

Brief Outline of Volume V

Volume V – Relative Overall Combat Proficiency (ROCP): the ROCP of Soviet and Axis Forces from 1941-1945

Volume V relates to establishing a realistic assessment of an armed force's historical Relative Overall Combat Proficiency (ROCP). Accurate historical values for the belligerents' ROCPs are critical if historical accuracy, and predicting probable alternative outcomes, are amongst the primary aims of any analysis or military simulation.

Volume 5 can be conceptually divided into of two main components. Chapters 1 and 2 contain generic discussions, analysis and methodology relating to combat proficiency. Chapters 3, 4 and 5 relate to the calculation of the Relative Overall Combat Proficiency (ROCP) of Axis and Soviet forces from 1941 to 1945, particularly for the belligerent forces involved in Operation Barbarossa.

Chapter V-1, Relative Combat Proficiency

The initial chapter in Volume V introduces the concepts of combat proficiency or combat efficiency. It includes a review of the debate around what constitutes tactical level combat proficiency as opposed to operational level combat proficiency. There is discussion of the differences (if any) between the two levels, with illustrative examples from the Wehrmacht and Red Army in 1941. Chapter 1 also defines some key concepts and parameters for the tactical, operational and strategic level, that are needed to calculate relative combat proficiency.

Chapter V-2, Relative Overall Combat Proficiency (ROCP)

Chapter 2 mathematically defines the Relative Overall Combat Proficiency (ROCP) used in this work: namely the relative overall tactical and operational combat proficiencies of the combatants. This chapter includes a comprehensive quantitative analysis of what goes into combat proficiency or efficiency, and contains a complete methodology on how to calculate ROCP. The methodology is based on a mathematical solution of the differential equations derived from the Lanchester Square Law, and modified to include additional factors such as:

- Relative force strength and relative force strength change over the period in question (so reinforcements and losses are considered).
- Total personnel casualties.
- Effects due to technological differences in weapons (from Part II).
- Weapon densities in opposing forces (weapons per person, by type of weapon are considered).
- Terrain.
- Weather.
- Fortification benefits.
- Relative time spent in a defensive or offensive posture.

The last section in Chapter 2 defines and reviews seven key assumptions made by the ROCP methodology. Historical events which invalidate any of these assumptions could weaken the validity of the ROCP methodology.

Chapter V-3, Axis and Soviet Relative Overall Combat Proficiency (ROCP) in 1941

Chapter 3 contains a comprehensive quantitative analysis of the ROCP of the opposing forces involved in Operation Barbarossa. Chapter 3 draws heavily on the FILARM-PILARM data

presented in Volumes I to IV of this work, which contains all the relevant data on the Soviet, German and German Allied forces on the East Front in 1941.

This data, and the methodology from the previous chapter, is used to calculate the Soviet, German, Finnish, Rumanian, Hungarian, Slovakian and Italian forces' ROCPs from June to December 1941. The chapter includes an analysis of how the various sides' ROCPs varied over the period June to December 1941. In addition, it reviews whether this change is comparable to the commonly perceived proficiency changes (between the Axis and Soviet forces) that apparently occurred in November-December 1941.

The last section in Chapter 3 includes an analysis of the Soviet-Axis ROCPs in 1941, taking into account 'weapon effects' as detailed in the ROCP methodology.

Chapter V-4, Air Force ROCPs during Operation Barbarossa

Chapter 4 contains an analysis of the relative combat proficiencies of the Luftwaffe and VVS (Soviet Air Force) during 1941.

Chapter V-5, Axis and Soviet Relative Overall Combat Proficiency (ROCP) from 1942 to 1945

Chapter 5 involves a high-level analysis of the ROCPs of Axis and Soviet forces on the Eastern Front in 1942, 43, 44 and 45 respectively.

The data for this analysis is presented within the chapter (because data in the FILARM models only extends to December 1941). The main purpose of this chapter is to help ratify the ROCP figures ascertained for 1941, and to enable the reader to gain an insight into how the belligerents' ROCPs progressively changed from year to year, until the end of WWII.

Outline Volume V (Draft Sample)