

Tactical and Operational Level: Terms and Concepts

In our calculations of Relative Combat Proficiency (and in the chapter defining the combat model for Operation Barbarossa) we will be using defined concepts and terms at the Tactical Level and Operational Level. The following are the principal definitions.

Tactical Level

The Tactical Level is defined as the level involving manoeuvre units of platoon size or smaller, or gun batteries or smaller.¹ Note, **all physical combat is at the Tactical Level.**

Tactical Level Proficiency

Tactical Level Proficiency is defined as the Combat Proficiency at the Tactical Level only. It does not include any Operational Level Proficiency factors.

Operational Level

The Operational Level is defined as the level involving manoeuvre units of company size to army group level (Axis) and fronts (Soviet).²

Operational Level Proficiency

Operational Level Proficiency is defined as the Combat Proficiency at the Operational Level only. It does not include any Tactical Level Proficiency factors.

Finally Strategic Level Proficiency is defined as the proficiency at the Strategic Level only.³ It does not include any Tactical Level or Operational Level Proficiency factors. In our calculation of Overall Combat Proficiency, 'overall' refers to the military forces on the East Front (German) or West Front (Soviet), and does not include forces elsewhere involved in aspects of Strategic Warfare.

Tactical Combat Efficiency

Tactical Combat Efficiency is defined as the **Tactical Level Proficiency multiplied by the Operational level Proficiency.**⁴

Tactical, Operational and Strategic Losses

In our calculation of Relative Overall Combat Proficiency (ROCP) we will be using the relative casualty inflicting efficiencies of the respective forces. We therefore need to look closer at

¹ In this context, the Tactical Level encompasses all aspects of tactical and tactical-operational military simulations with space scales up to 300metres per hex. Refer Part I 1 4) a. – 'Military Simulations, and the General Structure of the Integrated Land and Air Resource Model - Military History through Simulations - Tactical, Tactical-Operational, Operational and Strategic Military Simulations - Tactical Level Simulations'.

² In this context, the Operational Level encompasses all aspects of operational military simulations, and only operational activities of strategic military simulations, with space scales from 500metres per hex upwards. Refer Part I 1 4) – 'Military Simulations, and the General Structure of the Integrated Land and Air Resource Model - Military History through Simulations - Tactical, Tactical-Operational, Operational and Strategic Military Simulations'.

³ Refer Part I 5 - 'Military Simulations, and the General Structure of the Integrated Land and Air Resource Model - Military Simulation Concepts and Definitions', for more on the Strategic Level. Also refer Part I 1 4) d. – 'Military Simulations, and the General Structure of the Integrated Land and Air Resource Model - Military History through Simulations - Tactical, Tactical-Operational, Operational and Strategic Military Simulations - Strategic Level Simulations'.

⁴ Correspondingly, the average Tactical Combat Efficiency is defined as the average Tactical Level Proficiency multiplied by the average Operational Level Proficiency.

defining casualties in terms of type to determine which are related to enemy action, and to justify any assumptions made.

Tactical Losses

Tactical losses are defined as all losses sustained as a direct result of 'Enemy Fire', 'Enemy Ordnance', 'Close Combat' or 'Tactical Surrender'. Note that all physical combat is at the tactical level.

Enemy Fire is defined as fire from all types of small arms and artillery, including anti-tank guns, tank guns and ship borne guns.

Enemy Ordnance is defined as any ordnance delivered by artillery (above), aircraft, or mines.

Close Combat is defined as combat involving flame throwers, grenades, satchel charges or any other close assault weapons, or hand to hand combat.

Tactical Surrender is defined as any platoon sized unit or smaller, or any artillery battery or smaller, surrendering independently of any formation orders from company level or above.

Operational Losses

Operational losses are defined as losses sustained as a direct result of 'Operational Surrender', 'Operational Attrition' or 'Operational Combat'.

Operational Surrender is defined as any unit surrendering as a result of direct orders from army level (German) or front (Soviet).

Operational Attrition Losses are defined as all losses due to training accidents, other accidental loss (including due to breakdowns) and scrapping. In addition they are losses due to desertion, disease, sickness and frostbite which are unrelated to any Tactical Level combat.

Operational Combat Losses are losses due to battle fatigue, desertion, disease, sickness and frostbite, which are the direct (longer term) results of combat at the Tactical Level, but do not appear as immediate Tactical Losses (above).

Note land combat units that become isolated from any form of supply as a direct result of combat, will experience progressively higher levels of Operational Combat Losses. These types of losses are NOT classified as Operational Attrition Losses (above) because they occur as direct result of enemy action, albeit delayed.

In our calculations of Relative Combat Proficiency we will be including all Tactical Losses and Operational Combat Losses (as defined above) for the respective forces.

Operational Surrender losses only occur when a large force is trapped and forced to surrender with relatively little actual combat. These losses will not be included because it invalidates one of the key assumptions in our ROCP methodology, which is covered in the Relative Overall Combat Proficiency (ROCP) calculation below.⁵

Operational Attrition Losses are not included for three principal reasons:

1. They represent an insignificant portion of the total Tactical and Operational Losses on the East Front in WWII. For example, the total personnel losses in the Red Army and Navy during the war with Germany apparently amounted to 29 592 749. Of these 540 580 died as a

⁵ Refer Part III 2 2) – 'Relative Overall Combat Proficiency (ROCP) - ROCP Methodology: Key Assumptions'.

result of disease or accident, 3 042 812 were sick and 90 881 were frostbite cases.⁶ Of these at least 70% can be classified as Operational Combat Losses. Hence only around 3.7% of total personnel losses could be classified as Operational Attrition Losses.

2. Both sides would experience Operational Attrition Losses at similar rates as a percentage of the overall force strength. Hence the cancelling effect reduces any influence from Operational Attrition Losses even further.
3. Specific data on Operational Attrition Losses for most forces is unavailable as part of overall losses.

Strategic Losses

Strategic Losses are defined as all losses sustained as a direct result of 'Strategic Warfare', or as a result of 'Collapsing or Captured Country Infrastructure', which are not Operational or Tactical Losses.⁷

Strategic Warfare is defined as warfare involving strategic bombing, submarine warfare, commerce raiders, sabotage of production, and any other activity resulting in loss of war production or reduced mobilisation for the armed forces.

Collapsing or Captured Country Infrastructure is defined as all a country's armed forces surrendering en masse as a result of an order from the Strategic Level, or all resources (mobilising or otherwise) captured before they are allocated to the armed forces.

Strategic Losses are not included for several reasons, which include:

1. Losses as a result of Collapsing or Captured Country Infrastructure are similar to Operational Surrender Losses but on an even larger scale. They also invalidate one of the key assumptions in our ROCP methodology.
2. Although combat due to Strategic Warfare is resolved physically at the Tactical Level, it was relatively insignificant on the East Front during WWII.⁸
3. Partisan warfare is not classified as Strategic Warfare. Losses due to Partisans appear as direct Tactical Losses.

Examples of how such Strategic Losses can distort any calculation on Relative Combat Proficiency are the early German blitzkrieg campaigns. At the end of the Polish campaign in 1939 the German Army had sustained 40 389 killed, wounded and missing.⁹ The total Polish casualties were around 106 000 including those from the Soviet forces. However out of 800 000 mobilised, 694 000 ended up as POWs in German hands when Poland surrendered.¹⁰ These are classified as Strategic Losses in our methodology. Obviously any Relative Combat Proficiency calculation using the latter figures is invalid. Similarly at the end of the French Campaign the German casualties amounted to 156 492 killed, wounded and missing.¹¹ The total French casualties were around

⁶ G.F. Krivosheev, et al, Soviet Casualties and Combat Losses in the Twentieth Century, ed. Colonel General G.F. Krivosheev, Greenhill Books, London, 1997, pp. 96 and 97, table 69.

⁷ Refer Part I 5 - 'Military Simulations, and the General Structure of the Integrated Land and Air Resource Model - Military Simulation Concepts and Definitions'. Also refer Part I 1 4) d.

⁸ By contrast, the Western Allied Strategic Warfare effort was very significant. It resulted in the majority of Luftwaffe losses from late 1943 onwards, the diversion of immense Flak forces, and massive loss of war production during 1943-45.

⁹ 8 082 killed, 27 278 wounded and 5 029 MIA. J. Delaney, The Blitzkrieg Campaigns, Caxton Editions, London, 2000, p. 72.

¹⁰ J. Delaney, The Blitzkrieg Campaigns, Caxton Editions, London, 2000, p. 72.

¹¹ 27 074 killed, 111 034 wounded and 18 384 MIA. A. Shepperd, France 1940: Blitzkrieg in the West, Osprey Military, London 1990, p. 88.

290 000 killed and wounded (British, Belgian and Dutch military casualties were 101 240).¹² However an additional 1 900 000 French were missing or prisoners by campaign end. Again only a small portion of the latter could be classified as Tactical or Operational Combat Losses. In short, the ROCP methodology does not allow a large portion of the losing side's surrendering population or newly mobilising forces, to be permanently classified as enemy military casualties by the winning side's military, to support the latter's combat proficiency assessments.

¹² Around 90 000 killed, 200 000 wounded. A. Shepperd, France 1940: Blitzkrieg in the West, Osprey Military, London 1990, p. 88.