PVA. Moreover, ROK had different fighting style: from PVA battle accounts, American usually withdraw all the way down to the foot of the hills after suffering a failed attack, but ROK only retreated to out of fire range to regroup and attack again immediately, which caused great difficulty for PVA, and of course greater casualty on ROK. However, western historians seldom mention ROK's positive contribution to the UN side.

**What did Mao say about US after the Korean war?**

"American imperialists are very arrogant, they are very unreasonable whenever they can get away with it, if they became a little bit reasonable, it was because they had no other choice."

**Did US consider the use the A-Bomb in Korea?**

US generals actively considered the use of Atomic Bombs from the very beginning, even before China intervened. US presidents considered the use of the A-Bombs after PVA entered.

*[From Blair]*

On June 1950, Eisenhower met with Collins, Haislip, Ridgway, Ike suggested use of two atomic bombs in the Korea area.

In July 1950, MacArthur suggested plan to use atomic bombs to 'isolate the battle fields'.

*[From Hastings]*

On November 30 1950, President Truman said in a press conference: "There had always been active consideration of its[Atomic Bomb's] use..."

On December 24 1950, MacArthur submitted a list of 'retaliation targets' in China and North Korea, requiring 26 atomic bombs.

In January 1953, US tested its first tactical nuclear weapon, and the JCS considered its use "against military targets affecting operations in Korea."

In February 1953, in a NSC meeting, President Eisenhower suggested the Kaesong area of North Korea as an appropriate demonstration ground for a tactical nuclear bomb--it "provided a good target for this type of weapon".

On May 19 1953, the Joint Chiefs recommended direct air and naval operations against China, including the use of nuclear weapons. The National Security Council endorsed the JCS recommendation the next day.

Dulles, the Secretary of State was visiting India and told Nehru to deliver a message to Zhou Enlai: if peace was not speedily attained, the United States would begin to bomb north of Yalu, and US had recently tested atomic shells.

**As a side question, did US threaten China with nukes after the Korean war?**

Yes.

US threatened China with nuclear weapons again in 1959.

From recently declassified documents, President Kennedy considered using nukes to bomb Chinese nuclear facilities in early 1960s , when China was on the verge of exploding its own bomb, but JFK was assassinated and the plan was dropped by President Johnson.

Facing nuclear threat, Chairman Mao said:"we need to have some atomic bombs too". In 1964, China exploded its first A-Bomb, 30 months later, in 1967, it exploded its first H-Bomb, since then, China has developed a variety of strategic and tactical weapons, China also produced missiles of various ranges, initially targeting US bases at Japan and Philippines, and eventually the North America continent. Mao also said:"We must have nuclear submarines even if this would take us ten thousand years". China tested its nuclear subs in early 1970s and tested SLBMs later. The exact size of PLA nuclear stockpile is unknown, but reasonable estimate put it in the range of 2000-4000 warheads.

In March 1996, PLA conducted an exercise in the Taiwan Straits, President Clinton sent two carriers to the straits, PLA responded by dispatching its nuclear attack submarines and the US fleet stayed 300 nautical miles off Taiwan, in the meantime, PLA SAF (Secondary Artillery Force) conducted exercise to retaliate against enemy strategic strikes, PLA Vice Chief of Staff, Gen. Xiong Guangkai reportedly hinted that US cares more about LA than Taiwan.

**How many civilians were killed by US forces in Korea?**

About 3 million.

**What was the lesson China learned from the Korean war?**

**Chinese learned that united as a nation, they can defeat any enemy.**

**Korean war casualty statistics**

Country	KIA+	Wounded	MIA	Captured	Total	Comments
S Korea	227,800	717,100	43,500	?	984,400	Captured included in MIA?
US	54,229	103,248	8,142	3,746	169,365	KIA included the 20,600 accidental fatality
UK	710	2,278	1,263	766	5,017	
Turkey	717	2,246	167	217	3,349	
Australia	291	1,240	39	21	1,591	
Canada	309	1,055	30	2	1,396	
France	288	818	18	11	1,135	
Thailand	114	794	5	0	913	
Greece	169	543	2	1	715	
Holland	111	589	4	0	704	
Columbia	140	452	65	29	686	
Ethiopia	120	536			656	
Philippines	92	299	57	40	488	
Belgium/Luxe	97	350	5	1	453	
New Zealand	34	80		1	115	
South Africa	20		16	6	42	
Japan	several			1		
PRC	132,000	238,400	8,000	21,400	392,600	
NK						

**War cost**

	Total weight of material (in million tons)	Ammunition (in million tons)	Cost (in billion USD)	
US	75	3.3	20	
PRC	5.6	0.25	2.5	