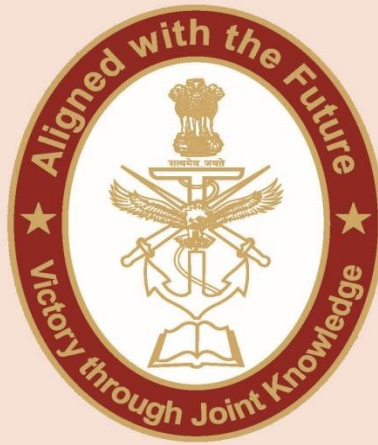


CENTRE FOR JOINT WARFARE STUDIES



CENJOWS

**TANKS SHALL
ENDURE AND
PREVAIL OVER ALL
FUTURE CHALLENGES**



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**“It is not the Big Armies that
Win Battles...
... It is the Good Ones”**

-Field Marshal Maurice Comte de Saxe (1782)



The Fallacy of Tank Obituary

Tank-O-Phobia (TOP) is a virus that plagues the defence analyst repeatedly albeit in various strains. This virus resides in the parochial mindsets of armchair strategists who see the battle space through the myopic lens of exclusivity, not inclusivity, and presumptuously announce the death of the Tank or sign its obituary obliviousness. Ironically the tank versus anti-tank saga is as old as the appearance of tanks in the Battle of the Somme in September 1916. The attack helicopter, the top attack cluster munitions, the anti-tank mines, the drones and now the fire and forget top attack ATGM, all to stop this enduring war monster called "The Tank". Tank dominates and is an offensive weapon, anti-tank as the name suggests is a defensive reaction to stop this onslaught. No 'Eureka' and yet the tank continues to be an instrument of deterrence in peace and force of decision in war. So, what is the big breaking news?? The question is not whether tanks will survive in the future but how they will they continue to adapt to meet future challenges. The question is not whether armies should have tanks in the future but what should they look like and evolve in future.

Tanks are Enduring and Dominant War Machine

War has an enduring nature and an evolving character. So also, the Tank is enduring and tank warfare evolving with changes in terrain, technology, threats, tactics and training. The aim of war is to impose one's will on the adversary and the art of war is to achieve victory at the least cost and in minimum time. Thus, the application of military instruments must target both the will and the capability of the adversary. It is this important factor in which tanks enjoy a unique and indomitable position on the battlefield. Tanks as mobile protected firepower platforms pre-empt, dislocate and destroy/disrupt enemy forces by dominant manoeuvre. Their ability to achieve an overwhelming 24x7 execution tempo by providing shock action and brute force paralyzes the enemy physically and psychologically. Is there any parallel platform or force that can fulfil its role on the ground? Is there any platform that equally dominates the critical 'time-space-force' dimension of the battlefield? Is there any platform that delivers such a shock effect and impacts the will of the adversary? The answer needs no elucidation.

Reality Breaks the Myth

Ever thought as to why do we first compare tanks, aircraft and ships when we analyze military balance? Why do we see pictures and animations of tanks on the electronic media battle boards? The answer is simple -Tanks are the signature of military strength and a symbol of offensive intent. That's the reason we saw Tanks at Ladakh unnerving the Chinese and sought to

be pulled back first from Chishul Sector to deescalate the situation. That's the reason Tanks led the Russian offensive into Ukraine not marching columns. That's the reason both our western and northern adversaries continue to invest in this platform. That's the reason why India is also going for a light tank, active protection system and now some news of unmanned tanks / unmanned ground vehicles. That's the reason why the Global Armoured Vehicle Market valued at USD 17.57 Billion in 2020 is projected to reach USD 27.83 Billion in 2028 and is projected to grow at a CAGR of 6.36% in the 2021-2028 period. So, as long as war exists and warfare evolves, tanks will continue to adapt, evolve and transform to overcome future threats and prevail in war.

Ukrainian Conflict



The Ukrainian conflict has given oxygen to the armchair analyst to adversely comment on the tank. These analysts have little experience or understanding in handling tanks or understanding tank warfare. Drawing lessons in the fog of war may be premature as the first casualty in war is always truth. Yet the open-source western dominated narratives indicate that the Russian tank tactics were of the 19th century while fighting a 21st-century war. Having tank columns lined up ceremonially on roads is one thing, but to use them, competently, on the battlefield is another. There was no semblance of the tactically disposed tanks as part of a combined arms team in a joint operational environment. No self-propelled artillery, no self-propelled air defence, no attack helicopters or close support aircraft in support, no mechanized infantry, no infantry and a lack of matching combat support logistics. They moved on roads as lone rangers in a very predictable manner may be to avoid slushy countryside, but compromising their basic strength of mobility and survivability. The very operational

manoeuvre groups the Russians professed and the Chinese learnt were missing. They failed to understand the employment of mechanized forces in marginal terrain and built-up areas where tanks, infantry and artillery have a mutually supporting role. Evidently, the war fighters failed, certainly not the Tanks. It would also not be surprising if the western narrative was built by defence industry magnates to demean the Russian tanks and hype up the western anti-tank missiles. To garner world opinion against Russia or any country the West targets, they are willing to destroy and kill anything and everything in their information war. Mick Ryan, a recently retired major general, stated that “the historical data on ground forces that have tanks, versus those that don’t, is pretty exhaustive. If you have tanks, you lose fewer soldiers and have a better chance of success. The caveat is that they need to be used in a well-led combined arms team.” The real lesson we need to draw is that the combined arms concept along with joint operations synergy will lead to force optimization and thus critical for success. There is no king or queen in contemporary battle. Tanks as mobile protected firepower platforms lead the spearheads of the combined arms team. The need is for an inclusive force structuring and integrated joint force application, not an exclusive parochial outlook. What makes combined arms manoeuvre potent is not the collective employment of multiple arms but the cumulative, integrated and complementary effect along with integrated logistics. The Indian Army Integrated Battle Group (IBG) concept needs this understanding as its foundational force construct. IBGs are technology-enabled, modular, integrated, agile, combined arms force, specific to a theatre and a defined role. It requires unified force structure, complementary equipping, integrated training and above all bold, decisive and offensive leadership.

Azerbaijan and Armenia Conflict



Similarly, often quoted drone war of Azerbaijan and Armenia conflict also spelt the death knell of tanks. Ironically the social media battlefield destroyed more tanks on each side than they even possessed. The message was tanks are death traps to cheap drones. The basic lack of military understanding of tank warfare came to the fore with this fallacy. It must be understood that technology, tactics and training are designed to overcome challenges of terrain restrictions and evolving threats. The cost of the tank is a fraction of the value of training tank men to exploit their potential optimally. This investment must never be compromised or stagnated. The visuals of standalone tank clusters in this battle neither well dispersed nor manoeuvring nor camouflaged in a difficult terrain made them static pillboxes, not tanks. The force seemed neither trained nor structured nor equipped to obviate terrain challenges or exploit their inherent potential. The combination of TB2 drones and Israeli-made loitering munitions though certainly potent did not spell the end of tanks but only served as an example of what unprotected, poorly deployed armour would face. While drones represent a major technological advancement, like any system they too have attendant limitations and vulnerabilities to be targeted. The truth is tank killer drones can't swarm as they require a reasonable size to carry an anti-tank payload and so will need to come in pairs. They would also require a very high level of precision control, AI-assisted autonomy and SATCOM navigation. This makes them vulnerable to both soft and hard kills as demonstrated by the Russians against the drone attack on their airfields and naval bases in Syria in 2018. Further, anti-drone air defence systems, soft kill electronic warfare measures and military lasers are evolving at a fast pace. Yet the threat is real for tanks and so countermeasures will need to be adopted for enhanced survivability.

Indian Tank Employment Post Independence



In the first Indo-Pak war of 1947-48, the bold and innovative employment of Stuart Tanks of the 7th Light Cavalry surprised the enemy at Zoji La, at an unparalleled altitude of 11,575 feet, repulsing their advance to Srinagar and saving the province of Ladakh. Had it not happened, the map of India would have looked different today.

Later during the 1962 Indo-China War, AMX tanks of the 20th Lancers were airlifted by AN-12 aircraft. They gallantly fought alongside infantry battalions in the famous Battle of Gurung Hill at Chushul in Ladakh. Tanks were also employed in Nathu La during the same war effectively.

In the 1965 Indo-Pak war, tanks performed commendably. Tank thrusts in the Chawinda-Phillaurah sector forced Pakistan to recoil its offensive in the Chamb-Jaurian sector. Had it continued the offensive, it would have cut off the lifeline to Jammu and Kashmir. The epic Battle of Phillaurah is a saga of bravery by men behind the machine. Lt Col A.B. Tarapore, Commandant of 17 Horse regiment, was awarded the Param Vir Chakra posthumously. In the same war, the biggest tank battle since World War II took place in the Khem Kharan sector. Pakistan's 1 Armoured Division was annihilated, and the sector was named as the 'Pak tank graveyard'.

In 1971, the feat was repeated in the western sector. The Battle of Basantar exemplified the spirit of tanks and tank men. Second lieutenant Arun Khetrupal was awarded the Param Vir Chakra posthumously for his supreme courage and valour. In the eastern sector (now Bangladesh), Indian armour was again at the forefront. Led by PT-76 amphibious tanks, the Indian Army raced to Dacca in 14 eventful days in 1971.

In the 1980s, tank superiority got tested during the massive Ex Brass Tacks. It didn't start a war but certainly sent a strategic message. In the same decade, tanks were also deployed in Sri Lanka by the Indian Peace Keeping Force. On several occasions thereafter, tanks were at the forefront of mobilization by the Indian Army. In the Samba terrorist attack in 2013, the innovative move of tanks by the 16th Cavalry confined terrorists to a building and made their subsequent neutralisation easy.



Sensing the importance of mechanized forces both in the Northern and Eastern front, the Indian Army built up a sizeable force to dominate the valleys and passes. The tanks once again were back in high altitude and adapted both technologically and doctrinally to be the spearheads of combined arms team with an offensive content. Then came the Chinese intrusion into Ladakh Sector in Apr 2020. The role of tanks in Chishul sector once again helped turn the tables and dominate the sector. The credit must of course go to those brave soldiers who scaled the heights and dislocated the Chinese. Yet the offensive intent of tanks unnerved the Chinese who later sought their withdrawn as the first step to de-escalate the situation.

Tanks continue to play a critical role across the entire spectrum in the Western, Northern and Eastern borders of the nation. The Tankmen continue to showcase their professional prowess whenever so challenged by an adversary. Yet they learn, evolve and perform in keeping with the changing character of warfare. They remain inclusive in their outlook and ferocious in their performance.

Lessons for Tank Employment



So, what are the lessons for the employment of tanks in future battlespace?

- In a 21st-century war, traditional tank versus tank battles are increasingly exceptional, yet tanks as mobile protected firepower platforms will continue to find a predominant place across the entire spectrum of conflict including in the nuclear environment. Their optimization will be a factor of understanding their deployability, employability and capability.
- Anti-tank platforms will continue to hunt the tank. Marginal terrain and built-up areas will pose restrictions. Yet modern technology, innovative tactics and superior training will prevail over such challenges as in the past, present and future. Quality of equipment alone cannot ensure success, doctrine, strategy, tactics, training, motivation and astute leadership are equally important.
- Tank design has evolved from firepower, mobility and protection to lethality, agility, survivability and reliability. The mobility of a tank differentiates it from a static pill box and should never be compromised. The threat spectrum too has expanded from the traditional 180 degrees frontal arc to 360 degrees all around. Smart technologies like active protection systems and signature management and such countermeasures are adding to survivability. Survivability is an all-encompassing multi-layered, multi-tiered and multifaceted concept that needs greater understanding and

investment both doctrinally and technologically. Yet all these technologies must have an indigenous character. Superior and offensive tactical manoeuvre of this war machine will make the difference.

- Tanks must be employed as part of a combined arms manoeuvre. It's an inclusive team warfare concept wherein each arm complements and addresses the limitations and vulnerabilities of the other. It also requires integration and synergised application as part of the space to surface continuum. IBG is the way forward and needs a thorough understanding. Their employment must be offensive be it in a denial or domination mission. C5ISR remains essential for knowledge-based decision-oriented combined arms manoeuvres.
- Mechanised Forces must be conceptually viewed not only as armour and mechanized infantry but also as SP Arty, SP AD, Attack Helicopters and matching mobile combat support and logistics. Increasingly infantry too needs matching mobility when operating in a combined arms team and thus should be APC / Wheeled Armoured Platform (WHAP) borne. We must grow beyond arm centric myopic mindset, especially at the higher military leadership level.
- One size fits all solutions do not work across all terrains. So we need a mix of medium and light tanks and a mix of track and wheeled platforms. The Light Tank for the Northern Borders and WHAP induction are steps in the right direction.
- Urban areas and hybrid warfare certainly pose a challenge to tank employment in terms of restricted mobility, lack of high angle firing capability and vulnerability to close range handheld anti-tank systems. These can be overcome by innovative tactics wherein infantry screens deploy ahead and clear such pockets of threat along with close fire as part of a combined arms team. Operation Protective Edge provides a robust case study of combat between a conventional force and a hybrid adversary (The Uncertain Role of the Tank in Modern War: Lessons from the Israeli Experience in Hybrid Warfare published in 2016 by 'The Institute of Land warfare' USA). The Israeli Defence Force's experience in Operation Protective Edge demonstrates that the capabilities of the main battle tank are likely to be more critical and

relevant in a hybrid environment than they have been during the combat in Iraq and Afghanistan.

Conclusion

Tanks are neither dead nor dying, but adapting and prevailing in contemporary battle space with increasing inclusivity. The wise learn lessons for the future, the smart learn lessons from others and the foolish learn the wrong lessons. While we draw the right lessons from the recent and ongoing conflict, it is equally important to relate them to one's operational environment and doctrinally orient to be future-ready. It's time we shed our parochial cloaks of exclusivity and view the contemporary battlespace from the prism of combined arms team operating in an essentially joint operational environment.

CERTIFICATE

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