



Considering Operational Penetration: The German Invasion of France, 1940



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Elevating Operational Penetration

Theory, History, Concept

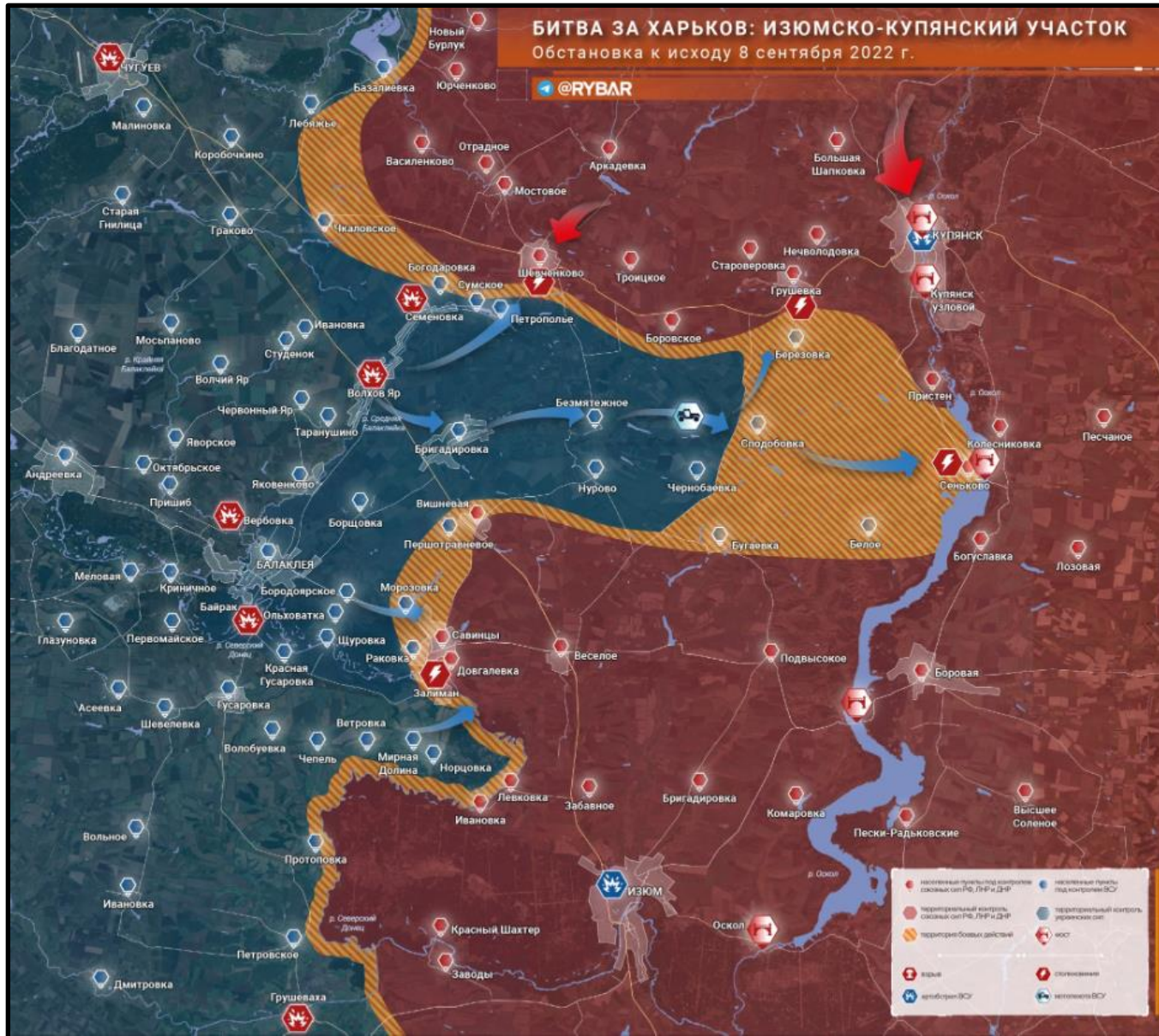


Concept: rapid operational (deep) penetration along narrow axes to neutralize or isolate critical enemy elements to catalyze systemic collapse across their entire order of battle in order to avoid frontal attrition and achieve decisive outcomes.

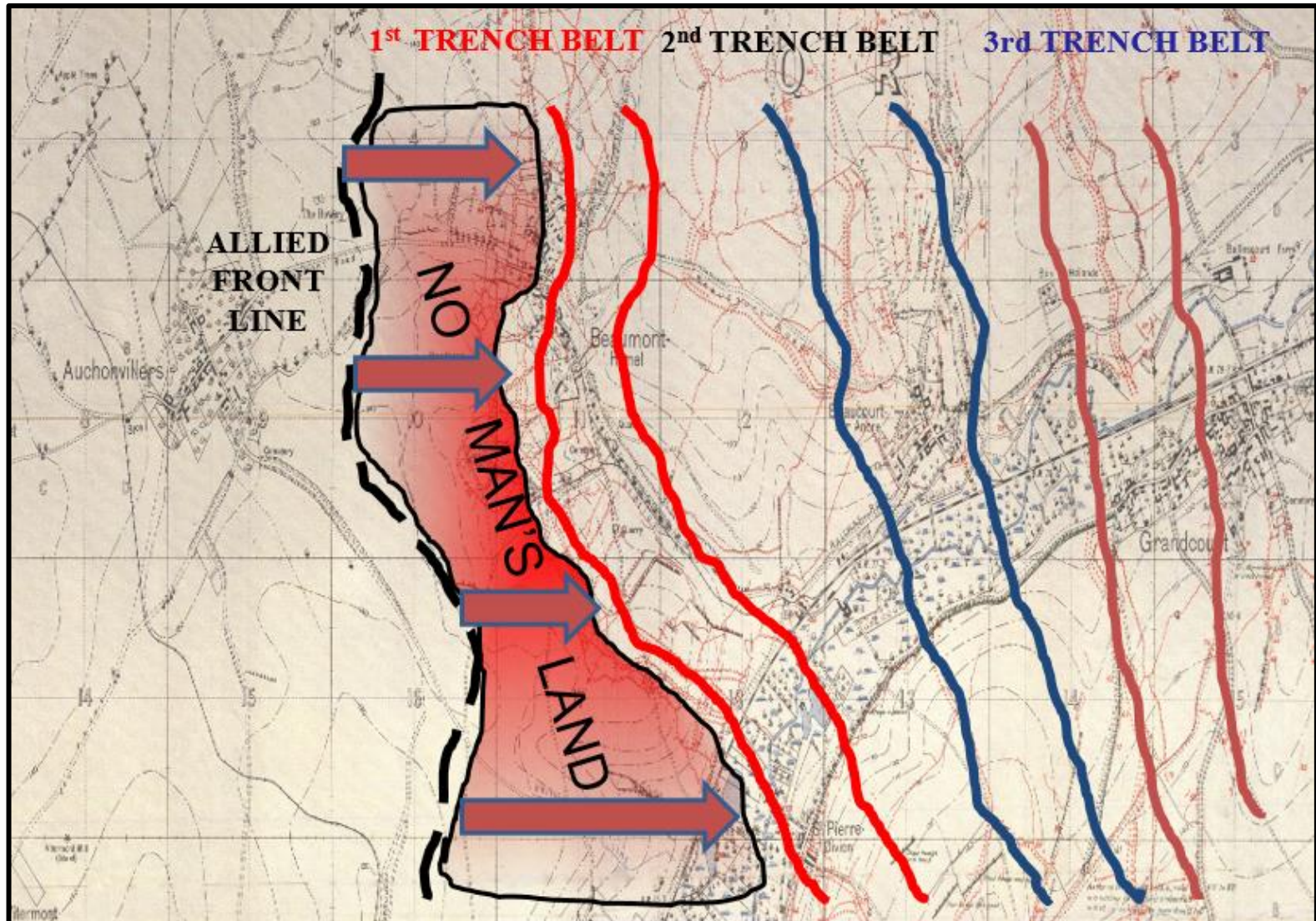
Pattern Analysis

- Division penetration occurs as an option in a larger **operational concept (MDO)** that relies on corps shaping efforts and joint dis-integration and dislocation.
- **Mobility:** the division *must* reach and neutralize assigned objectives.
- **Sustainment:** continued supply is critical; logistical culmination will risk defeat.
- **Asymmetries:** Joint, combined arms, or technological offsets have proven essential in order to enable the required rate of march at depth.
- **COG Analysis:** accurate understanding and targeting is required to inflict systemic collapse on the enemy order of battle.
- **Deception:** prerequisite to create favorable breach/endurance conditions.
- **Leadership:** Senior C2 fights forward to problem-solve and manage tempo.
- **Attrition:** assume no major follow-on force and protect operational viability.
- **Operational Art:** penetration success must result in positions of continuing strategic advantage and avoid nuclear/strategic escalation.
- **Deduction:** Historically represents a **high risk/high reward** option; most commanders have elected to flank or envelope because it is less risky.

Example: Ukrainian Army at Kharkiv

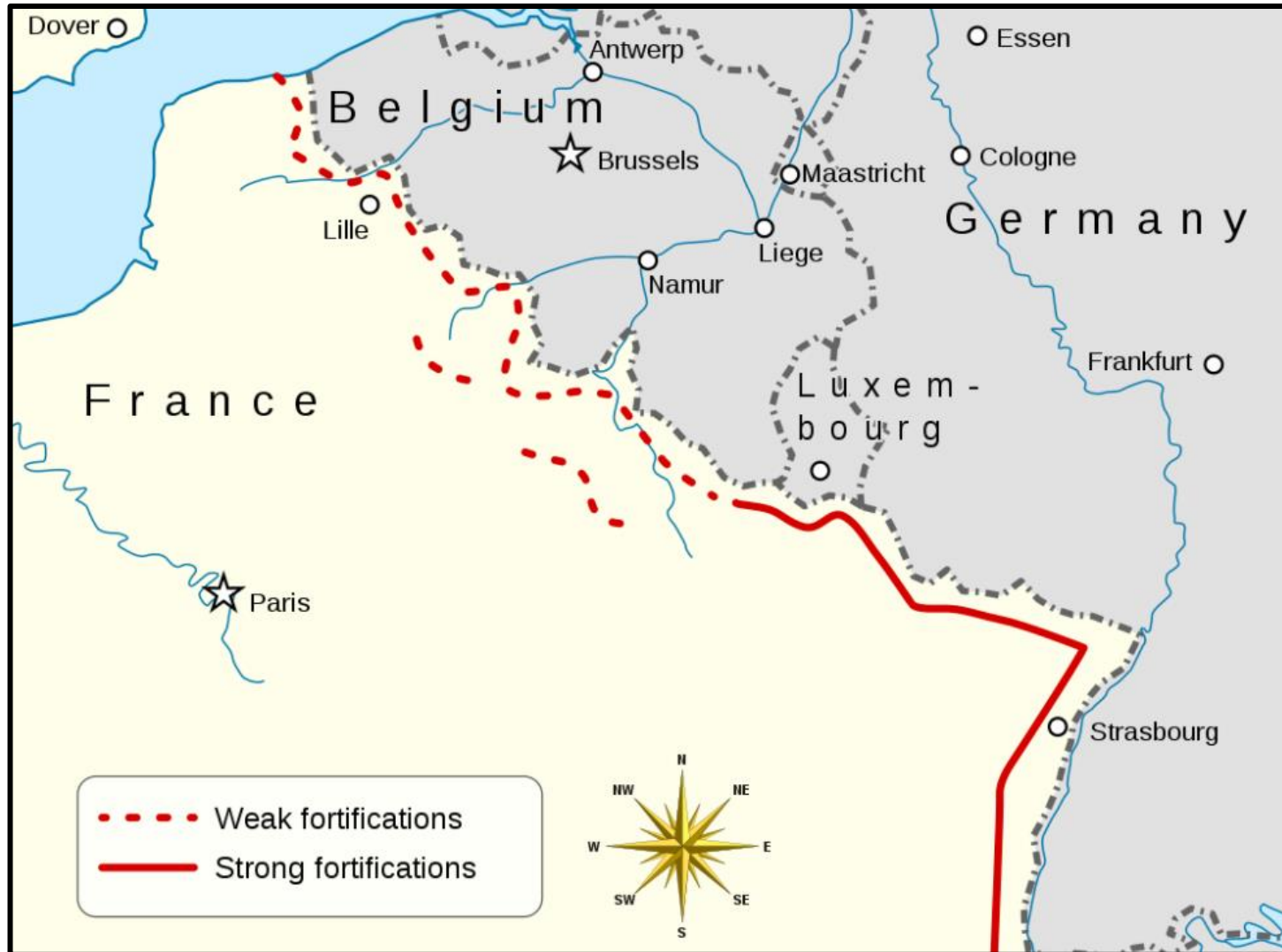


Background to 1940: The First World War & Attrition



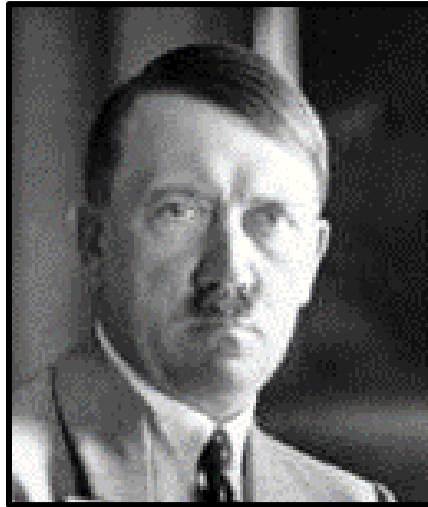
France's Maginot Line, 1940

The Ultimate Linear Defense





German Interwar Innovation: Solving for WW1 Attrition



Adolph Hitler



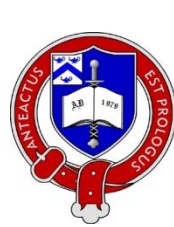
Heinz Guderian



Panzer I



Panzer III



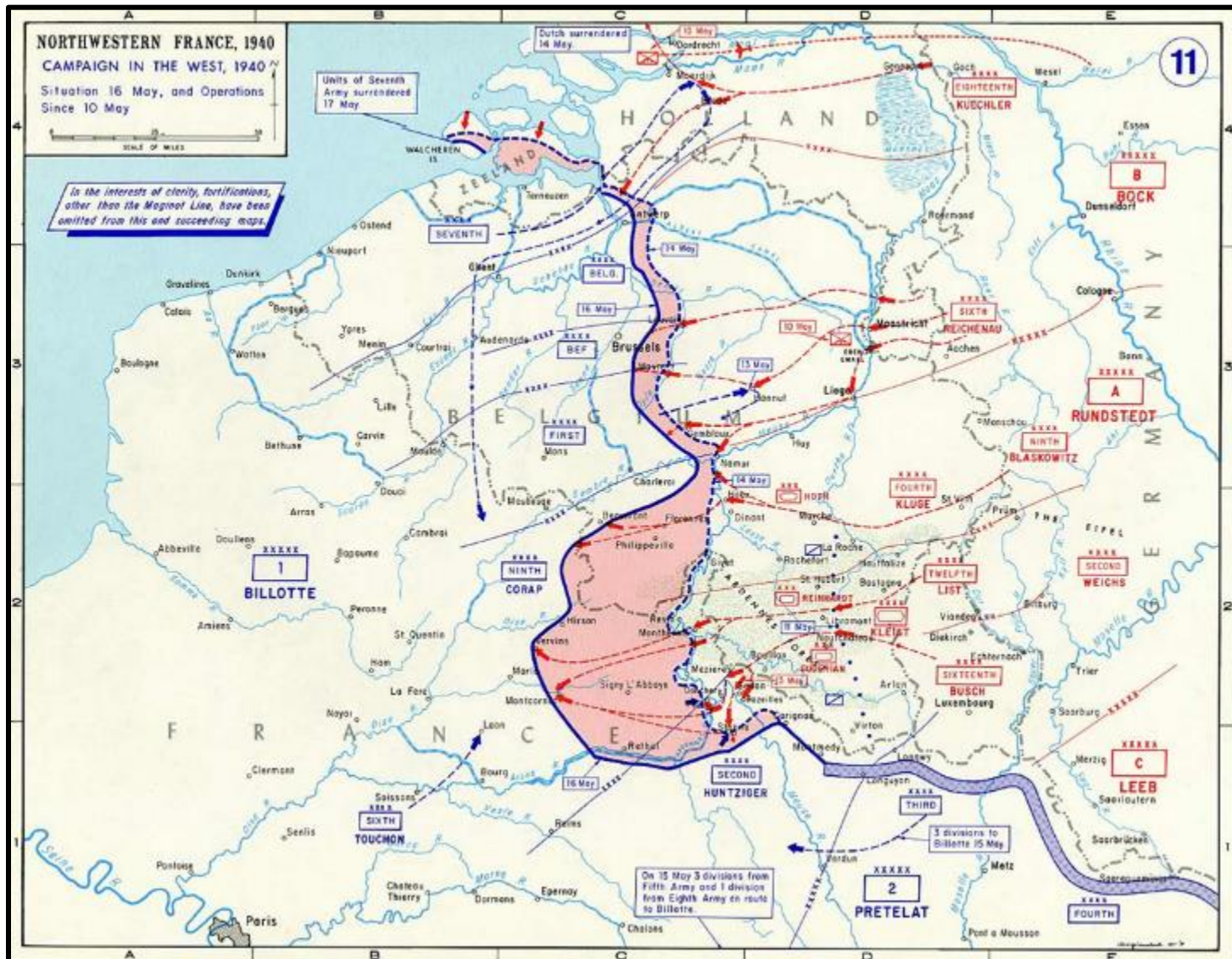
German Invasion of Poland, 1939

Testing the Blitzkrieg Concept

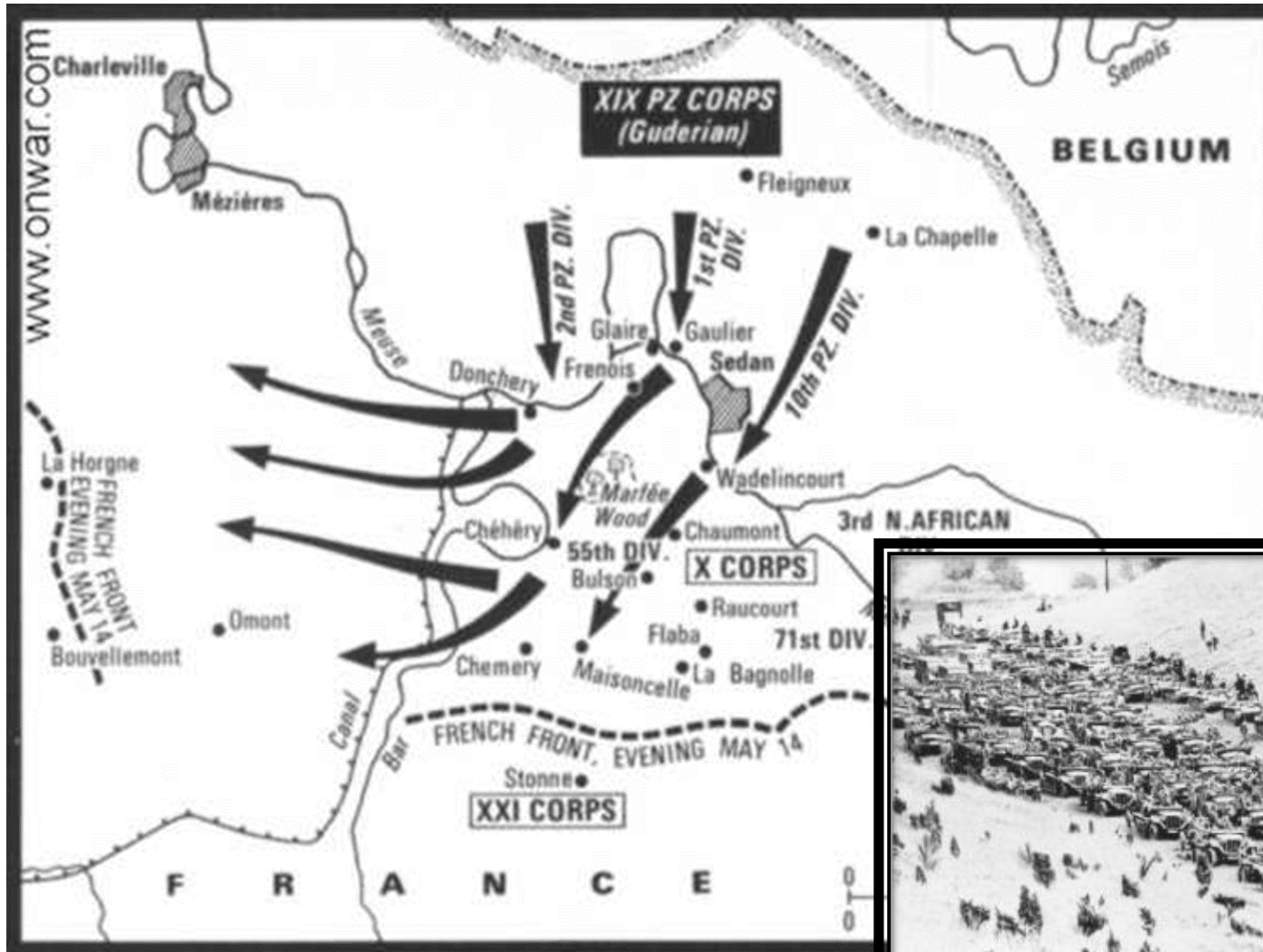


German Invasion of France, 1940

Validating the Blitzkrieg Concept



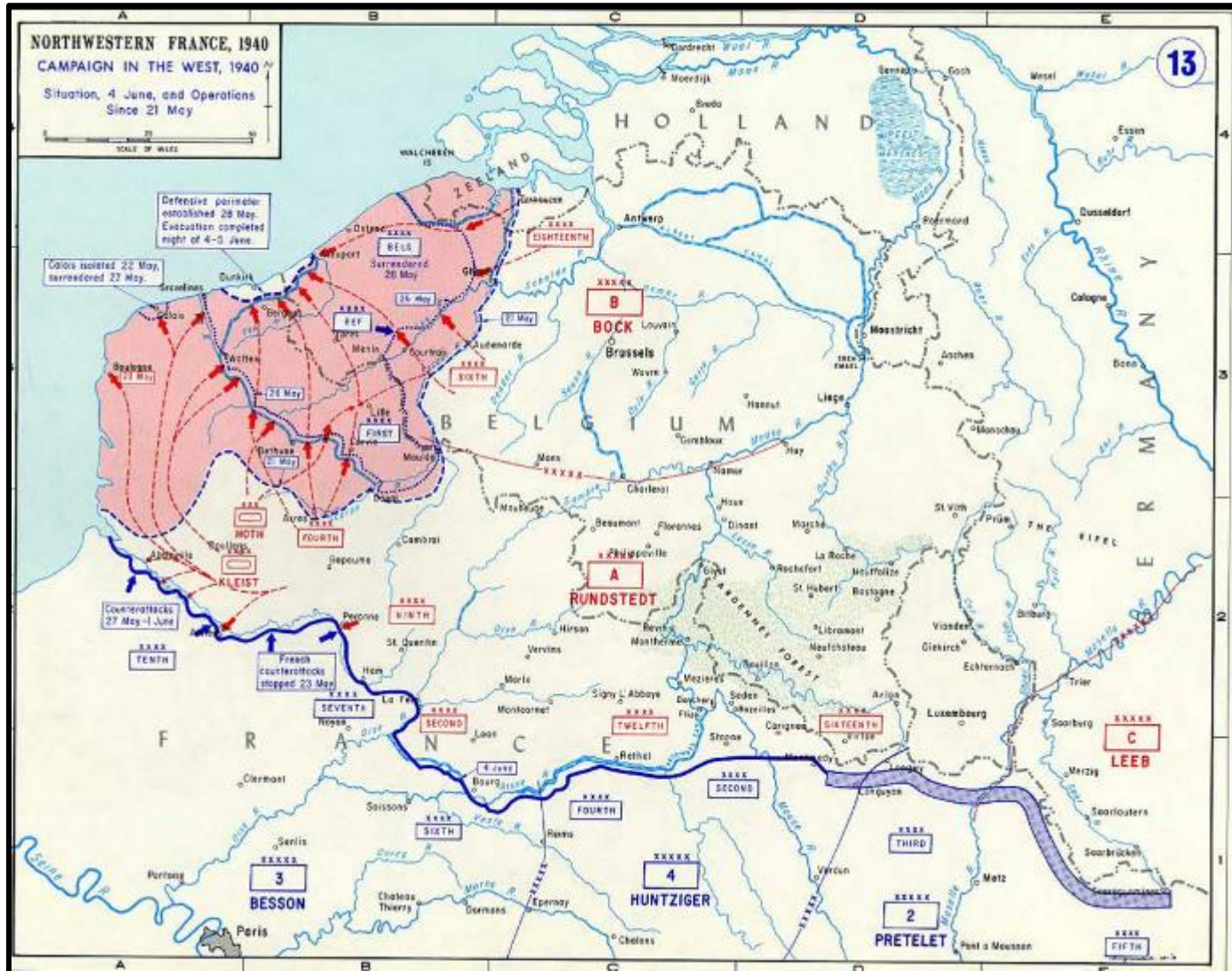
Guderian's Decisive Point: Penetration at the Meuse River





German Invasion of France, 1940

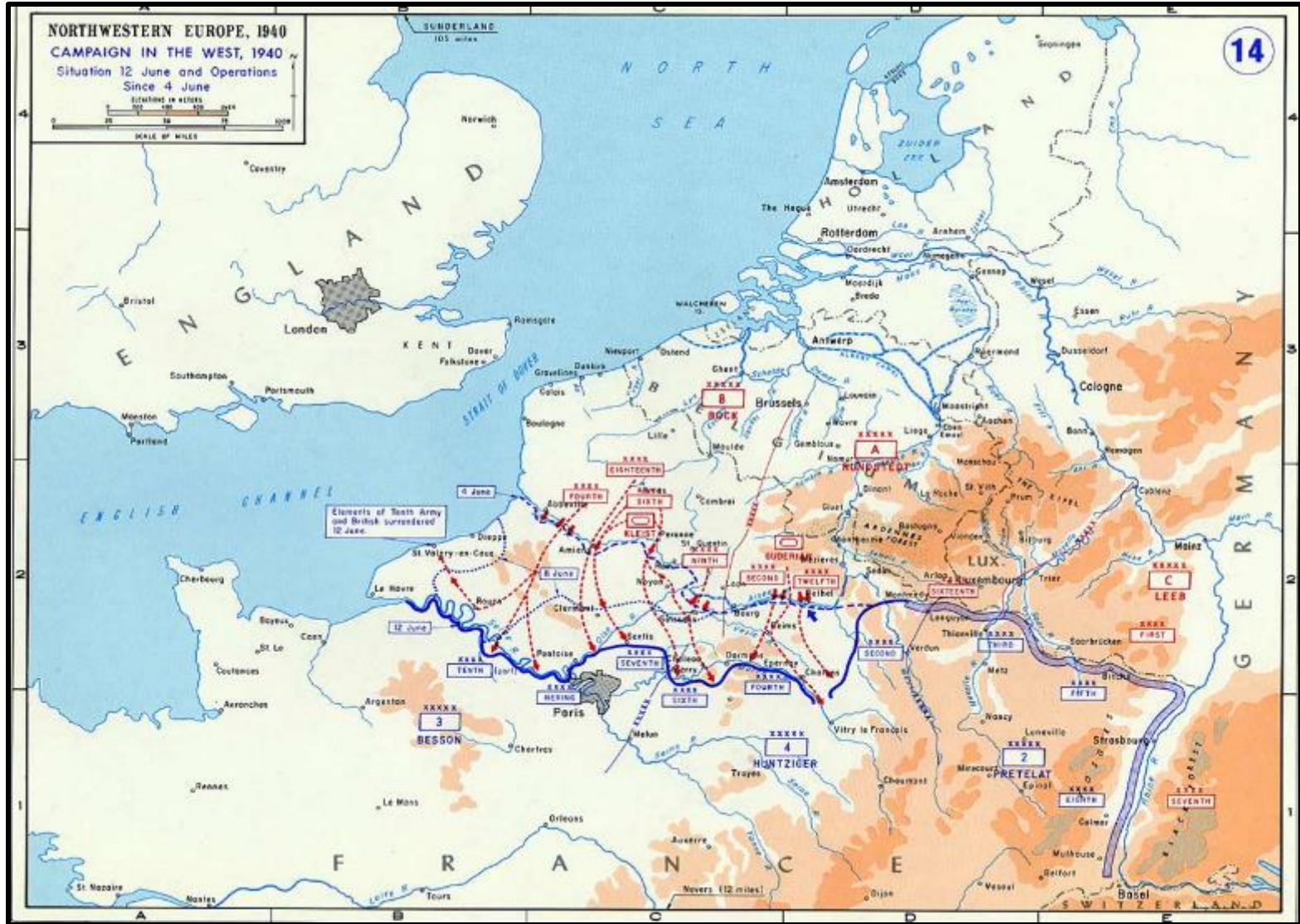
Exploitation and Isolation





German Invasion of France, 1940

Reorienting the Scheme of Maneuver





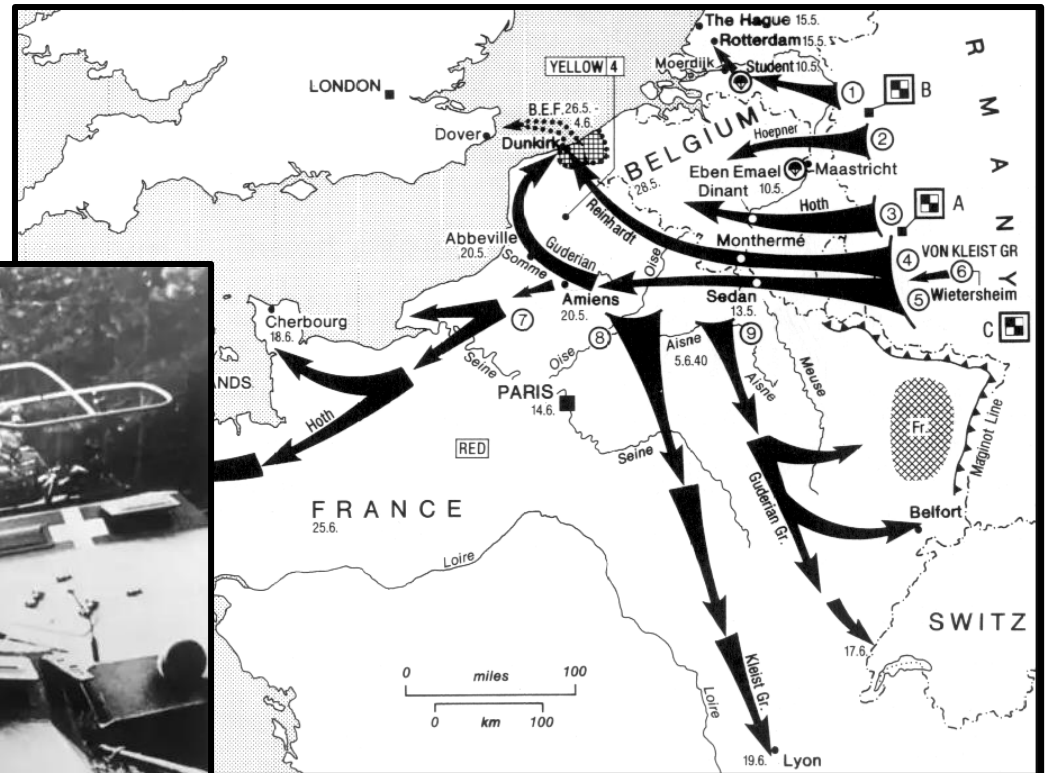
Battle for France, 1940: *A Paradigm Shift in Warfare*



<u>Nation</u>	<u>Casualties, WW1</u>	<u>Casualties, 1940</u>
Germany:	7,142,558	157,621
France:	6,160,800	360,000
B. Empire:	3,190,235	68,011
Belgium:	93,061	23,350



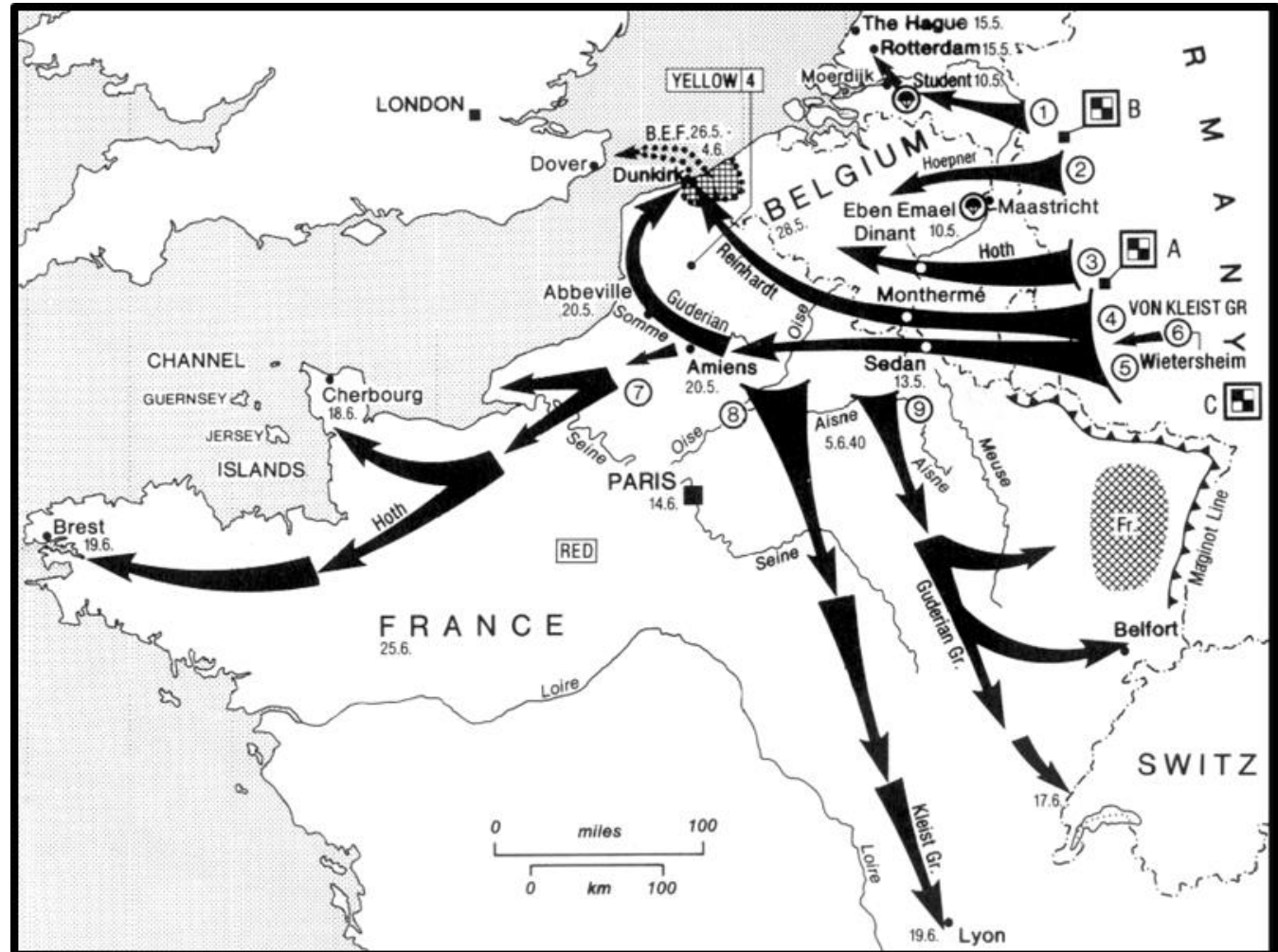
Explaining the Impossible: How did the Germans Win?



German Operational Art: Strategy, Operations, and Tactics

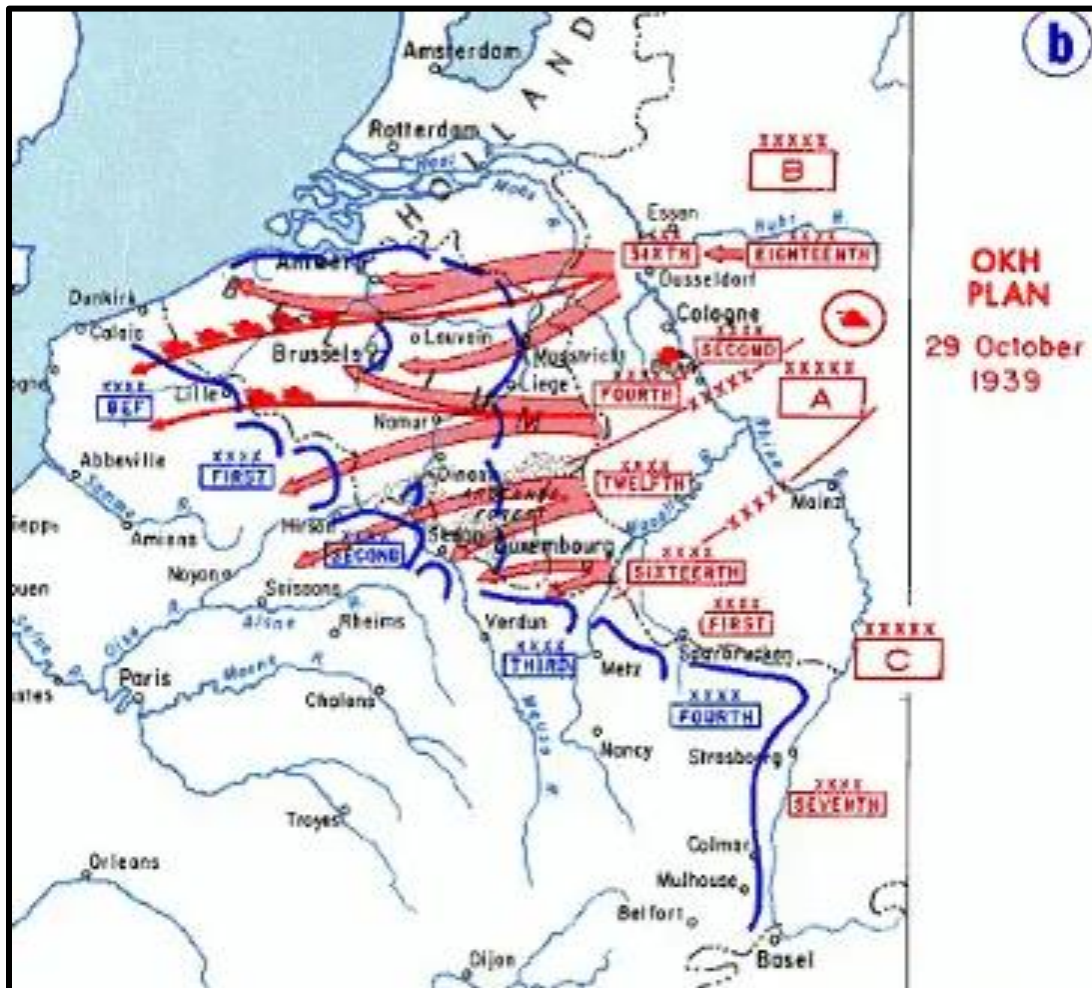


- Tempo
- Op Reach
- Risk
- Culmination
- Phasing
- Decisive Points
- LOO/LOE
- COG
- Basing
- Endstate





Creating Opportunity: Operational Deception in the North



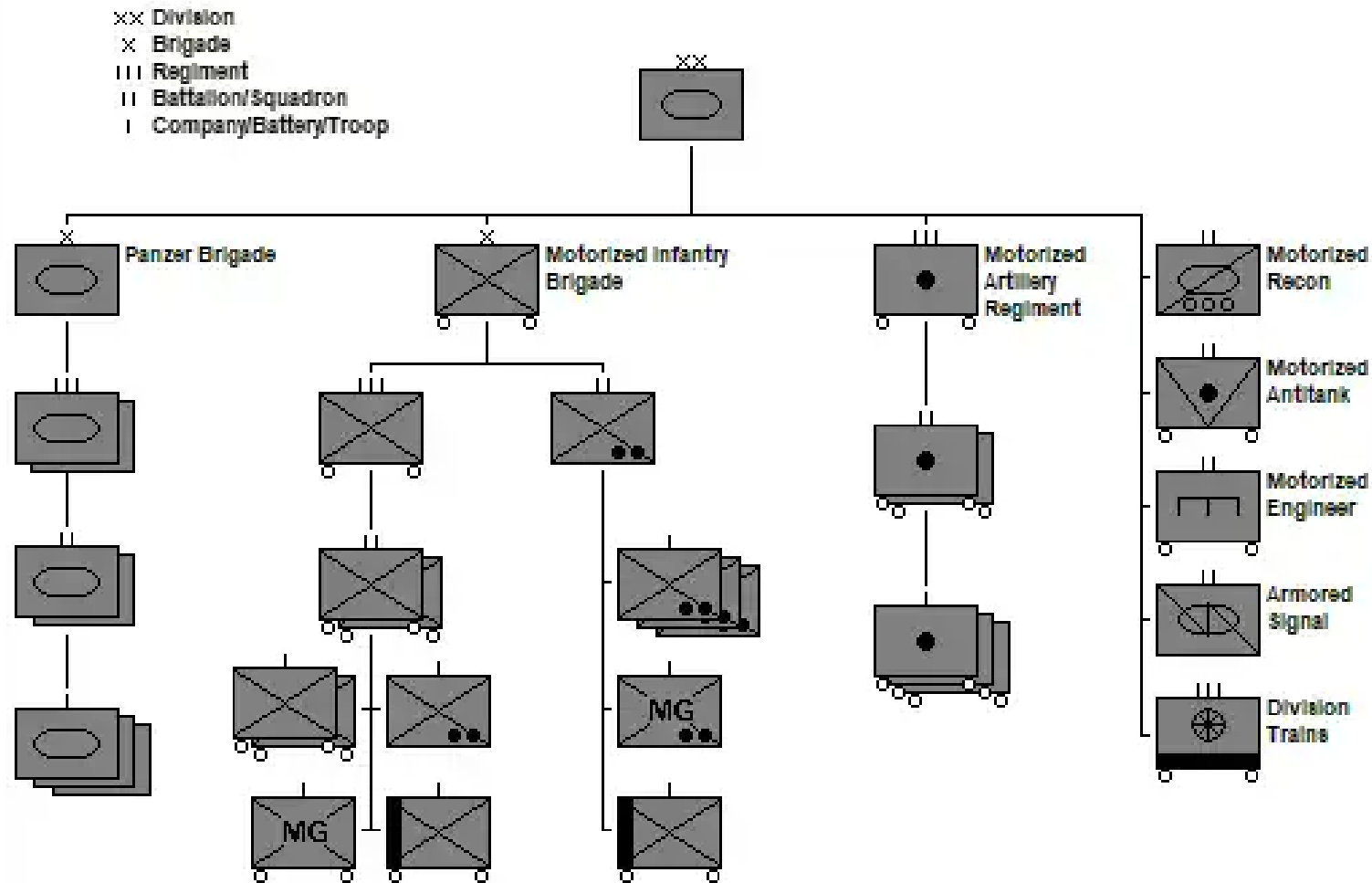


German Asymmetric Advantage: Dedicated Air Interdiction



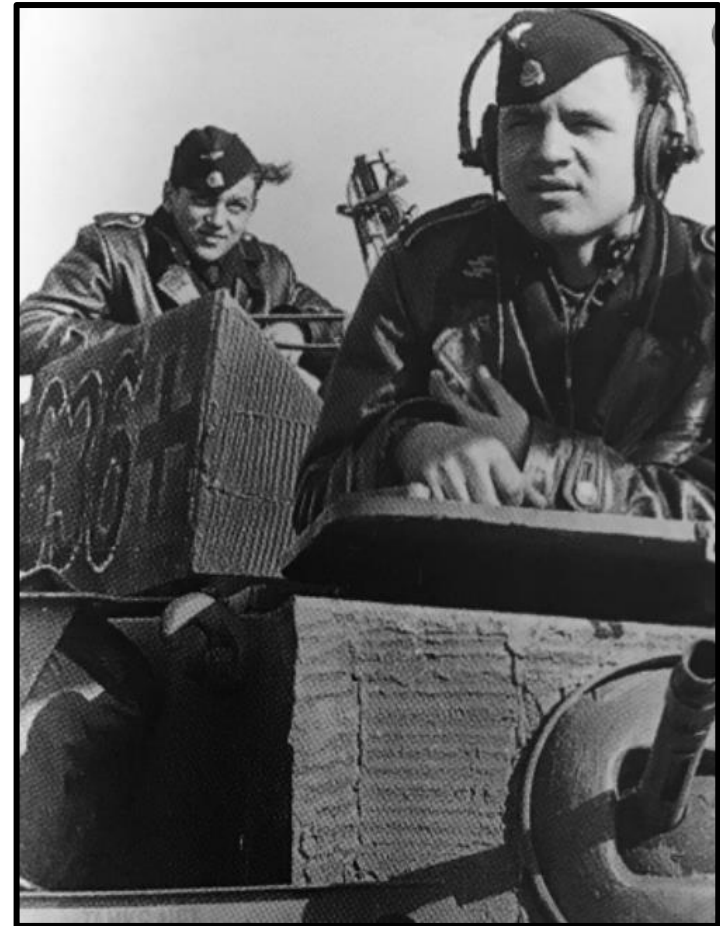


German Asymmetric Advantage: Combined Arms Panzer Divisions





German Asymmetric Advantage: Radio-Synchronized Maneuver





Enabling Critical Mobility: Improvised Sustainment Packages





Enabling Critical Mobility: Combined Arms Gap Crossing

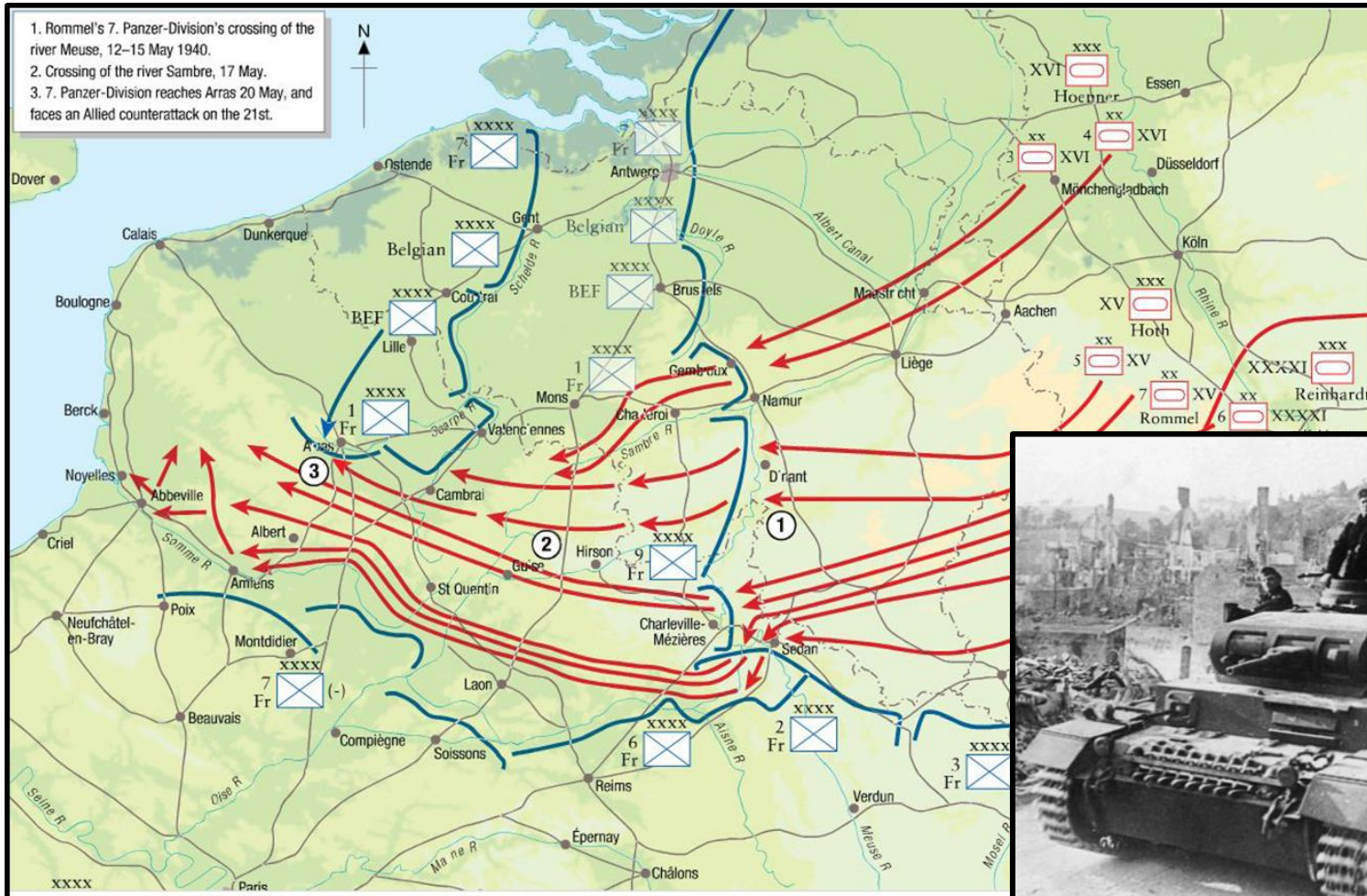




Enabling Critical Tempo: Forward Senior Leadership



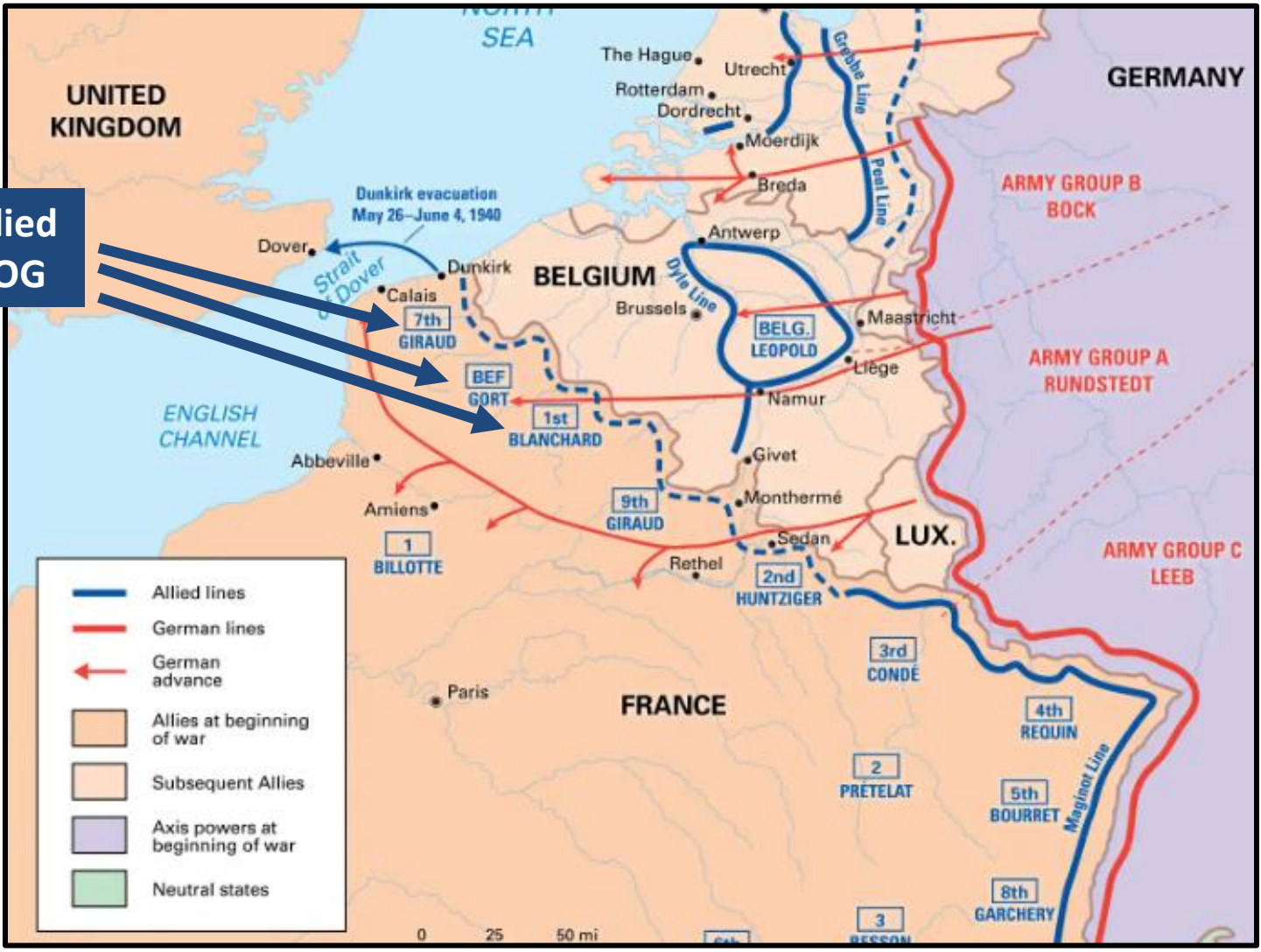
Decision Cycle Warfare: Out-Pacing the Defender





Purpose and Intent: Applying Accurate COG Analysis

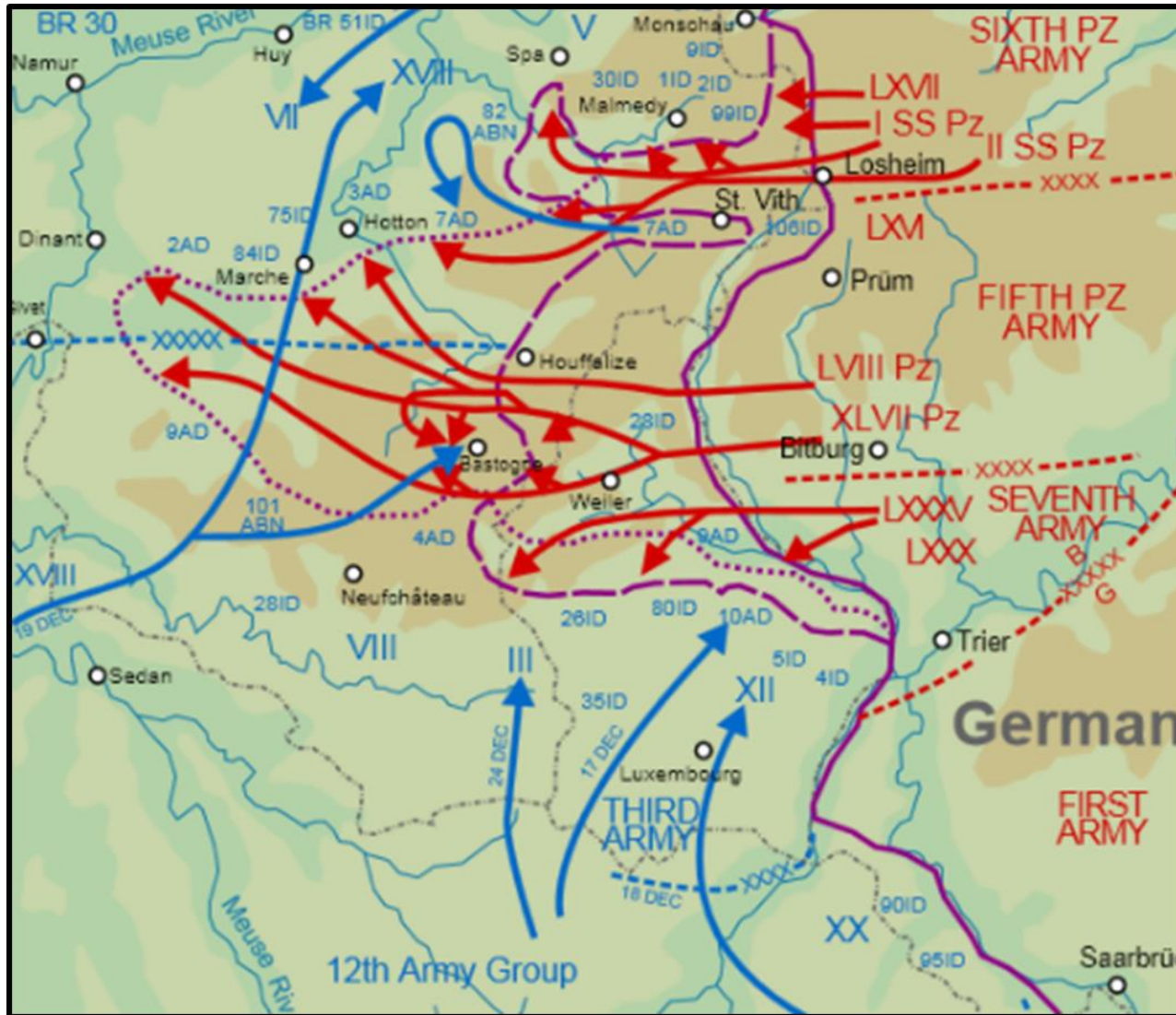
Allied
COG





German Ardennes Offensive, 1944

Operational Penetration Failure





Final Thoughts



“The 13th of May has been...the best day for the 1st Panzer Division. The division succeed in being the first to cross the Meuse, to punch a whole in the defensive line of the French, and to **force a penetration through a defensive zone considered by the French as impenetrable**. The decisiveness of this penetration at Sedan had been hammered into every single person from the moment the division was attached to the XIX Corps.”

- 1st Panzer Div Daily Log



The Battle of France, 1940: Insights for 21st Century Warfare

