

Notes on:

***Steel Victory:  
The Heroic Story of American's Independent Tank Battalions  
at War in Europe***

by Harry Yeide  
New York: Presidio Press, 2003

1. ***Steel Victory*** is a history of the U.S. Army's independent of the European war taken from the AARs of the independent tank battalions. Army-level independent tank battalions were the 70th, 191st, and the 700-series battalions.
  - a. The book briefly covers the organizational decisions that created the independent tank battalions, but does not examine the design of the units, training preparation, or doctrinal performance versus the tank battalions of armored divisions. Post-war U.S. Army tank re-organization is not examined.
  - b. The source AARs provide outlines for the combat narratives, but the author adds little additional context or details. No diagrams of key actions are included. No discussion of low-level SOPs or combat practices is made. The large campaign maps are not referenced in the text.
  - c. The lack of discussion at the high end – the creation of the force, *and* the low end – the nuts and bolts of tank-infantry cooperation, weakens the book. Each chapter is another repetitive retelling of combat actions, lacking either the details for interest, or the context for understanding.
  - d. Despite these flaws, *Steel Victory* does provide a wealth of tank-infantry insights.
2. **Missions.** *FM 17-33*, 19 December 1944, listed the missions of independent tank battalions: “To lead the attack, to support by direct fire...tanks and ground troops, to feel out the enemy...weak spots, to serve as a reserve for exploiting a success or breaking up a counterattack..., to accompany the infantry...advance by...neutralizing automatic weapons and pillboxes..., to fight enemy tanks..., to destroy dug-in pillboxes..., to reinforce artillery fires, and to assist the infantry in mop-up.”
  - a. *The 743rd Tank Battalion destroyed 81 German armored vehicles, 100 machinegun nest pillboxes, 36 AT guns, 9 artillery pieces, 4 armored cars, and 125 wheeled vehicles* – all targets expected of an infantry support unit.
  - b. By 1944, “to transport infantry on tanks,” was a de facto mission. Tanks were sometimes used to shuttle infantry forward, making multiple trips.
3. **For the infantry, the most important tank weapon was the machine gun. US .30 caliber MGs were very accurate, an important trait when supporting moving infantry.** Because tanks had storage for only 15K rounds of .30 caliber, the 740th Tank Battalion used external

and internal storage to permit 50K rounds per tank. The .50 caliber was less useful for infantry support as it was less accurate and carried only 600 rounds.

4. **For the infantry, the size of the main gun was less important.** Whatever the size, the most important aspect for infantry support in close terrain was that the gun could traverse quickly – precluding heavy cannons – and that it could traverse sideways in narrow streets or on roads lined with telephone poles or trees.
5. **Voice coordination with infantry was the critical capability.** Because tank designers ignored this, field expedient methods were developed with field telephones.
  - a. Verbal face-to-face communications greatly increased the risk to exposed tank commanders and infantry leaders. Getting the attention of a buttoned-up tank was difficult for infantrymen, sometimes requiring them to jump up and down in front of the vehicle, a practice not recommended while under fire.
  - b. When artillery, mortars, or machinegun fire pinned down accompanying infantry, tanks sometimes continued moving and lost contact with their infantry.
  - c. Tanks supporting infantry learned not to shoot at everything. The infantry would commonly be in places that the tank commander thought were un-occupied or were occupied by the enemy. Transcripts of radio traffic show the constant effort needed to keep track of multiple infantry units in contact.
6. **Infantry assigned to protect tanks needed to train on tank-specific skills.**
  - a. To guide a tank over obstacles, bridges, minefields, and natural hazards required a knowledge of the tank's limitations and capabilities and what constituted passable terrain to prevent bogging down. Narrow muddy trails through woods were a special problem. Guiding a tank required knowledge of the tank crew's limited visibility. Guiding a tank saved time-consuming foot reconnaissance by tank commanders.
  - b. To direct tank fire required knowledge of the tank crew's limited visibility.
  - c. To permit maintenance, infantry posted security elements, especially at night. Tanks separated from their infantry before dusk knew they were especially vulnerable to German infiltration after dark. Tankers need small arms for close protection.
  - d. Infantry can see and hear many things that tank crews cannot. Infantry need to know the vulnerabilities of tanks to AT guns and panzerfaust, especially in close terrain.
  - e. "The infantry and tankers need to know each others' first names." Tank commanders should be able to recognize individual infantrymen by name, in the dark.
7. **Tanks are vulnerable in close terrain. Infantry is invaluable to tanks in close terrain.** Infantry can root out AT weapons in prepared strongpoints. Tanks are vulnerable to mines, AT guns, artillery, and other tanks. *The 743rd Tank Battalion lost 96 tanks during the war, most to AT fire and panzerfaust.*

8. **Infantry are particularly valuable to a tank to find and destroy AT positions.** Infantry are vulnerable to MG fire, but tanks can destroy these positions with ease. Infantry needs to learn that tanks attract enemy fire, both direct and indirect.
9. **The attack.** Infantry working with unfamiliar tanks were reluctant to precede tanks, fearful that tanks would shoot them once contact was initiated. **Enemy positions that could not be seen by tanks required a talk-on by the infantry to identify the enemy location.**
10. **Liaison.** Infantry units need tank liaison officers. Tank units need infantry liaison officers, air liaison officers, forward air controllers, medical personnel, and artillery observers. All liaisons need communications. *None* of these were provided in WWII organizations.
11. **SOPs.** Tank and infantry units with habitual relationships developed SOPs in the heat of combat. This was an indictment of stateside doctrine and training.
  - a. **1st Hedgerow SOP.** Dozer breaks through hedgerow and backs out, tanks penetrate with infantry in trace. When German MGs were located in far hedgerow, infantry was decimated. Enemy learned to move panzerfaust AT missiles to target dozer break-ins.
  - b. **2nd Hedgerow SOP.** One tank, one rifle squad, one engineer team are attached. Engineers blow a hole. The tank drills each far corner with its main gun, and then tank and infantry suppress the far side. Infantry crosses under tank suppression and tosses grenades over far hedgerow. Tank moves up, protected by accompanying engineers.
12. **Habitual relationships are critical.** Tank-infantry coordination requires training, sharing of ideas between units, and rehearsal behind the lines. Tank battalions that remained attached to the same division developed well-executed SOPs. Even then, different companies would rotate and rest, leaving the tankers over-used, exhausted, and working with different units each day.
  - a. Histories that refer to a tank-infantry-engineer-artillery-airpower “team” are overstating the average capability. US air often attacked US tanks. Tanks suffered under infantry commanders who had little knowledge or appreciation of tank tactics. Communications between units was spotty and jury-rigged. **Most provisional task forces were ad hoc and too short-lived to develop integrated unit capabilities.**
  - b. The enemy used indirect fire to separate infantry from tanks. In many instances, tanks advancing under artillery and mortars lost their infantry. The tanks were then attacked by AT guns, grenades, small arms, and panzerfaust.
  - c. Some enemy pillboxes were invulnerable to direct tank fire. Tank MG fire would then suppress, so infantry could advance under suppression and burn out the pillbox.
13. **Steel Victory**, with its insights on WWII tank-infantry failures and successes, is a good reference for tank-infantry coordination training today.