

Panther's War College

Subject # 1

Tactical Reconnaissance

The timeless value of reconnaissance

On the cold morning of December 4th, 1757, the Prussian King Frederick the Great was riding well ahead of his army and with his advance guard, the Puttmaker and Zieten Hussars. As they approached the city of Newmarkt, Frederick learnt from peasants that “the enemy had established a bakery in that town, that it was garrisoned with pandours, and that Daun’s army was expected”.^{1,2} It was obvious the Austrians wanted to deploy a base at Newmarkt. If the Austrians were allowed to do so, the hills east of this city would give them an enormous tactical advantage. The Prussian infantry and artillery needed to clear the Austrians from Newmarkt was more than a half a day march away. Frederick ordered the hussars to storm the city, something very unconventional. Besides an unusual tactical victory (120 killed, 569 captured Croats) and a bounty of bread rations, the Prussian King won the initiative over the Austrians. The enemy was forced both to spend the night almost in the open and most importantly, to fight the next day in terrain of Frederick’s choosing. The battle that ensued the following day at the village of Leuthen left two thirds of the Austrian army destroyed.

The pages of military history are full of examples displaying the importance of reconnaissance. From the deployment of *exploratores* (mounted scouts) in the ancient Roman army to unmanned aerial vehicles in today’s armies, commanders have always strived to know the most about the enemy’s location, resources and intentions. In this edition of Panther’s War College we will explore the importance of reconnaissance through a series of readings and two fictional COTA scenarios.

Objectives

We would like you to:

- 1) Gain a better perspective on how reconnaissance was carried out by German and US armored forces during the early years of WWII .
- 2) Explore present-day principles of reconnaissance. Due to its wide spread availability in the form of field manuals, we will focus in present US Army doctrine.
- 3) Discuss in the forums how all of the above can be applied into COTA.

Organization of this PWC subject

We will provide you with reading material and forum discussion questions. Discussion in the forums of these material and questions is highly encouraged. We will then present you with two tactical reconnaissance problems and ask to submit via e-mail a plan to solve them. After a period of time, we will post two COTA scenarios that correspond to those tactical problems. We will ask you to play them and post an after

¹ *Frederick the Great on The Art of War*, edited and translated by Jay Luvaas. New York: Da Capo Press, 1999. Page 235.

² Leopold Graf von Daun, joint commander of the Austrian Army

action report (AAR).

Tactical Reconnaissance and COTA

A good definition of reconnaissance is: “a mission undertaken to obtain information by visual observation, or other detection methods, about the activities and resources of an enemy, or about the meteorological, hydrographic, or geographic characteristics of a particular area”.³ The significance of a reconnaissance mission for real military operations is more than obvious from this definition.

Regarding the activities and resources of the enemy, COTA features “fog of war” which means that enemy units are not necessarily visible to the player at all times. To obtain information about the enemy, the player will have to move his own units into good observation points. In some cases, the player will have to engage the enemy to obtain information. More about this will be discussed later.

Forum discussion: once you have detected an enemy formation in a COTA scenario, what cues do you use to estimate their mission/intent?

As for “meteorological, hydrographic or geographic” features, COTA maps provide a degree of information that was never available to real life WWII commanders. However, a typical COTA map represents very complex geographical areas, which increases the chances that an unsuspecting player will miss-interpret the map to a certain extent. How many times you have bogged a friendly unit into terrain that looked perfect for a quick march but turned out to slow a unit to 3% of their normal speed? To avoid such a situation, players could always use a reconnaissance mission to ensure a route is not only safe from enemy threat, but also travelable at a reasonable speed by forthcoming friendly units.

Reconnaissance can be analyzed and planned at different levels. According to the “Handbook of German Military Forces”,⁴ back in WWII the German army classified reconnaissance into three types: operational reconnaissance, tactical reconnaissance and battle reconnaissance.

- (i) Operational reconnaissance provided information to plan, execute and monitor the progress of operations. Operational reconnaissance was usually conducted deep into enemy territory and included the observation of “rail concentrations, forward or rearward displacements of personnel, loading or unloading areas of army elements, the construction of field or permanent fortifications, and hostile air force concentrations”.
- (ii) Tactical reconnaissance, the topic of this edition of the War College, was conducted in an area just behind operational reconnaissance and provided the information necessary for the commitment of troops once one or more operational objectives were assigned. It involved

³ *US Army FM 17-95, Cavalry Operations*. Accessible online at:
<http://www.globalsecurity.org/military/library/policy/army/fm/17-95/index.html>

⁴ “*Handbook on German Military Forces*“. U.S. War Department Technical Manual, TM-E 30-451. US Government Printing Office, March 1945. Facsimile printed by the Louisiana State University Press. Baton Rouge, 1995. Page 210.

obtaining information about “the enemy's organization, disposition, strength, and antiaircraft defense; determination of the enemy's reinforcement capabilities; and terrain reconnaissance of advanced sectors”.

- (iii) Battle reconnaissance was conducted right after troops began to deploy. Once tactical reconnaissance missions provided information that allowed the commander to commit troops into a particular battle, battle reconnaissance missions provided information necessary to plan such a battle.

Forum discussion: Warfare is usually classified into three levels (strategic, operational and tactical). Which levels of warfare are represented in COTA? Can operational, tactical and battle reconnaissance be assigned to any of those levels of warfare?

Truth be said, warfare is a very dynamic and complex endeavor and as a result most of the time it may be difficult to classify a reconnaissance mission into a definitive class. This is particularly true concerning tactical and battle reconnaissance missions in COTA scenarios. For example, if you are commanding a brigade sized force, you rarely deploy your units for battle (allegedly the end of tactical reconnaissance and the start of battle reconnaissance) all at once. Once you committed a fraction of your forces into battle, any mission by the brigade's reconnaissance assets intended to collect information about the enemy can be interpreted as a battle reconnaissance (by the troops deployed for battle) or as a tactical reconnaissance (by the troops still to be committed to battle) mission. Rather than a partition in the fabric of military operations, the previous classification should then be taken as a framework to construct a plan that achieves all that matters: the objectives. We don't mean to entangle you into strict classifications. We chose tactical reconnaissance as a topic for the War College because it was the most typical mission assigned to an emblematic combined arms organization in both the US and German armored forces: the reconnaissance battalion.

The German Reconnaissance Battalion

With two successful campaigns under its belt, the German army was a confident war machine at the start of operation Marita. Two years before, following the main tenets of the German war fighting doctrine (quickly inflict strategic paralysis on the enemy, then annihilate it), and after a significant motorization effort, many German army units (including reconnaissance ones) were transferred to the newly created “Mobile Troops” (*Schnelle Truppen*). Besides belonging to a seemingly new arm, units in the “Mobile Troops” pool shared a common role on the first scenes of the WWII drama: the dagger plunging deep in the chest of Europe.

As for the composition of a German reconnaissance battalion, you can find it in many sources. Because of its publication near the time of the Greece campaign, a US Military Intelligence Service information bulleting entitled "German Armored Car Reconnaissance"⁵ offers an interesting peek at Germany's reconnaissance battalions back in 1941. In particular, section 1.A.(1) of this bulletin details its composition. The

⁵ “German Armored Car Reconnaissance“. Military Intelligence Service Information Bulletin No. 1. December 1941. Accessible online at: <http://www.lonesentry.com/manuals/armored-car/index.html>

information bulletin can be read completely at the following link:

<http://www.lonesentry.com/manuals/armored-car/index.html>

The primary mission of the reconnaissance battalion was to provide reconnaissance for armored divisions. Thereby, the reconnaissance battalion was directly subordinated to a division commander and would report back directly to him. Following a centuries old tradition on how to wage wars, the Germans emphasized aggressiveness in their reconnaissance missions. Rather than passively observing the enemy, the reconnaissance battalion was required to fight for information. Moreover, the reconnaissance battalion was required to “attempt to obtain superiority in the area to be reconnoitered”. The autobiography “Grenadiers”⁶, by Kurt Meyer offers an unsurpassed level of detail regarding the reconnaissance and combat missions of a reconnaissance battalion during the Balkans campaign. The previously mentioned bulletin also offers an interesting vignette (section 2.a, “Reconnaissance Battalion in Action”). Both references clearly show that at least in these two cases, reconnaissance objectives were meant to be controlled rather than observed.

Regarding the tactics the Germans employed in their reconnaissance missions, to avoid repetition of freely accessible information, the reader is referred the following two links:

1. <http://www.lonesentry.com/manuals/tme30/ch4sec2.html>. *TM-E 30-451: Handbook on German Military Forces*. Please read section II.3.e entitled “Tactical reconnaissance procedures”.
2. <http://www.lonesentry.com/manuals/armored-car/index.html>. Military Intelligence Service, Information Bulletin No. 1, December 1941. Please read section 1.a.2 entitled “Training Principles of Reconnaissance Battalions”.

Forum discussion:

1. Can you advance your units by bounds in a COTA scenario with orders delay?
2. How can you overcome the lack of platoon-sized patrols in a COTA scenario?
3. COTA doesn't feature explicit phase lines. Do you implicitly use them?
4. The aggressive doctrine of the German army for reconnaissance missions would regularly require seizing objectives from the enemy. Would these reconnaissance battalion's objectives necessarily be the same as the armored division's operational objectives?

The US Armored Reconnaissance Battalion

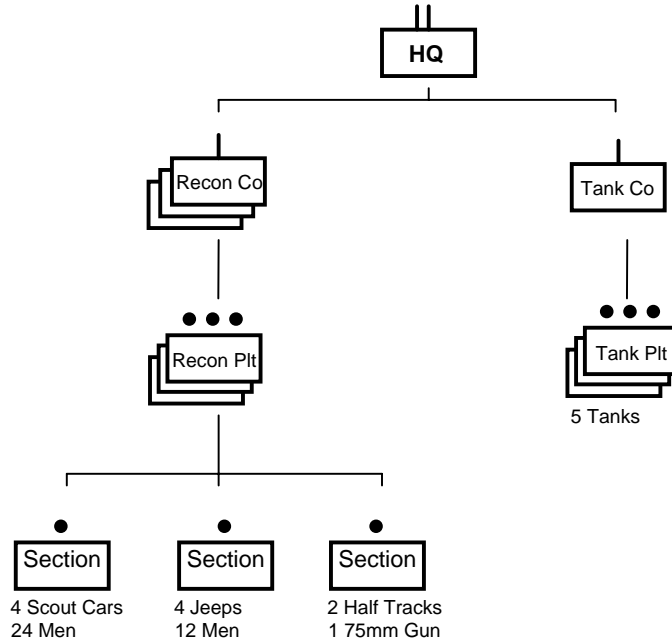
To consider the US reconnaissance battalion composition and doctrine, we will take as a starting point the year 1942, in which the US Army published field manual FM 17-22 *Armored Force Field Manual, Reconnaissance Battalion*.⁷ This document had both apt and unsuitable guiding principles that were immediately put in practice during Operation Torch later that year. Operation Torch was where the US Army gathered their initial lessons on how to employ armored reconnaissance units.

The following diagram shows the composition of the US Armored

⁶ “Grenadiers”. Kurt Meyer. Mechanicsburg, PA: Stockpole Books, 1995. See chapter entitled “The Balkans” and “Into Greece”.

⁷ FM 17-22 *Armored Force Field Manual, Reconnaissance Battalion*. Washington: US Government Printing Office. 1942.

Reconnaissance Battalion in 1942.



US Armored Reconnaissance Battalion, 1942

As its German counterpart, the US reconnaissance battalion provided reconnaissance for an armored division. As in all other armies, reconnaissance was the quintessential mission of the US Cavalry arm. During interwar years, the transformation of the US Army to a mechanized force left the Cavalry arm officers engulfed in a state of confusion and anxiety about how to perform their missions (let alone the confusion about which new missions would be Cavalry's). This crisis lasted until the first years of WWII. Nevertheless, the early US reconnaissance battalions were equipped and trained around the guidelines of field manual FM 17-22. This field manual exposes both similarities and differences compared to the German reconnaissance doctrine. For example, FM 17-22 clearly states that the primary mission of the reconnaissance battalion is reconnaissance, later saying that “**additional** missions that **maybe** assigned are counter reconnaissance, security and combat”⁸ (bold is mine). Compare that to the Germans who, according to the Handbook of German Military Forces, “believe in employing reconnaissance units in force as a rule”.⁹ Both German and US doctrines in the early years of WW II conceived an aggressive reconnaissance force, but the goals were somewhat different at that time. Germany's reconnaissance battalions strived to gain superiority in the reconnoitered area, while FM 17-22 explains that “to gain **information**, the reconnaissance battalion must act quickly and aggressively” and later says “it must be prepared to fight for

⁸ Ibid, Page 2.

⁹ “*Handbook on German Military Forces*“. U.S. War Department Technical Manual, TM-E 30-451. US Government Printing Office, March 1945. Facsimile printed by the Louisiana State University Press. Baton Rouge, 1995. Page 210.

information” (bold is mine).¹⁰ This supremacy of information over combat in FM 17-22 has the period’s US Cavalry officer corps thinking written all over it. General Patton himself wrote in 1943 that the reconnaissance battalion’s “primary mission is information not fighting”.¹¹ Seizing critical areas within enemy territory was taught to reconnaissance battalion commanders as a possibility rather than something they should aim regularly.

The early tactics of the US reconnaissance battalion involved spreading out two reconnaissance companies down to platoon (or even section) sized patrols and keeping a reconnaissance company plus a good part or all of the tank company as a reserve near the battalion HQ. A typical geographical area assigned to a reconnaissance battalion is shown in Figure 1.

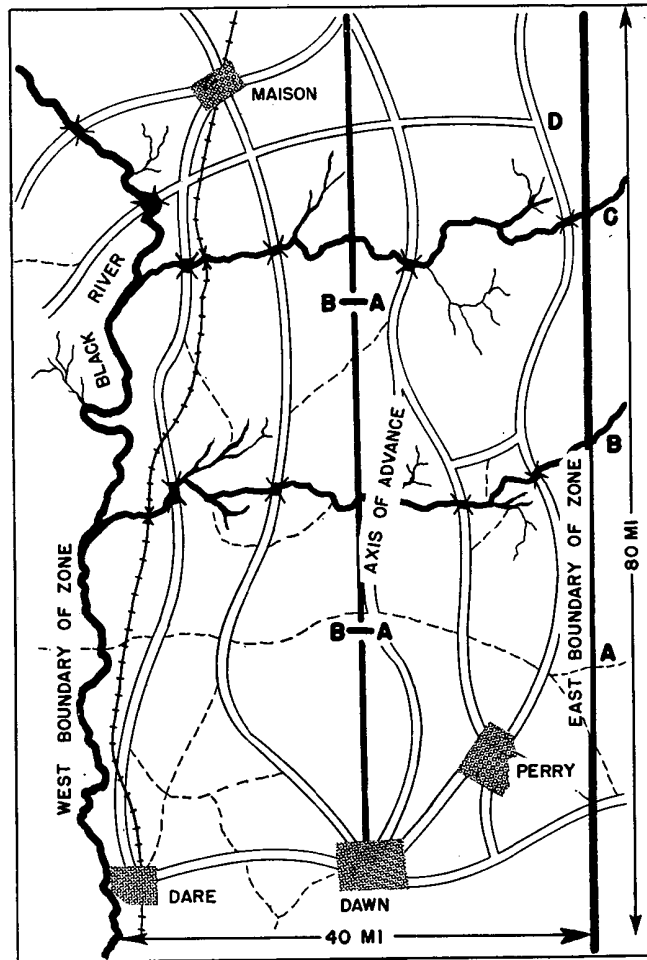


Figure 1. Zone of advance for a reconnaissance battalion, showing axis of advance, boundaries and phase lines A, B, C and D. From FM 17-22 *Reconnaissance Battalion*,

¹⁰ FM 17-22 *Armored Force Field Manual, Reconnaissance Battalion*. Washington: US Government Printing Office. 1942. Page 33.

¹¹ “*Notes on Tactics and Techniques of Desert Warfare (Provisional)*”. George S. Patton, Jr. 1943. Headquarters Desert Training Center, Camp Young, California. Cited in “*Men on Iron Ponies, The Death and Rebirth of the Modern U. S. Cavalry*”. Ph.D. thesis by Matthew Morton. Florida State University. 2003.

The battalion HQ and the battalion reserve moved by bounds, with the reserve tank company (minus detachments) marching before the reserve reconnaissance company. This was to allow commitment of the reserve tank company as soon as possible if there was a need to fight for information. In such contingency the battalion HQ plus the reserve needed to be kept in a position which allowed rapid movement of the reserve (Figure 2).

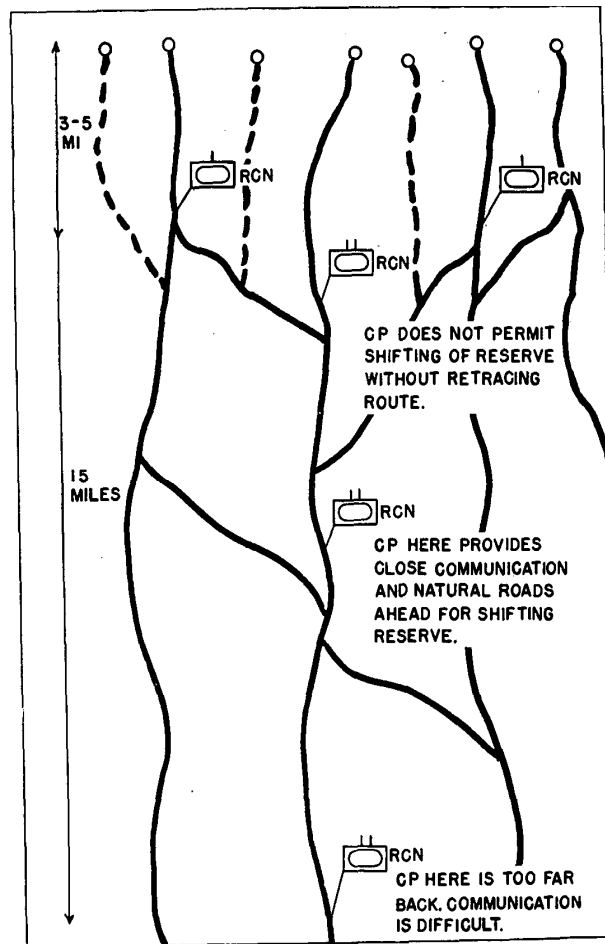


Figure 2. The command post (CP) of the reconnaissance battalion should be kept as forward as possible to provide close communication with the reconnaissance companies and back enough to speed up the commitment of the reserve. From FM 17-22 *Reconnaissance Battalion*, page 20.

When enemy resistance grew stronger, the reconnaissance battalion attempted to get into the rear of the enemy line by seeking gaps or flanks. If that was not possible, the reconnaissance battalion committed its reserves (tank and reconnaissance companies) in an attack into a weak spot.

Forum discussion: Does the organization and equipment of the 1942 US Reconnaissance Battalion reflect the US Cavalry doctrine? Could such a battalion be used in missions driven by the aggressive German reconnaissance doctrine?

Modern reconnaissance: fundamentals

FM 17-95 is the manual that describes the US Army's present day doctrine for Cavalry operations. This manual can be read at:

<http://www.globalsecurity.org/military/library/policy/army/fm/17-95/index.html>

According to FM 17-95, the reconnaissance mission has to follow these fundamentals:

1. Maximum Reconnaissance Force Forward. All the available eyes and sensors should be on the enemy. Maintaining a reserve force is discouraged, but keeping a certain depth in the own sector is mandatory.
2. Orient on the Location or Movement of the Reconnaissance Objective. Whatever happens, the commander should keep his force oriented towards the assigned objective (terrain or enemy force).
3. Report All Information Rapidly and Accurately
4. Retain Freedom to Maneuver. Avoid decisive engagement because the unit will not be able to maneuver or extricate from the fight. Once decisive engagement begins, reconnaissance ends.
5. Gain and Maintain Enemy Contact. Being "contact" surveillance or close combat.
6. Develop the Situation Rapidly. Provide the means to get the most complete information in the shortest time possible about relevant terrain features or enemy forces encountered (regardless if they are the objective of the reconnaissance mission or not).

Some of the previous fundamentals of reconnaissance are timeless. This is not surprising taking in account that reconnaissance has been part of waging wars since ancient times. In an apparent drastic departure from WWII doctrine, the modern fundamental "maximum reconnaissance force forward" proposes a reconnaissance force organized without a reserve. A reserve is usually considered a part of a force that the commander holds back ready to confront a crisis or to take advantage of an opportunity. However, troops not decisively engaged in combat that can be redeployed rapidly also represent a reserve. Thereby, if fundamental #4 ("retain freedom of maneuver") is followed, any portion of the modern reconnaissance force can be extricated from the front and re-deployed into another sector. In other words, both WWII and modern US reconnaissance forces had and have a reserve, it was just organized and physically deployed differently. Why then a WWII reconnaissance battalion commander wouldn't put his reconnaissance force all forward? The main differences between a WWII and a 21st century reconnaissance force are technology and (as a result of it) organization. The technology gap is not limited to new sensing capabilities like unmanned aerial vehicles (UAV), but encompasses an increased capacity to communicate orders and to receive, process and share enemy intelligence. A WWII reconnaissance battalion leader commanded his force with an overly simple and relatively un-reliable communications network. Information about enemy and friendly forces or the commander's orders did not instantly reach all units of the battalion. The slower the speed by which information spread out within a force, the bigger the chances a portion of this force could not be reinforced in time to take care of a crisis or an opportunity. Thereby, for a WWII

battalion commander, the chosen method was to keep a reserve force near where all information was most likely to flow into and come out first: his command post.

Concluding Remarks

Two centuries and a half after Frederick's Army defeated the Austrians at Leuthen, Major General Blount was in command of the 3rd US Infantry Division during the Iraq War. On the afternoon of March 31 2003, the 3rd US ID, had reached Baghdad's "Red Zone" near Karbala. MG Blount had a meeting with the V Corps commander and explained how the very next day, departing from the common wisdom of "see first, act first and finish decisively", he would basically skip the "see first" part. MG Blount's perception of the battle was that operational tempo was to be preserved at all costs, and that if the Iraqi forces were to be kept off balance there was no time to infiltrate reconnaissance assets in the operations area. The nature of the questions asked by the V Corps commander to MG Blount during this meeting (concerns about chemical attacks and if the lines of communications would be sufficiently safe during the attack) reveals that both commanders shared the same vision.¹² It is clear that military doctrine should be taken as a guiding principle rather than a dogma. Whether the commander decides to use his reconnaissance forces in a non conventional way (Newmarkt, 1757) or not to use them at all (Karbala Gap, 2003), the only thing that counts at the end of the day is defeating the enemy.

¹² "On Point: The United States Army in Operation Iraqi Freedom". Col. Gregory Fontenot, Lt. Col. E. J. Degen and Lt. Col. David Tohn. Annapolis: Naval Institute Press. 2005. Page 282.