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# Unleashing the Blitzkrieg: Precursors of a Tactical Revolution

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# Unleashing the Blitzkrieg: Precursors of a Tactical Revolution

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**Unleashing the Blitzkrieg:  
Precursors of a Tactical Revolution**

**by  
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# INTRODUCTION

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At 7:15 a.m. on February 22, 1916, French soldiers tilted their heads back to watch the winter sky light up in an opalescent orange, followed by a tidal wave of 1,400 shells careening down toward the their forts at Verdun. The light resonating off the exploding fortress walls illuminated the German fleet of artillery completely surrounding the French position. The attack was so violent that surface vibrations were felt over a hundred miles away, pounding down stone walls for nearly ten hours straight. The relentless sound of exploding artillery died off around 4:45 pm, replaced by the sound of the German infantry marching towards the medieval city.

Six German divisions launched the assault on a four-and-a-half mile stretch between Bois d'Haumont and Herbobois, placing the battered defenders on an exceedingly narrow front. German soldiers advanced in bulk, elbow to elbow, while the French artillery ruptured massive holes in their dense lines, slinging earth and limbs dozens of feet off the ground. The French watched in horror as fresh German bodies filled the gaps before the blood and smoke even began to clear the air. Without options, the French defenders dug their heels into the trenches and held on to their position by the skin of their teeth, trading blood for minutes as they waited for supply trucks and reinforcements to arrive.

As French reinforcements arrived from Bar-le-Duc, the German offensive slowed down to a glacial pace. Both armies were pinned down by their respective artilleries, but had enough supplies to continue raining fire over Verdun for ten long months. Finally ending with a pyrrhic French victory in December, the operation claimed 542,000 French and 434,000 German lives, making it the longest, bloodiest battle of attrition ever fought.

Some 23 years later, on September 1, 1939, and Poland's army stood firm with clenched

teeth, preparing to hold the initial wave of the impending German attack. The sounds of clanking metal and screeching sirens announced the Wehrmacht's arrival, which was quickly confirmed by an enormous dust cloud forming in the distance, swallowing the visible landscape in a giant spherical progression.

German aircraft rained bombs down from above as columns of rapidly moving tanks erupted from the clouds of dirt, blasting the Polish army without stopping or even slowing apace. The mobile columns of German tanks (Panzers), working in close liaison with the air force (Luftwaffe), crashed through the Polish army's defensive lines and continued to drive deep to the rear, assaulting Polish reserves, supply trucks, and railheads, while motorized infantry followed close behind to secure the advance. The speed of the mechanized formations prevented the Polish army from reforming any cohesive line with its reserve forces, and destroyed all rear installations that would allow for an effective retreat. After the German Panzers made a clean break through the rear, the separate mobile columns linked up at a decisive point behind the Polish troops, surrounding them with German armor and boiling them alive in a firestorm. The Wehrmacht conquered the Polish army in two weeks, inflicting about 200,000 casualties and taking around 600,000 prisoners. Western military leaders were quick to excuse the German victory as a result of Poland's inexperience in war and lack of advanced technology, but they quickly changed their tune when the Wehrmacht stomped out what was thought to be the world's most powerful army in the following spring.

The purpose of this thesis is to analyze the space between the two World Wars to discover what elements led to the German army's drastic transformation – the distinct shift from stagnation in World War I to tactical revolution in World War II. The Wehrmacht took a mechanized form, obviously dependent on modern hardware, but this thesis argues that form

follows function, not the reverse. The software that ran the German war machine in World War II found its roots in the Weimar era (1919-1933), a period of time in which the German army (Reichswehr) had no access to modern weaponry or equipment. After Germany's defeat in 1918 the Reichswehr underwent a process of painstaking military reevaluation to extract lessons from World War I that would allow Germany to succeed in the next European war. The Reichswehr officer corps translated these lessons into theories on modern war, hammered them into the army's system of education, and applied them to the most comprehensive field maneuvers of any interwar institution, leading to the development of the operational-level doctrine that shook the world in 1939 known as Blitzkrieg.

The thesis is broken down into two sections. Chapter One maps out the Reichswehr's path to developing theories on modern war and analyzes the educational system that taught the officer corps' theories at large. This section also discusses the institutional reforms that built the foundation for the rebirth of the German army, and the pivotal role that General Hans von Seeckt (1921-1926) played in the reorganizing the Reichswehr in the army's early years. Chapter Two documents the evolution of the German army towards an operational Blitzkrieg doctrine by analyzing the Reichswehr's capstone field maneuvers. These military maneuvers were the most complex of any army in the interwar period, and through a combination of creativity and solid theoretical work they took into consideration every aspect modern war, leaving the Reichswehr the best trained army in the world by 1932. Chapter Two also uses these maneuvers as a vehicle to explain the complex paradigm shift that occurred in the Reichswehr's later years toward realistic military planning. Often characterized by the tenures of General Wilhelm Groener (1927-1933), Werner von Blomberg, and Oswald Lutz, this shift brought German tactics into maturity, and acted as the final developmental stages of Blitzkrieg. Together these two chapters

substantiate the argument that the unmatched systems of military analysis, education and training in the Reichswehr's early years, combined with the constantly evolving military leadership during the Weimar's later years, cultivated the most revolutionary military doctrine of the 20th century, and reconstructed the face of modern warfare forever.

# CHAPTER 1

## LEARNING THE THEORY OF BLITZKRIEG

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The trail of destruction the Wehrmacht left in Poland beginning in September 1939, made it clear that something radical had occurred between the two World Wars. The German army traded in its grandiose artillery strikes for an aggressive, breakneck paced style of war that did not let up until it claimed decisive victory over the Polish army, and the fall of 1939 was just the beginning. In May, 1940 the Wehrmacht crushed the French army in less than a month, and then effortlessly catapulted its British rescuers completely off the continent. One year later the Wehrmacht tore its way through the Soviet Union, systematically encircled enough Soviet divisions to equal to the entire combined British and French armies, and drowned them in a hailstorm of tank, artillery, and aerial fire. The army's string of victories in the opening years of World War II was beyond comprehension for the Allies' leaders. Why was the German army capable of overcoming the stagnant battles that were so characteristic of the western front in World War I, and which in the end, had proven to be Germany's undoing?

This phenomenon was not explainable by any advantages in German weapons. The tanks, airplanes, and artillery of the German army weren't extraordinary, and the Allies' arsenal was every bit as deadly. The answer to this question lies in the comprehensive software that the German army developed in the interwar years, rather than the hardware it used in World War II. The German army's institutional reforms following World War I established an exceptionally

small but experienced officer corps, with a military ethos that promoted an unmatched intellectual approach to military analysis, debate, and education, leading to the development of the “Blitzkrieg” tactics unleashed in World War II.

The majority of officers in the interwar German army, or Reichswehr, did not view the stagnant battles and blood ridden trenches in World War I as a sign that technology has changed the nature of war. To them, these things were the result of the army relying too heavily on defensive firepower instead of concrete, well thought out military strategies. After the war’s end, debate raged across the Reichswehr over the status quo and a call for a reassessment of the army’s strategic approach to war. Instead of figuring out how to tailor the army’s doctrine to the gruesome realities that World War I presented, these officers worked to find out how the German army could wage a war that would avoid them altogether. However, not every officer in the German army was eager to commit to such a radical reform.

There were still a large number of traditionalists that salivated over the idea of waiting to expand the army’s numbers as large as the country’s industry permitted, and then arming it to the teeth for another grand defensive war. Former commander-in-chief General Walther Reinhardt was convinced that the German army needed to adopt a strategy that emphasized overwhelming firepower as the most significant offensive tactic, and he obsessed over the impregnable defensive capabilities of the mass armies in World War I. Reinhardt was one of several traditionalists who believed that battles of maneuver were rendered useless when faced with the awesome power of modern science, and that technological and industrial superiority had become the new prerequisites to victory on the battlefield.<sup>1</sup>

The German army did not go this “traditionalist” route primarily due to the influence of one sharp minded war veteran, Chief of General Staff General Hans von Seeckt. General von

Seeckt experienced World War I on a whole different level than the commanders in the west, who spent most of their time stuck in defensive positions. Stationed on the eastern front, Seeckt planned the 1915 breakthrough at Gorlice, and oversaw the 2nd Guards Division's assault and capture of fifty-three well defended Russian fortifications.<sup>2</sup> He was also in charge of the operation which overran Serbia in 1915, and was on the Chief of Staff throughout the 1916 campaign that quickly conquered Romania.<sup>3</sup>

From his experiences on the eastern front, Seeckt saw the dependency on defensive firepower as a weakness in modern army tactics, and believed that smaller armies, thoroughly trained in aspects of joint operations and combined arms tactics, could use technology to outmaneuver and decisively defeat mass armies.<sup>4</sup> The sheer size alone of World War I armies slowed them down to a glacial pace, and the addition of modern weaponry grinded their forward offenses to a halt, into what the German army called a *Stellungskrieg* (war of position).<sup>5</sup> Seeckt saw these mass field armies as counterproductive to the army's ultimate goal: destruction of "the enemy's forces as quickly and as completely as possible."<sup>6</sup> He argued that the army's new emphasis needed to be on the superiority of maneuver over firepower and well-timed offenses over well-supplied defenses.

This was by no means a revolutionary new theory concocted by Seeckt while serving on the eastern front. Fast paced campaigns that focused on mobile armies had been a long time Prussian tradition. Seeckt was a student of war, well versed in the theories of military geniuses like Helmuth von Moltke and Karl von Clausewitz, and so it should be no surprise that a large portion of his fundamental beliefs on war can be found in these men's writings. What was unique in Seeckt's approach to war was his view on the use of technology, not as a panacea, but as a tool "to extend and modernize what already exists."<sup>7</sup> The hyper arms race induced by

World War I brought about unimaginable gains in technology, and enabled modern armies to become truly mechanized for the first time in history. Seeckt saw this shift in technology as the perfect opportunity to bring war back down to the operational-level, into what he called a *Bewegungskrieg* (war of maneuver). His aggressive theory emphasized highly mobile combined arms formations that would outmaneuver mass armies and attempt to defeat them in the earliest stages of war.<sup>8</sup> An excerpt from Seeckt's writings offers a concise overview of this concept:

The future of warfare lie in the employment of mobile armies, relatively small but of high quality and rendered distinctly more effective by the addition of aircraft, and in the simultaneous mobilization of the whole defense force, be it to feed the attack or for home defense.<sup>9</sup>

However great ideas might be, they cannot win wars, and Germany's military complex needed to be rebuilt from the ground up if it was ever going to pursue a large-scale military reform. Seeckt received command of the defeated German army in 1920, and was faced with the daunting task of reconstructing a new army under the watchful eye of the Inter-Allied Control Commission.

The Allies' foremost priority after their victory in 1918 was to eliminate any conditions that might allow Germany to bounce back and stage a great counteroffensive. In 1919 the Allies dropped a bomb of bad news on the German army that undoubtedly crushed a lot of officers' postwar enthusiasms for reform, namely the Treaty of Versailles. The treaty practically eliminated the German imperial army, and its long list of restrictions left but a specter of the once massive force, leaving little possibility for any resurgence in size. The treaty stipulated that the new German army be reduced to a force of 100,000 men and of those men, only 4,000 were allowed to be officers. It abolished conscription and replaced this with a 12 year voluntary service. The treaty even prohibited the manufacture and use of military aircraft, tanks, and heavy artillery for the German army.<sup>10</sup> Furthermore, the treaty included damaging geographical terms such as the creation of the Polish Corridor, which cut off communication between East Prussia

and Germany proper. In the west, Germany lost the Rhineland, its principal strategic barrier against France and a vital industrial region.<sup>11</sup> To top it all off, the Allies forced Germany to dissolve the cream of its officer corps, the General Staff, and destroyed the army's school system (*Kriegsakademie*) that had been the staple of officer training for decades.<sup>12</sup> The treaty was fervently disputed by Seeckt and the officer corps, but in the end it was put into place. This treaty, with its punitive restrictions, established the parameters for the army's reform for the rest of the interwar period.

The pre-World War I German army was essentially a federation of private armies under split control of the general staff and the Prussian War Ministry. The Prussian War Ministry controlled the army's budget and the procurement of weapons, while the general staff was responsible for the creation of war plans and doctrine development. This division of authority left the relationship between logistics and training relatively chaotic, and slowed the army's developments due to conflicting opinions in the respective organizations. It was not uncommon for the general staff to begin revising aspects of army doctrine, and then find out that the army did not have the proper funding or equipment to realistically do so.<sup>13</sup>

The Versailles treaty ironically eliminated this problem by forcing the German army to consolidate into a single, national army comprised of professional volunteers under a unified command. Also, what might be viewed as the most important organ of the army, the general staff, survived the treaty by operating under the disguised title of *Truppenamt* (Troops Office).<sup>14</sup> Not only was the staff still functioning, but Seeckt funneled the general staff officers into the highest command positions in the army. This instantly changed the army's internal dynamics to reflect the meritocratic values of the general staff, and put several well educated war veterans in extremely influential positions.<sup>15</sup> Seeckt also created a parallel organization known as the

Weapons Office (*Waffenamt*), which controlled the research and development of weapons, as well as organized the manufacture of military supplies. These two organizations worked with every major army branch to provide specific training and armament, with both organizations under the complete control of the commander-in-chief. These structural reforms resulted in a drastic improvement in cooperation between the developmental and logistical arms of the Reichswehr, as well as created an officer corps that had years of military experience and a strong background in scholarly military study.

Ironically, what must be the most significant organizational change in the interwar period was actually the result of a massive oversight on the Allies' behalf. The German army received no restrictions on the number of non-commissioned officers (NCOs) it was able to employ in the Reichswehr.<sup>16</sup> The Reichswehr enlisted an incredible 17,940 senior NCOs and 30,740 junior NCOs by 1922, which together comprised half of the total enlisted. These NCOs were expected to act independently without supervision, and were encouraged to contribute to the military community, regardless of rank. Seeckt saw the NCOs as the most crucial element in reaching what was probably his most cherished goal – an “army of leaders” (*Führerheer*).<sup>17</sup> Even in its early years the Reichswehr was a breeding ground for critical thought and analysis, throughout every rank and every division.

On December 1, 1919, only one week after Seeckt took control of the *Truppenamt*, he issued a directive that called for the creation of fifty-seven committees, comprised of officers and area specialists, to conduct a study on the “tactics, regulations, equipment, and doctrine” in the German army.<sup>18</sup> Seeckt ordered officers to create “short, concise studies of the newly gained experiences of the war,” taking into account the following four points: First, “what new situations arose in the war that had not been considered before the war?” Second, “how effective

were our pre-war views in dealing with the above situation?” Third, “what new guidelines have been developed from the use of new weaponry in war?” And finally, “which new problems, put forward by the war, have not yet found a solution?”<sup>19</sup> By the mid 1920s there were over 400 German officers working to analyze and compile information on World War I, which was absolutely staggering when compared to the Allied armies’ approaches to tactical reassessment in the interwar period. The British army, for instance, gave only one man the responsibility of revising and rewriting their entire infantry tactical manual, B.H. Liddell Hart, who at the time was a 24 year old lieutenant with almost no real military experience.<sup>20</sup>

This German enthusiasm for critical reflection upon the lessons learned in World War I combat might very well be the most crucial element which led to the Reichswehr’s success in the interwar period. The general staff’s intellectual approach to doctrinal reformation was stronger than ever in the Weimar era, and created a military ethos that promoted a subculture of scholars within the officer corps. German officers had the freedom in the Reichswehr to express their own ideas on military doctrine, critique those of other officers, and even criticize already established doctrine.<sup>21</sup> The Reichswehr measured the quality of its officers by their ability to analyze intelligently military questions, and provide rational conclusions using historical evidence to support their arguments. This communal interest in academic studies created a competitive atmosphere, in which debate was encouraged and new ideas were welcomed.

Officers used the army’s military journals as the most common medium to present their arguments on army doctrine, and were encouraged to do so even if they wished to remain anonymous. The army’s primary military journals, the *Militärwochenblatt* (*Military Weekly*) and *Wissen und Wehr* (*Education and Defense*), contained some of the most progressive military writing in the interwar period, laying claim to the first known articles on large-scale airborne

operations in western literature. In 1929 and 1930 these two journals published an entire series of articles that considered “vertical strategic envelopment, in which a large force of paratroops and air-transported units of up to a division in size could be brought over the enemy trenches and dropped in strategic locations deep behind enemy lines to outflank and outmaneuver the enemy.”<sup>22</sup> This kind of radical literature simply would not have appeared under the prewar army’s leadership. The level of intellectual freedom given to the German officers brought about a sort of “anything goes” attitude as long as their arguments were within the realm of military studies.

An anonymous author in the May, 1927 issue of the *Militärwochenblatt* wrote an audacious article that criticized the officer corps’ views on General Seeckt’s campaigns in Serbia, Romania, and Italy as “dangerous and self-deceiving.”<sup>23</sup> The article, “Bewegung und Waffenwirkung in der Taktik des Weltkrieges” (“Movement and Weapon Effect in the Tactics of the World War”), offers a bulldogged stance against the officer corps’ obsessive praising of the battles on the eastern front, claiming that their success owed more to the enemies’ outdated technology than the German army’s mobility at the time. The solution for stagnant war, the author argued, could only come from a correct analysis of the war fought on the western front.

The author analyzed the battles on the western front by using three variables: firepower, movement, and tactics. The first section of the article focused on the elements in World War I that caused armies to break down into static positions. According to the author, the primary factor which led to stagnant battles was the continuous introduction of new, devastating weapons to the battlefield. This new weaponry upset the equilibrium between movement and firepower in tactics, and discouraged armies from seeking a decision through tactics. The destruction of this equilibrium resulted in “the locally dead-locked combat action, the battle of material, and, as its

natural accompanying phenomenon, but not as its cause, an increased employment of field fortifications, as is possible only under stationary conditions.”<sup>24</sup>

The article attributed the disintegration of this equilibrium between movement and firepower to the failure of the prevailing tactics, and the armies’ severe lack of understanding on how to use modern technology. Throughout the article examples of wartime situations, both old and new, were given to further drive the point home that Germany’s prewar tactics were horribly inadequate when facing modern “weapon effects.” If the German army was “to make movement again possible in tactics, a new kind of tactics were needed and, above all, a new means of combat which could restore in some form or other the destroyed equilibrium.”<sup>25</sup>

The latter section of this article focused on how the army might overcome the tactical stagnation that had broken out on the western front, providing two possible directions for the army to consider. The first would continue developing the tactics used in World War I, focusing on the overwhelming firepower of artillery formations in order to paralyze the enemy long enough to enable the army to maneuver.<sup>26</sup> The author used an unspecified French offensive in 1917 as evidence that World War I had proved this strategy ineffective.

The French front was a mere 10 kilometers, yet French forces had employed no less than “624 light, 986 heavy and 270 trench guns” for a total of 188 guns per kilometer. This fleet of artillery required a total of 180 ammunition trains with 30 cars each to continuously supply the offensive. After pumping out over sixty million kilograms of ammunition, the French secured the ability to maneuver, but the area secured was limited to the maximum range of the artillery, or about six kilometers deep. Once the infantry had gone beyond this protective umbrella, they were well received by a hailstorm of German machine gun fire and were once again doomed to defensive positions. This approach, the author concluded, reduced war to a simple mathematical

equation, with victory entirely dependent upon an army's ability to exhaust the other's supplies and manpower (*Abnützungsstrategie*).<sup>27</sup>

The second option involved driving "artillery" up to the front steps of the enemy's defense and blowing a hole in it point blank. Tanks, the author argued, could rapidly move in on enemy canon and machine gun fire protected by armor plating, and take advantage of the close range to obliterate the enemy's heavy defense weaponry. The author concluded that the mobile artillery power of the tank could force tactical movement everywhere and under any circumstance, allowing "the decision-seeking attack to be carried out in one stroke through all arising tactical resistances."<sup>28</sup>

Whether or not every officer argued such daring points as these was not as important as the fact that every officer had the opportunity to make them. The army made sure that the ideas of every officer, and even those of non-commissioned officers (NCO), were taken seriously regardless of rank. In fact, the Reichswehr trained its NCOs two levels above their rank, making a senior NCO a junior officer in theory.<sup>29</sup> These officers and NCOs produced hundreds of military articles in the army's scholarly military journals, and left a permanent imprint on German doctrine that would not be removed until after World War II.

The German officer corps' studies took a much larger form in 1921 as the army's field service manual entitled *Führung und Gefecht der verbundenen Waffen* (*Combined Arms Leadership and Battle*; hereafter *F.u.G.*). Quickly following its release was the manual's revised edition in 1923, as well as six other manuals which covered each army branch individually.<sup>30</sup> The *F.u.G.* was a profoundly intelligent manual which acted as the authority for the entire national army, preparing it for what must have seemed like every imaginable warlike contingency. Combined arms tactics and mobility were stressed throughout the manual as the

two most important fundamentals of modern warfare.

In order for cooperation between arms to work fluently, the manual called for “the requirements as to the mentality and executive ability of the subordinate commanders, down to the group commanders and the privates” to be increased dramatically.<sup>31</sup> By giving each individual a strong leadership role, the elasticity in command was greatly increased, and therefore allowed combined arms groups to operate at much quicker tempos.<sup>32</sup> An excerpt from the German infantry regulations manual clarifies this theory well:

They (non-commissioned officers) require understanding of the nature of the combat of their own and associated arms, training in giving orders with clearness, certainty, and rapidity to small units of mixed arms, initiative, and decision. It is not the mechanical, literal application of the formulas of the regulations which controls the situation, but the carefully considered choice of means, corresponding to the situation at the moment, which leads to success. The infantry regulations therefore purposely refrains from laying down any rigid formulae, and despite the exhaustive detail of its instructions, leaves to every non-commissioned officer, full independence in the performance of his task.<sup>33</sup>

This type of command structure goes back to the Moltkean tradition of *Auftragstaktik*, where the commander verbally described a mission (*Auftrag*) in a clear and concise manner to an officer, the trained officer then surveyed the situation (*Lage*) and made a decision (*Entschluss*) based on his own assessment.<sup>34</sup> This system put a great deal of responsibility on the subordinate commanders, but ensured that large-scale operations would never be bogged down due to a handful of inept officers, thereby increasing the potential speed of the army.

Several older principles like *Auftragstaktik* saw greater attention in the Seeckt years than they ever had in the past, especially the role of the *Schwerpunkt* (point of decision) in battle. The *Schwerpunkt* targeted a military objective that the unit in question could focus on through which to bring about the most favorable decision, and was more important than ever in the Reichswehr now that the Versailles treaty shrank the military down to the size of a border patrol. Officers

could not afford to disperse the limited troops ineffectively, and so each arm and unit was given a point of decision where its efforts would be most valuable. The *F.u.G.* directed the armored, air, and artillery forces to hone in on the *Schwerpunkt* en masse to ensure a decisive result. This principle was always to be followed, even if it ran the risk of severely weakening other parts of the line.<sup>35</sup>

The *F.u.G.* emphasized Shock Troops as the backbone of future infantry offensives. These groups would work in deep, wide areas, with individual units and arms organized according to the demands of the specific situation, in order to provide the closest support for each arm.<sup>36</sup> According to the manual, this ensured that when executing their mission, they inflicted the greatest possible losses on the enemy, but suffered as little as possible themselves.<sup>37</sup> These new shock troops would work in combined arms groups, but advance independently under the protection of air forces. The accompanying aircrafts' job was to ensure that the mobilized forces advanced far enough to flank the enemy, and to provide protection for the infantry following closely behind.<sup>38</sup>

German officers took their ideas for these Shock Troops straight from the later years of World War I. On March 21, 1918 General Ludendorff set off Operation Michael, a stake-all offensive from the Hindenburg line that aimed once and for all at bringing a decisive end to World War I. At 4:40 a.m. the German army uncorked a 6,000 gun barrage that poured fire over the British 5<sup>th</sup> army division for five long hours. The artillery strike reduced the British command and control to rubble, leaving the British army shattered. At 9:40 a.m. the German army launched its assault and hit the ground running with sixty-three divisions of newly developed *Strosstruppen* (Storm Troops) – diverse infantry groups reinforced with a combination of machine guns, light trench mortars, and flamethrowers. These troops advanced thirty miles,

tore into the British army's rear and took around 90,000 prisoners of war. Operation Michael achieved the largest advance of any army since the outbreak of war, but its success dwindled as the *Strosstruppen* advance outstripped their supply line. Without fresh troops or supplies to reinforce the German offensive the Allied forces ground Operation Michael to a screeching halt on March 29.<sup>39</sup> The most important lesson taken from these *Strosstruppen* was their ability to work together in combined arms to outmaneuver and outflank the enemy's position. The *F.u.G.* argued that the problems in supply that had undone the offensive could be overcome by motorizing the army to keep up with the rapid advance of the troops.

The *F.u.G.* stated that every combat group's successful attack needed to facilitate the next group's advance, providing an unrelenting momentum that would destroy any chances of a counter-offensive. The troops were to flank the enemy army on one or both sides and attack in the rear; however, if envelopment was not an option, a direct assault on the enemy's front would be an acceptable alternative. After the army penetrated deep into the enemy's rear, the main objective shifted to the annihilation of the enemy forces (*Vernichtungsschlacht*). The manual stressed that commanders were to issue this directive with the means to achieving its end left up to the subordinate officers. Once the enemy was on the run, the German army's foremost priority needed to be catching up to the retreating forces and forcing them into submission.<sup>40</sup>

The Wehrmacht called this rapid envelopment of enemy forces a *Kesselschlacht* (cauldron battle), and it remained an army officer's most sought after battlefield achievement up until the final years of World War II. The goal of a *Kesselschlacht* was to break up an enemy army's cohesion by simultaneously attacking it on all sides. The overwhelming envelopment would crush the soldiers' morale and boil down the enemy's defenses until soft enough for German infantry to cut through with minimal resistance



army's educational and instructional standards to unprecedented levels. In contrast to the one year cadet school used in the prewar Prussian army, the period of training for officer-aspirants in the Reichswehr was four years, and a total of six years for those without an *Arbitur* (high school diploma).<sup>45</sup>

Officer training began with senior first lieutenants or junior captains, and admissions were based on an entrance examination entitled *Wehrkriesprüfung*, which acted as a parallel to the entrance exams in the prewar *Kriegsakademie*.<sup>46</sup> Unlike the voluntary prewar exams necessary to become a general staff member, the Reichswehr required every aspirant to take the *Wehrkriesprüfung*, and every officer had to prove adequate knowledge in fourteen areas. The subjects which the aspirants were tested on spanned several disciplines, requiring for example a high level of proficiency in a minimum of two foreign languages (one strictly for geography), military history, physics, law, and even health science.<sup>47</sup>

The Ministry of Defense even set an academic prerequisite for an aspiring candidate to be *eligible* for completing the entrance perquisites! A soldier was required to give proof of an *Arbitur* (high school diploma) and if he could not furnish this, he was then required to pass two scientific examinations after obtaining two years' service in the army. Furthermore, if at any point in time the army decided that certain aspirants were not qualified, it was entirely acceptable to cut them from the program before their service contract expired. If accepted, however, officer candidates did not have to worry about finances, as the Reichswehr paid the volunteers from the day they started, and gave pay raises with every promotion. This practice was clearly created to encourage these aspiring officers to concentrate their time and efforts solely on their military studies.<sup>48</sup>

After being accepted into the German officer program, a soldier's training began

immediately with fifteen months on troop duty followed by one more examination. From then on trainees were allotted a seat at the officer's table in recognition of their progress and hard work, or perhaps as motivation to keep them from quitting the program. Regardless, the aspirants went straight back to troop duty for another 3 months, and then finally began general service schooling, at which point they were promoted to sergeant and received an ensign examination. The second year of courses required every officer to study at the infantry school, followed by another term in one of three specialized service schools: Cavalry School in Munich, Artillery School in Hannover, or Engineer School in Jüterbog; closing with the final officer examination in Munich. Aspirants attended these service schools for approximately 10 ½ months, and were assigned to troop duty immediately thereafter for another 7 ½ months. Altogether an officer's training lasted approximately 48 months. The officer corps would then select promising aspirants to receive the "officer subject" title and placed them throughout the army according to their written and performance-related abilities.<sup>49</sup>

Crafting an adaptable and efficient young "leaders army" was Seeckt's number one priority from the very beginning, and no area of the Reichswehr makes this more apparent than in the educational system. He considered a youthful officer corps so important that he even put tight age restrictions on the aspirants "to prevent the officer corps from being filled with men who are too old." No man entering a service school was allowed to be over 25, and when he was recommended for promotion to ensign or lieutenant then he needed to be 26 and 28, respectively.<sup>50</sup> Such high standards assured that extremely few men would ever be able gain entrance into the officer training, and that even fewer could make it to the end; however, that was precisely what Seeckt had hoped for. By reducing the Reichswehr officer corps to 1/15<sup>th</sup> of its former size, the Versailles Treaty trimmed the fat from the German army and allowed for

extreme selectivity when choosing officers. The army even warned against “misusing the officer profession to ‘accommodate’ young men, who are not fully capable in every manner,” as these candidates would “never accomplish the present high demands placed upon them; besides many embarrassments and disappointments,” the army asserted that these men would just “lose valuable time.”<sup>51</sup>

In 1928 U.S. military attaché Lieutenant Colonel A.L. Conger was invited to visit the Reichswehr’s Third Divisional School, where he took detailed notes on lectures, wargames, and exercises for U.S. intelligence. These reports gave a rare inside view of the Reichswehr officer education system, and were considered strictly confidential up until the early 1980’s when they were released to the public. Conger stated in his report that the Reichswehr’s Colonel Liebmann was expected

to show me everything without reservation, but that inasmuch as their officers’ schools and the training given thereat were still a matter of controversy with the Allied governments, he was instructed to request me to take the necessary precautions to see that any reports I might make on this subject were regarded as strictly confidential. He particularly requested me not to mention to anyone the fact that I was permitted to attend these schools or even that I had knowledge that there were such schools.<sup>52</sup>

Every division of the army had a class of officers selected from that division’s troops, and the graduates of these classes were sent to the “War Department” where they were given further instruction. The Third Division Officer School’s War Department had two courses, both of which Major Conger was informed he would be permitted to visit.<sup>53</sup> The training of officers for general staff duty began in classes comprised of first lieutenants and junior captains, and every officer enrolled received an annual fall examination. Officers who passed this exam (*Wehrkriesprüfung*) were then accepted into a two years’ course at the headquarters of their assigned divisions, lasting from October 1 to early May for technical instruction, which was

followed up by an eight-day tactical ride. The officers' training in this first year took place completely in the sphere of reinforced infantry regiments, and included fourteen different courses ranging from military history to foreign languages and horsemanship. The total number of hours required clocked in at about 22 a week; however, this did not include the war games and map exercises which took place at least one day a week.<sup>54</sup>

While the first year was referred to as the "reinforced regiment," Conger's report made it a point to explain that "the scope of the course should not cause this to be confused with the infantry school or compared with the course at our (Leavenworth) infantry schools." German instruction considered tactics best mastered through the "study of very simple combinations of the arms combined – a battalion or two of infantry, a battery or two of artillery, a little cavalry, a few tanks, a reconnaissance detachment and a little motorized infantry." Conger expressed fascination that while the U.S. "practically eliminated the study of the reinforced brigade as a means of imparting tactical instruction, the Germans still devote a whole year to it and continue to regard that as the most important year of the officers' tactical education."<sup>55</sup> The U.S. army at this time was gripped by the false promises of strategic warfare, and focused on long distance bombing, as well as the employment of infantry and artillery on a mass scale; mostly ignoring tactics on the operational-level.

The entire first year of German officer training devoted itself to the study of tactics and little attention was given to logistics or formal orders. Concerning the latter, Conger was surprised to find out that the lowest German unit that received formal orders was a division, and as he saw from maneuvers, even that didn't always hold true.<sup>56</sup> The technique of orders and supplies did, however, find their way into the second year's course instructions. The tactics taught to officers in the second year did not concern themselves so much with minor areas of

combat, but rather with the larger problems that confront divisional commanders. German officers drilled students incessantly throughout lectures, questioning their knowledge on unit organization, specific detachment strengths, and bridge crossing procedures.<sup>57</sup> The instructors often translated these questions into some kind of wargame or exercise that allowed students to understand their importance in a realistic battle situation.

As a supplement to the tactical course there also existed a course in command technique which was still very much in the spirit of tactics, but which put a much heavier emphasis on the “features of troop leading and all the details connected with the issue of orders.”<sup>58</sup> The military history course, which lasted a total of two hours, received by far the most attention in Conger’s report. The first half of the course centered on the discussion of the Prussian army’s situation on August 6 in the 1866 Austrian Campaign. The questions presented were strategic in nature, and postulated a situation in which either side could have continued the campaign. What is especially interesting was that the solutions proposed had to be applicable to the Reichswehr in its present conditions. For example, the instructor dismissed the idea of the Prussian army marching on Vienna as a military objective, explaining that such an action would be justified only in the time of Frederick the Great or Napoleon, and had no place in the “strategy of today.”<sup>59</sup> Following this discussion the instructor highlighted Napoleon’s pursuit of the Prussian army after the Battle of Jena and used it as a vehicle to discuss the proper procedures to be used in the pursuit of a defeated modern army.

The first hour of this course focused almost completely on the discussions of possible problems and solutions, while the second hour discussed the Prussian advance southward with students using maps to locate the divisions of both armies, and used blue (Prussian) and red (France) pencils to distinguish their movements. Intermittently the instructor related these

problems to those the German army faced in World War I, and concluded the course by giving individual students specific World War I operations to analyze, all of which occurred on the western front.

Throughout the seminar Conger noted that the instructor had free reign to criticize military actions and offer his own opinions on every aspect of tactics. One humorous incident occurred in the class in connection with a letter the lecturer wrote criticizing the Chief of Staff, Moltke, which somehow made its way into a local Vienna newspaper. After the letter's release the two men's relationship became pretty cold, and the students got a real kick out of mentioning it to see how red the instructor became.

Conger believed that the German and U.S. approach to analyzing World War I was similar, but noticed that the Germans extracted almost entirely different lessons from the war. The German system of officer training differed greatly from the U.S.'s, in that it taught the lieutenant the "broad outlines of strategy as well as of tactics and let the development of his strategic sense go hand in hand with the tactical."<sup>60</sup> Conger's report makes it very clear that the German army wanted to wage war somewhere between the strategic and tactical levels. This style of war would eventually place the term "operational-level warfare" on the tip of every theorist's tongue in 1939.

Conger's experience in the "Army Organization" course took similar form and the instructor used Clausewitz's theories on the economy of forces in war to lead the discussion. The officer lecturing focused on the necessary amount of industry and production needed to support a modern army, exclaiming loudly that the United States was the country that best understood the organization of industry for the "next war." The officer's comment no doubt gave Conger a few goose-bumps, and became even more ominous sounding as the teacher

continued to explain that “such an organization is very difficult for Germany, bound as it is by the Versailles Treaty. Nevertheless, plans for its rapid accomplishment have to be made if success in the next war is to be achieved.”<sup>61</sup>

The remark, regardless of how serious it sounded at the time, gave some indication as to how the Reichswehr’s officers thought in terms of the future rather than making plans according to the treaty’s current restrictions. Conger’s concluding remarks described German tactical methods as being beyond those of the United States, and far ahead of the French. In fact, it was common for German officers to break out in laughter when discussing the French’s post-war tactics. Officers joked that the French army contradicted itself by committing to open warfare while still seeking “to conduct it in methods evolved from positional warfare.”<sup>62</sup> Conger believed that the German army “will only fight to gain a decisive result, be it on the offensive or defensive, and when a favorable decision can no longer be in question it will retreat to a position of readiness and there await a more favorable opportunity.” Decisive victory (*Entscheidungsschlacht*) remained the highest priority throughout the campaign, regardless of how much territory was lost in the process.<sup>63</sup>

Although Conger was impressed with the army’s tactical developments, he criticized the Reichswehr's teaching of strategy and even gave the German approach to war a nickname – “grand tactics.” The Germans, in Conger’s opinion, only looked to the movements of army groups and army corps, without consideration of “the underlying political, psychological, and economic grounds” in a theater of war.<sup>64</sup> As for the instruction in the supply of troops in the field, he considered the army’s system “worked out with methodical minuteness and precision,” with instruction in the field heavily supplemented with “lectures, conferences, problems, and wargames.”<sup>65</sup> He considered all matters of technique, including those in orders, instructions in

material, transport, and armament, extremely well given. Conger concluded his report confessing that the German army would “be tactically and technically a most formidable force” for the U.S. to face on the battlefield.<sup>66</sup>

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Seeckt and the officer corps succeeded in developing the first devastatingly accurate mobile warfare doctrine in the 20<sup>th</sup> century, the 1923 *Combined Arms Leadership and Battle or F.u.G.* Conger’s visit in 1926 showed a reformed system of education beyond both U.S. and French institutions, completely dedicated to teaching the *F.u.G.*’s principles on modern war to the future leaders of the German army. However, a correct manual on modern warfare was useless if soldiers did not understand how to execute it while on the battlefield. A comprehensive training program was needed if the German army was ever to tap into its potential. The Reichswehr faced its biggest problem of the interwar era – preparing its soldiers to fight a modern war, completely without the weapons of a modern army.

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<sup>66</sup> “Conclusions” in Conger, *Third Division Officer’s School*, USMI XIX, 408.

## CHAPTER 2

# FROM THEORY TO ARMS

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General von Seeckt and the Reichswehr officer corps never had the opportunity to uncork their theories on the battlefield. However, the Wehrmacht would use their theories to smash the Polish army in one of the most astounding military campaigns ever recorded in the annals of war. Five mechanized German armies rocketed in torrents through Polish defenses and launched their combined arms assault with refined precision. Mechanized formations spearheaded sweeping maneuvers around the Polish army's flanks, enveloped its forces into airtight pockets, and unloaded haymakers until the rear crumbled and the center roiled with tangled metal and fire – a picture perfect *Kesselschlacht*. The Allies' inability to combat German operational-level warfare at the beginning of World War II was not the result of lacking intelligence, but rather a complete lack of preparation. The German concept of fast paced, combined arms mechanized warfare was known to almost every major power, but most concluded, quite sensibly, that the successful implementation of such a highly complex, synchronized, and fast paced assault was impossible. Yet the Blitzkrieg that the German army unleashed on the Polish forces in September of 1939 quickly left no doubt that the Wehrmacht had not only created a new type of warfare, but that it had also mastered its implementation.

This chapter will examine why, when the German army went to war in the fall of 1939, the entire army, from the top generals down to the newest conscripts, from the tank commanders to pilots in the Luftwaffe, worked flawlessly to smash Polish defenses with a Blitzkrieg that simply overwhelmed the Polish army. Chapter Two shows that the Reichswehr developed,

conducted, and soaked up experience from the most innovative and comprehensive army maneuvers of any military institution in the interwar years, and it was through these rigorous peacetime exercises that the officer corps prepared every German soldier for the coming Blitzkrieg. Interwar maneuvers enabled German soldiers to be trained and tested under realistic battle conditions, and served as the primary medium through which the officer corps transformed the Reichswehr into a professional modern army.

Unlike the pre-World War I German army maneuvers that isolated each arm to ensure individual excellence, the Reichswehr officers believed that each arm's perfection could *only* be achieved when working together.<sup>1</sup> Reichswehr maneuvers adhered to a strict system of rules that were enforced by several experienced officers and older non-commissioned officers, otherwise known as the maneuvers' "umpires." In 1921 Seeckt issued a set of rule books for umpires directing maneuvers, which acted as the operating system for army maneuvers for the remainder of the interwar period.<sup>2</sup> The manuals stated that the umpires' greatest responsibility was to always "provide the impression of actual war" that peacetime practices inherently lacked, and stressed that umpires must constantly remind the two participating sides that both individual and combined arms operations were necessary to achieve military success.<sup>3</sup> By the end of 1922 the Reichswehr had already completed no less than three large-scale army maneuvers, and in August 1923, Seeckt submitted a forty-page assessment of these maneuvers to the German general staff members; instructing them to take every criticism as a directive for reevaluation and improvement.<sup>4</sup>

Seeckt referred back to the *F.u.G.*, stating that even the "very youngest of leaders" needed to understand "the many-sided problems of the combined efforts of all arms."<sup>5</sup> In Seeckt's opinion, the young officers conducted themselves without the haste and determination

that the next war would require. Seeckt ordered officers to be stripped of their comforts, and criticized several of their actions, calling them implausible in war. Seeckt stated, for instance, that officers would never to be able to “call subordinate leaders before them or ride into the front line to give orders” in actual combat.<sup>6</sup> Seeckt ordered for any comforts to superiors, participants, and even spectators to be prohibited if they had the slightest potential to result in unwarlike conditions. These regulations applied to practically everything, including the outward appearance of the body, which was deemed necessary to reflect war’s unforgiving nature “as an example to the troops, who must become accustomed to the sight of a warlike bearing of their leaders.”<sup>7</sup>

The 1921 regulations required orders given during the maneuver to be clear, positive and simple. Seeckt noticed that commanders gave prolix written combat orders in urgent situations in which “verbal or brief written individual orders could and dared be issued.” Seeckt observed that “written orders are preceded by actual happenings and are therefore useless.”<sup>8</sup> This comment makes an obvious reference back to the *F.u.G.*’s emphasis on elasticity in command, on which Seeckt was obviously not going to budge. As explained in the *F.u.G.*, it was necessary for the Reichswehr to break from the prewar army’s rigid command structure in order to keep up with the pace of a highly mobile army.<sup>9</sup>

Overall Seeckt believed that the army had made good progress since 1921, but he determined that “too many problems were taken from trench warfare.”<sup>10</sup> In his conclusions, Seeckt reminded the officers that there was no room for positional warfare in the Reichswehr, and that maneuver warfare remained the most important principle of the army exercises. Seeckt had full confidence in the army’s multiple service manuals, and beside every one of his critiques he wrote down the manual title, section number and paragraph to which the officers could refer

in order to better understand his criticisms.<sup>11</sup>

The most important of Seeckt's directives ordered the officers to give more consideration to the placement of armored and air forces in future maneuvers. Seeckt assured the officers that the Versailles treaty was not going to stop the army from considering modern weapons in maneuvers, even if that meant replacing them with other materials during field exercises.<sup>12</sup> This creative approach to replacing modern weapons with "dummy versions" became commonplace throughout the interwar years, and allowed for a prolific amount of theoretical progress to be made in the areas of German mechanization.

With every passing year the Reichswehr's maneuvers became more and more complex, and by 1925 the German army was almost unrecognizable from the one Seeckt reviewed in 1923. Lieutenant Colonel A.L. Conger took notice of this change at the 1925 4th Saxon Division's maneuver, and his classified intelligence report praises the German army's abilities to the point of unadulterated admiration. The most interesting aspect of Conger's report, however, did not address the higher ranking soldiers and officers, but rather the lower ranked individuals who, for some reason, acted more like leaders than subordinate civil-servants:

I noticed about 100 men all uniformly dressed, but not in military uniform, marching in columns of fours in perfect formation behind a military band. These young men, as soldiers, and the Security Police as officers, and non-commissioned officers could quickly and easily be drafted into the Reichswehr, raising the total to perhaps 300,000 men without any great loss in efficiency.

After watching the Reichswehr's complete maneuver, Conger confessed that Germany harbored "the best one hundred thousand soldiers on the continent of Europe."<sup>13</sup>

In September, 1926 the Reichswehr maneuvers reached a boiling point that can only be described as the defining moment of Seeckt's career. The army administered two Group Command maneuvers (*Gruppenkommando*), which were the first post-war exercises to involve

more than a division of soldiers.<sup>14</sup> United States military attaché Major McLean submitted an intelligence report on the first Command Group that offered a vivid view of how this maneuver was devised, conducted, and evaluated. The first Group Command was held in Brandenburg north from the Harz Mountains and west of the Elbe. The maneuver consisted of the 2<sup>nd</sup> Infantry Division (at Stettin) and the 1<sup>st</sup> Cavalry Division (on the Oder around Frankfurt) participating as the “Red Force” (Poland), and the 3<sup>rd</sup> Infantry Division, with a cavalry troop attached, participating as the “Blue Force” (Germany). To make the maneuver even grander, the staff directed each side to add an imaginary division of infantry; one on Red’s right flank and the other on the Blue’s left flank.<sup>15</sup>

The Blue troops were given the task of defending the Elbe line against a Red army advance. As stated in the “General Situations” distributed to both sides, “A Blue army is withdrawing behind the Elbe, with north wing via Stendal, before a superior Red army advancing north of the Harz Mountains.” Each side was also given “Special Situations” which outlined what stage of the conflict they were in, and what the conditions their troops were in. A brief summary of both sides’ predisposed situations is necessary to explain the maneuver. The Blue army had retreated across the Elbe River without enemy contact, and planned to set up defensive positions to receive Red’s offensive, at which point it would launch a counter-attack. Blue had planned to reinforce its position with the recently arrived 3rd and 4th Infantry Divisions, but the Red cavalry was too fast and on September 12, Red seized the bridgehead at the Elbe and began moving rapidly toward Blue’s position.<sup>16</sup>

The maneuver commenced with Red forces advancing in a single column toward the Elbe crossing point, while the Blue forces formed two columns to protect their position. Red’s cavalry units slammed into Blue’s left column first, but Red was unable to hold the position, and

Blue hurled Red's cavalry back across the Elbe. Blue's left column engaged in a pursuit of the retreating cavalry across the Elbe, but to its surprise there was a Red infantry regiment laying in wait. Occurring simultaneously, Blue's right column encountered a Red infantry regiment of its own and struggled to hold on to its position. With both columns under attack, Blue called on the commander for reinforcements. Instead of sending reinforcements to support either of the columns specifically, Blue's commander funneled the third regiment reserves into the gap between the two columns, hoping to prevent the collapse of both positions. With Blue's line of defense stretched out like a rubber-band, the Red army stormed in, snapped the defensive line and stole the victory.<sup>17</sup>

Major McLean expressed concern that the German staff focused almost entirely on "training officers of all grades to the consideration of the combined tactical employment of arms and weapons that the Versailles treaty prohibited."<sup>18</sup> Hostile and friendly air forces were considered by both sides, and "umpires never failed to bring home the commanders of every grade by constantly giving them an assumed air situation."<sup>19</sup> These air forces were physically represented with different colored floating balloons, each of which correlated with a different type of aircraft, but more often than not the officers would simply command their troops while assuming the existence of hostile enemy aircraft overhead. Curiously enough, the foremost consideration of every officer and soldier throughout the maneuver was air defense tactics. Troops sought to cover their position with camouflaged material, and when this wasn't possible officers dispersed their men and equipment into formations that would render enemy bombing ineffective.<sup>20</sup>

Likewise, the army's "tanks" were actually armored cars, which looked strikingly similar to the riot cars used by German police forces.<sup>21</sup> McLean pointed out in his report that the

Germans never planned on using these in war, and warned that they were being used to duck the treaty's restrictions on armor. McLean determined that these riot cars "represented field-heavy fast tanks such as might be employed for reconnaissance or special battle missions."<sup>22</sup> The Germans also employed smaller "dummy tanks" that appeared as camouflaged canvases over a steel framework mounted on two bicycle wheels, with two soldiers inside "driving" the vehicle.<sup>23</sup>

More than anything else the Reichswehr's infantry tactics surprised McLean. The German infantry in the maneuver advanced rapidly, but at different rates and in different sections. At first McLean assumed that this was the result of German troops being inexperienced with large-scale maneuvers, and he thought there must have been some kind of confusion with the orders.<sup>24</sup> McLean quickly corrected himself when he learned that German doctrine encouraged each section to take the initiative irrespective of how the other flanks progressed. Although they advanced separately, McLean noticed that the different sections cooperated "in all situations in which one unit found itself in a position to facilitate the advance of a neighboring unit."<sup>25</sup>

In the maneuver's final evaluation German General von Lossberg, the supreme commander of the exercise, criticized the Blue commander's decision to deploy two far reaching columns, and told him that their distance made it impossible for them to provide mutual support. Lossberg criticized the Red forces as well, remarking that they took too long to move in and exploit the Blue army's overstretched defenses. He asserted that if Red took the initiative sooner it could have obtained an even more crippling victory. At this point Seeckt made his presence clear. Seeckt called the Red commander's use of cavalry "foolish," exclaiming that instead of being used as a holding force on the Elbe it should have been turned against the Blue's flank,

where it could have exploded in the rear.<sup>26</sup>

The fall 1926 maneuver signaled a turning point the Reichswehr. Not only because the Reichswehr displayed substantial progress, but because the maneuver marked Seeckt's last year as the army's commander-in-chief. Throughout the maneuver's proceedings there was a new personality receiving most of the attention – recently elected President Paul von Hindenburg. McLean described Hindenburg atop a hill dressed in a full field marshal's uniform, looking out over the maneuver with a Kaiser-like aura about him.<sup>27</sup> Foreign observers from nine countries, including the U.S. and Russia, went up to greet Hindenburg one-by-one. It is worthwhile to note that France, Britain, and Italy, the three countries represented in the Inter-Allied Control Commission, were not invited. These countries remained hostile powers in the eyes of German officers.<sup>28</sup>

A new enthusiasm swept across Germany for the new president, with the *Lokal-Anzeiger* newspaper professing that “Germany's first soldier” had returned, and *Würzburger General-Anzeiger* claiming that every German “could feel it on the maneuver grounds, where one may observe a thousand times that love of the soldier and our army is again awakened.” A change was taking hold, not only in the civilian population, but in officer corps as well. The army was growing hungry for war, but its officers began to recognize that they were practically impotent with only 4,000 officers, 100,000 men and a meager supply of materiel. In his tenure as army commander, Seeckt achieved unprecedented progress in the army's reorganization, doctrine development, and training, but by 1926 his promise of a “future army” was starting to wane.<sup>29</sup>

In 1924, commander of the Army Department of the *Truppenamt* Joachim von Stülpnagel, delivered an article to every member of the Defense Ministry entitled “Thoughts on the War of the Future.” Stülpnagel assured them that a war with France was coming, but

asserted that a war in the Reichswehr's current state "would be a mere heroic gesture."<sup>30</sup> To make his argument clear, Stülpnagel pointed out that the army's seven divisions would use up their entire supply of ammunition in exactly one hour of combat. This was not an individual phenomenon, and officers of all grades began to wonder – perhaps the Reichswehr could do something more now, rather than hope for something 'great' later.<sup>31</sup>

More than any other individual Seeckt was responsible for the Reichswehr's successful recovery. But the trait that made Seeckt the perfect leader in the Reichswehr's early years was the same one that made him unsuitable to lead the army in its later years. Seeckt was a forward thinker, and a man with extraordinary foresight. His predictions on modern warfare were right on target, but the army needed to consider the tough situations at hand if it was ever going to be ready for a "future war." Seeckt's detached nature left the Reichswehr without any solid defensive plan in the event that one of the several hostile countries surrounding Germany invaded. In fact, his plan during the Russo-Polish war, had the Soviets invaded, was to retreat deep into Germany and wait for the Allies to intervene! His plan for a French invasion was almost identical; the army would evacuate past the Weser River, maybe even as far as the Elbe.<sup>32</sup>

Despite this, the troops respected Seeckt, and he earned their unwavering loyalty. Seeckt's portrait remained in meeting halls, corridors, and even in the private quarters of commissioned and non-commissioned officers. Seeckt's successor, General Wilhelm Heye (1926-1930), was not so lucky. Heye tried to present himself in a more democratic fashion, announcing that any soldier at any time could come to him for direction. In the minds of most soldiers, this system disregarded their immediate superiors, and most ignored his friendly, but surely ill-fated offer. Of course, the officers were especially perturbed by this undermining of their authority, and as a result Heye received little respect throughout his tenure.<sup>33</sup>

The third commander-in-chief, General Kurt Freiherr von Hammerstein-Equord (1930-1934), at least gained the respect of the troops. Hammerstein was a man of conviction, and received respect from most army soldiers and officers immediately. Hammerstein was a steadfast commander, and there had even been a few times throughout his tenure when he considered mobilizing the armed forces against the Nazi party. At the Jüterburg training ground in October 1932, Hammerstein spoke to Reichswehr soldiers about the country's political situation, telling them that "if Herr Hitler believes he can politicize the Reichswehr, a few bullets flying around his ears will someday demonstrate that the Reichswehr is not to be politicized."<sup>34</sup>

Like Seeckt, Hammerstein did not trust politics and tried to hold the Reichswehr above the level of political influence. Under Seeckt the army wasn't subject to the cabinet, Chancellor, or any government form associated with the Foreign Office. This treatment of the army as a "state within a state" led to mutual disdain between political and military ranks, and created a turbulent civil-military relationship that put Germany in a dangerous position, sealed in on all sides by hostile neighbors, with a strong distrust between the country's political and military leaders.<sup>35</sup> Seeckt's dismissal in 1926 gave way to new army leadership, and with it came a new enthusiasm for German civil-military cooperation.

Military progress in the Reichswehr after 1926 did not come so much in the form of tactics, but in the aspects of war neglected under Seeckt's tenure: logistics, foreign policy and civil-military development. Seeckt's tight constraints on army development came undone in 1926, and in the next three years the Reichswehr held no fewer than five large-scale maneuvers that tested everything from the army's efficiency in feeding its soldiers to its sanitary services and maintaining personnel. This shift in direction occurred primarily because of the Reichwehr's new leadership. The new generation of officers wanted to pull the army out of its isolationism

and theoretical stages into new age of realistic military planning. Officers wanted to focus on the army's current conditions, and felt that it was necessary to create a national defense policy to protect Germany in its vulnerable state. The movement started with commanders like General Stüplnagel, and gained momentum with Colonel Werner von Blomberg, chief of the Truppenamt in 1927, and Colonel Kurt von Schleicher, leader of the newly created *Ministeramt* (office controlling civil-military relations). This new order took a strong stance for national security measures, and asserted that the army could never defend Germany without a healthy civil-military relationship, especially if it ever hoped to rearm.<sup>36</sup>

There was one other individual in an especially unique position to push the army toward national defense, newly elected Defense Minister General Wilhelm Groener (1928-1932). The former defense minister, Otto Gessler, was a notorious yes-man to Seeckt, and had maintained a hands-off approach to military affairs. Groener on the other hand was deeply interested in politics and saw the development of a national defense policy as a necessary next step. With his political savvy, Groener brought a much broader approach to peacetime military preparations. In May 1928 Groener launched the army's first comprehensive intelligence operation to observe Poland's military capabilities. This enabled officers to begin drawing up realistic war plans as early as 1929, and provided the army with up-to-date information for use in its annual maneuvers.<sup>37</sup>

In October, 1927 (one year before Groener's appointment) Colonel Schleicher wrote up a detailed report on national defense recommendations and sent it to the Foreign Minister, Gustav Stresemann. Schleicher referred to his program as "national protection", which he defined as "the defense of the Reich's borders as well as the protection of the lives and population from enemy attacks and acts of violence on land, on sea, and from the air." Schleicher, in

collaboration with the officer corps, wanted to give Germany an organized system of mobilization and rearmament so that the army could finally receive the training and equipment necessary to prepare for an invasion by any one of the hostile countries nearby. The initial response from the Foreign Office was not very surprising.

Officials were wary about violating the Versailles treaty, *especially* its restrictions on mobilization and rearmament. National defense advocates did not let up, however, and invited Foreign Office members to a number of maneuvers and exercises in hopes that they would help foster better civil-military relationships and reassure government officials that the army was not looking to start a war anytime soon. In November, 1927 the Defense Ministry invited Foreign Office members to attend a wargame that postulated a Polish invasion of Germany. The Foreign Office accepted the invitation enthusiastically, and in January 1928, army officers and Foreign Office members participated in a forty-nine day wargame taking place in the Defense Ministry's office. In the spring of the same year, General Blomberg invited Foreign Office members to the annual ten-day General Staff Tour in Bautzen and Silesia, which also acted as a traveling wargame.

That spring the Reichswehr Ministry and General Groener submitted new directives for national defense to the Foreign Office and, finally, the office caved in. The Foreign Office determined that, because the Versailles treaty showed no sign of changing, it was necessary to prepare the Reichswehr to defend Germany. Still, the Foreign Office demanded that no military action could jeopardize foreign policy, and told Groener that every major decision had to undergo a Foreign Office review before even being considered. While Groener was not satisfied, this was a first step. In light of this new development, Groener suggested to the Foreign Office that the army begin hosting new, grander wargames and maneuvers to work out the civil-military

issues within national defense. He argued that the January 1928 wargame proved that the army was still unable to cooperate with the civil government efficiently, and offered to set up diplomatic exercises, based on the most plausible future wartime situations. Groener began this project immediately, and nowhere in the Reichswehr's history is the shift to realistic military planning more apparent than in the army's 1927-1932 maneuvers.

The army's 1930 maneuver is of special interest, for it took into consideration every division in the German army, and postulated a large invasion from a superior French army into the heart of Germany. Present at the maneuver was President Paul von Hindenburg, Chief of Army Command Wilhelm Heye, and Defense Minister Wilhelm Groener, as well as the army's invited guests. The latter included Reichstag and state government representatives, civilian industries, and several foreign attachés (with the exception of France, Soviet Union, and Poland). The 1930 maneuver was not simply an attempt to improve tactics or even civil-military cooperation – it was a test of the army's ability to mobilize for a full-scale European war.

The maneuvers in the last two years of the Weimar Republic (1931–1932) showed substantial growth in army training, but more importantly, these exercises occurred in the final stages of the development of Blitzkrieg tactics. Although renowned armored theorist Ernst Volckheim paved the way for German theories on mechanized forces with his 1923 *German Tanks in the World War* and his 1924 publication *Tanks in Modern Warfare*, the most prominent armored theorist emerged in the Republic's final years. This theorist was Colonel Oswald Lutz. As inspector of Motor Transport Troops, Lutz was responsible for overseeing the Reichswehr's seven motorized battalions. Throughout 1931-1932 Lutz held a series of maneuvers involving dummy tank battalions in Jüterbog and Grafenwöhr. These theoretical tests allowed Lutz to draw up the first solid lessons on mechanized warfare, which he summarized in a September

1932 report intended to help with the revision of the *F.u.G.* service manual.<sup>38</sup>

Lutz broke down mechanized warfare into three principles that eventually formed the basis of tank tactics for the Wehrmacht. The first of Lutz's principles was independence. Tanks, according to Lutz, should be used for independent missions that utilized their specialized attributes. Tank units were to be used for the *Schwerpunkt* only, as they were far too valuable to use solely for support missions. The second principle was mass. Tanks needed to be used in at least battalion sized groups, anything less jeopardized the possibility of a decisive victory. Lutz's final principle was surprise. Tank units were to attack suddenly on a broad front to splinter the enemy's defense. It was necessary for these units to operate in echelons that would attack deeply, with the possibility of the *Schwerpunkt* changing during the pursuit. If this occurred, the tank units would first destroy any targets or obstructions that posed a threat, and then return to their previous mission.<sup>39</sup>

Combined arms remained essential in Lutz's view on armored warfare. Lutz disputed the notion that antitank weapons rendered armor ineffective, but he did believe that an armored advance without supporting infantry, aircraft, and artillery was hopeless. The infantry played an especially important role in this combined arms team. Mechanized formations would be used to penetrate the enemy lines, and then supporting infantry would follow close behind, grabbing hold of the position and taking advantage of the enemy's panicked troops. The 1931-1932 exercises provided the theoretical foundation for the army's final maneuvers in the Weimar era. Lutz's exercises showed the first signs of the officer corps' theories taking form in armored warfare, and it is no stretch of the imagination to say his 1932 report marked the genesis of the famous German *Panzer* (armor) divisions.<sup>40</sup>

If it were possible to divide the German military experience in the Weimar era into two

periods, the developmental and the experimental, then the maneuvers of 1926 and 1932 would have to be their respective parallels. Like Seeckt's 1926 maneuver, the fall 1932 army maneuver was an amalgam of every military development since the army's rebirth, and can be described as no less than an epic display of Germany's interwar progress. Taking place on the Oder River and around Frankfurt, the exercise involved a rapid movement of Red forces (Polish) through an opening in the lines of Blue forces (German), which transpired simultaneously with the seizure of an Oder bridgehead by a motorized reconnaissance detachment (MRD). This was followed by a crossing of the Cavalry Corps, and a maneuver of the MRD toward the rear of the Blue army.<sup>41</sup> The Blue army, or 3rd infantry division, was under the command of Lieutenant General Karl Gerd von Rundstedt and consisted of the 7th, 8th, and 9th infantry regiments, as well as the 3rd artillery regiment. Lieutenant General Fedor von Bock, Major General von Fritsch, and Major General von Kleist led the Red forces, which consisted of the 1st and 2nd motorized cavalry divisions.

There were no less than thirty-five foreign attachés from fourteen different countries, including the Red Army's own armored theorist General Mikhail Tukhachevsky, enthusiastically observing the exercise. The maneuver had two chief objectives. The first concentrated on experimenting with the organization of infantry and cavalry divisions. This was the first time that infantry and cavalry units performed in close cooperation with a highly mobile motorized reconnaissance detachment. This MRD, comprised of an array of unique units, was a major divergence from previous maneuvers and was made an integral part of the operation. The major units of this detachment included a signal platoon, a platoon of armored cars, an anti-tank platoon, a bicycle company, a machine gun troop, and one cavalry troop.

The maneuver's second objective was to test the army's ability to move large groups of

troops across wide, rapidly flowing rivers.<sup>42</sup> Similar to the 1926 Group Command, this maneuver took place within the parameters of a given situation that each side adhered to, and maintained a warlike atmosphere from start to finish. A brief synopsis of the “Special Situations” is necessary to understand the general demands placed on the army. It was early in September 1932 and the Blue (German) territory had just been invaded by strong Red (Polish) forces in the eastern frontier. By mid-September two major battlefronts developed, separated by a salient created by the Oder and Warthe rivers. To the north in Silesia, Blue forces had lost the line of the Oder on September 18th and retreated toward the Bober River with the Red forces following in pursuit. The Blue north wing retreated from the direction of Neusal and redirected itself toward Raumburg on the Bober. The Blue 1st Field Army located to the south Pomerania, defended itself against the superior Red 1st Army. The area in the Oder-Warthe salient was clear of either army’s troops, with only frontier guards posted between the Unruhstadt and Netze frontiers, which were not “considered to have any military value.”<sup>43</sup>

The first day of operations saw the immediate positive effects of motorized troops on the army's mobility. Commander Bock’s Red cavalry corps used the MRD and its motorcycle rifle battalion south of Fürstenburg to quickly capture the west bank of the Oder River. The Blue forces were forced to blow up the Fürstenburg Bridge in order to prevent Bock’s troops from advancing further. Bock had, thanks to the excellent performance by the reconnaissance detachment, gained a clear picture of the Blue army, and decided it was possible to defeat Blue forces in the Oder-Warthe elbow before they could cross the river. General Bock commanded the Provisional Cavalry Corps to make a hard drive and outflank the Blue forces fighting on the Oder and erupt into their rear. This order to rapidly envelop the Blue forces and strike from a rear position is arguably the most mature form of Blitzkrieg tactics seen in any maneuver so

far.<sup>44</sup>

The units in this exercise consisted of multiple supporting arms, including several dummies of those not permitted by the treaty. The MRD, for instance, performed its first operational maneuver with a diverse collection of units which included an armored car platoon with four cars; an anti-tank platoon with two 37 mm guns; a bicycle company; a machine gun troop with four heavy guns; and a mounted signal platoon.<sup>45</sup> Of the ersatz equipment involved, perhaps the most interesting were the tanks and armored cars made of tin, and the wooden anti-tank guns (of which only the barrel was wooden, the rest of the weapon was geared for service) that served throughout the entire exercise. The inclusion of such equipment enabled the German army to maneuver according to the limitations of a modern army, despite its lack of modern equipment. The radio, a commonly neglected addition to combined arms team, also played a key role in the maneuvers, allowing the officers to issue even quicker verbal commands and update each other on the situations at hand.<sup>46</sup>

U.S. attaché Colonel Jacob Wuest witnessed the maneuver and described it as close to wartime conditions as was possible for a peacetime army.<sup>47</sup> Wuest wrote that the operations continued 24 hours a day, from the beginning to the end of the exercise, and did not spare troops or animals the hardships of wartime conditions. Furthermore, in only three days the troops marched some 300 kilometers and “upon conclusion of the maneuvers” there had been “no unusual signs of fatigue either among officers or men.” He described foot soldiers as being far from manufactured units geared for war, and instead called them “hand worked products of carefully selected stock.” Wuest described the German officer corps in the maneuver as “a class of careful students of their professions which they follow with a seriousness not known in our Army.”<sup>48</sup>

Wuest noticed that the lower ranking officers showed a particular resolution. He asserted in his intelligence report that non-commissioned officers (NCOs) “conducted their detachments with an assurance that would have done credit to higher ranks, and gave sufficient evidence that Germany will not be lacking in platoon and company leaders when she needed them.” This remark echoes the epiphany Conger had in 1925, and Wuest took it further still, stating that this was “the goal of the present system - to make every soldier a potential leader in war.”<sup>49</sup> The 1932 maneuver unveiled a major accomplishment of the Reichswehr – the creation of a well-crafted blueprint for maneuver warfare, manifested into a physical reality. The collective efforts of the German officer corps left the Reichswehr the most educated and trained army in the world; a professional army lacking only in material and manpower. This was a risky readjustment that, according to Wuest, Germany had already decided to make – “with or without the consent of the rest of the world.”<sup>50</sup>

When Hitler seized power in 1933, he inherited the most practiced army in Europe. There was only one revision of 1923 *F.u.G.* service manual and it was published in 1933, two years before the army even began Hitler’s colossal rearmament program. Entitled *Truppenführung* (Troop Leadership), the new service manual was an obvious continuation of the *F.u.G.*, with many of its passages lifted almost verbatim from the 1923 service manual. The author of this revision was the newly appointed chief of the *Truppenamt*, General Ludwig Beck, who began the revision in 1931, about the same time Lutz began his motorized exercises. Unsurprisingly the major changes in the manual came in the areas of motorization and armor, but other than that *Troop Leadership* read like an eloquently paraphrased version of the officer corps’ *F.u.G.*<sup>51</sup>

The manual continued to outline the use of combined arms with artillery, infantry, tanks,

and aircraft, as the keystone elements of German warfare. Independent leadership remained a fundamental necessity, and the manual still valued elastic thinking and flexibility in command as crucial characteristics of German officers. The emphasis on outflanking and attacking in the enemy's rear, as well as pursuing the enemy forces after their defeat became even more important now that technology actually allowed such daring maneuvers. Although the manual did not yet outline Panzer divisions, it discussed "armored commands" consisting of motorized infantry and regiments of tanks. The concepts of decisive victory (*Entscheidungsschlacht*), point of decision (*Schwerpunkt*) and battle of annihilation (*Vernichtungsschlacht*) all remained important aspects of German warfare.<sup>52</sup>

Indeed, the doctrine that had been developed during the interwar era saw minimal revisions under General Beck, and the core principles of the Reichswehr's *F.u.G.* remained the foundation of German army tactics until 1945. The army continued its tradition of wargames, field exercises, and maneuvers, but the "content of these exercises was virtually indistinguishable from what had gone on before." The German army during the Nazi era "did not break any radically new ground in training, doctrine, or military education," but it did translate as fluidly as possible into an army fivefold its former size. The professional German micro-army expanded into a juggernaut, going from the 100,000 soldiers in 1933 to 3,737,104 by the time World War II began. Simultaneously, the army underwent a rearmament program starting in 1935 that moved beyond the officer corps' wildest dreams, and within several years the army received all of the instruments of destruction previously restricted to it by the Versailles treaty.<sup>53</sup> Renamed the Wehrmacht (Defense Force), the German army commenced its first full scale operations on September 1, 1939, at 4:45 a.m., and a Blitzkrieg was born.

The attack on Poland, coded Case White (*Fall Weiss*), aimed at destroying the Polish

army west of the Weichsel and preventing the development of Polish defenses by utilizing the outer wings of Army Group North and South. Generals Bock and Rundstedt from the 1932 fall maneuver reappeared as the commanders of the two German Army Groups, commanding a total of five mechanized armies. General Bock commanded Army Group North, comprised of the 14th, 10th, and 8th armies. Army Group South, led by General Rundstedt, had two armies; the 4th and the 3rd.<sup>54</sup> The campaign opened with the five armies diverging from each other and entered on two main fronts; the 4th, 8th (east of Breslau) and 10th (Oppeln toward Warthe) armies driving from Silesia formed the first front; the 3rd and 14th armies entering from East Prussia and Slovakia formed the second. The two fronts formed a giant pincer attack, driving around the Polish forces on the Bzura River and then linking up, with almost the entire Polish army ensnared in a massive *Kesselschlacht*.

The Wehrmacht killed 65,000 Polish soldiers in action, wounded 144,000, and took 587,000 prisoners of war. The German staff called this the "greatest enveloping campaign known in world history." Panzer divisions ripped through enemy lines at Tomaszow and reached the capital of Warsaw by September 8th. The Germans dubbed the operation the "Eighteen Days' Campaign" because by September 16 the only thing still in Polish hands was the capital. But even Warsaw gave way under the weight of German air strikes by September 27th, and by September 29th both the fortresses of Warsaw and Modlin surrendered. Poland was conquered in less than a month, and the only evidence left of an organized Polish army laid strewn across the countryside in heaps of smoking metal and fallen soldiers.<sup>55</sup>

U.S. Lt. Colonel Sumner Waite wrote an after-action analysis of the German operations in Poland. Col. Waite described the offensive as a revolution in military tactics, stating that "armored units, motorized units and aviation attacked in mass for the first time, all acting in

close liaison." He described the five armies' assault as a "disconnected penetration like the teeth of a fork, rather than a breakthrough of the entire defensive front." The flanks of the army "were always exposed to powerful and fast envelopment movements by light divisions or motorized elements supported by aviation" and antiaircraft guns. After the initial breakthrough, about 400-500 tanks appeared in several echelons of light and medium armor. The infantry "followed the tanks in successive waves and was employed to mop up and occupy the terrain." During the exploitation "armored units avoided combat and were pushed forward as far and as rapidly as possible, breaking up enemy formations, disrupting communications, and destroying" reserve depots and personnel.<sup>56</sup>

Waite believed there to be five major principles of German warfare. The first of these was to carefully prepare zones of attack through meticulous intelligence gathering. Second, the army would delimit these zones and isolate them in order to carry out flanking operations. Once these two things were accomplished, the army penetrated deep into the enemy's rear through the use of surprise flanking maneuvers and then engaged in combined arms attacks. The fourth principle required the German forces to avoid all centers of resistance whenever possible. The fifth and final major principle was to disrupt communication and liaison by using mobile formations to penetrate deeply, as quickly and as far as possible, regardless of the rest of the army's advance.<sup>57</sup> Waite reflected back on World War I, remarking that mass infantry attacks were no longer *de rigueur* for the German army. The employment methods of German combined arms forces were based on well-established doctrine Waite concluded, "thoroughly studied in time of peace."<sup>58</sup>

Col. Waite's statement could not have rung truer for any other army. The Reichswehr's officers and soldiers participated in the largest, most complex and demanding maneuvers

engaged in by any army during the interwar era. Starting as early as 1921 under Seeckt, the army grew by leaps and bounds every year in the areas of combined arms tactics, quality of leadership, physical conditioning, and overall doctrinal execution. The 1939 war on Poland was nothing new for the German army, as it had been practicing for this engagement for almost two decades. The Inter-Allied Control Commission had neutered the German army's ability to wage a war, but it could do nothing to stop the officer corps from preparing for one. General Seeckt captured the German spirit of perseverance best in his memoirs, explaining that even though the power of modern matériel may always be superior to the "living, human mass," it could never be "superior to the living and immortal human mind."<sup>59</sup> The Reichswehr's maneuvers between 1921 and 1932 gave the German troops all the mental equipment necessary to prepare them for another world war. Unfortunately, it was under the leadership of a ruthless tyrant that the German army received the arsenal necessary to fight it.

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- <sup>15</sup> Citino, *The Path to Blitzkrieg*, 134.
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- <sup>17</sup> Citino, *The Path to Blitzkrieg*, 135-136.
- <sup>18</sup> Group Command maneuvers are both in Conger, *Fall Maneuvers, 1926*, USMI, XIV, 664-771. For first Group Command see, Major Mclean, *Maneuvers of the 1st Group Command (1<sup>st</sup> Army Corps) North of Harz Mountains and West of Elbe River, September 13th to 15th*, USMI, XIV, 666-711.
- <sup>19</sup> Major Mclean, *Maneuvers of the 1st Group Command*, USMI, XIV, 703.
- <sup>20</sup> Major Mclean, *Maneuvers of the 1st Group Command*, USMI, XIV, 704.
- <sup>21</sup> Major Mclean, *Maneuvers of the 1st Group Command*, USMI, XIV, 706.
- <sup>22</sup> Major Mclean, *Maneuvers of the 1st Group Command*, USMI, XIV, 706.

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- <sup>23</sup> Major Mclean, *Maneuvers of the 1st Group Command*, USMI, XIV, 705-709.
- <sup>24</sup> Major Mclean, *Maneuvers of the 1st Group Command*, USMI, XIV, 705-706.
- <sup>25</sup> Major Mclean, *Maneuvers of the 1st Group Command*, USMI, XIV, 706.
- <sup>26</sup> Citino, *The Path to Blitzkrieg*, 136-137; *Maneuvers of the 1<sup>st</sup> Group Command*, USMI, XIV, 706.
- <sup>27</sup> Citino, *The Path to Blitzkrieg*, 137-138.
- <sup>28</sup> Ibid, 137-138.
- <sup>29</sup> Ibid, 136-137.
- <sup>30</sup> Ibid, 140. Joachim's essay, "Gedanken über den Krieg der Zukunft" ("Thoughts About the War of the Future") is located at the *Bundesarchiv-Militärarchiv* N 5/10.
- <sup>31</sup> Ibid, 140.
- <sup>32</sup> Ibid, 145.
- <sup>33</sup> Ibid, 147-148.
- <sup>34</sup> Citino, *The Path to Blitzkrieg*, 147-148. For more on the turbulent nature of the Reichswehr's politicization see, F.L. Carsten, *The Reichswehr and Politics 1918-1933*, (London: Oxford University Press, 1996), 325-328.
- <sup>35</sup> Gains Post Jr., *The Civil Military Fabric of Weimar Foreign Policy* (Princeton, N.J.: Princeton University Press, 1973), 165 – 202.
- <sup>36</sup> See Citino, *The Path to Blitzkrieg*, 148.
- <sup>37</sup> Citino, *The Path to Blitzkrieg*, 148.
- <sup>38</sup> Citino, *The Evolution of Blitzkrieg Tactics: Germany Defends itself Against Poland, 1918-1933* (Westport, CT: Greenwood Press, 1987), 167-191; *The Path to Blitzkrieg*, 202.
- <sup>39</sup> Citino, *The Evolution of Blitzkrieg Tactics*, 202-203.
- <sup>40</sup> Citino, *The Path to Blitzkrieg*, 202-203.
- <sup>41</sup> Lieutenant Colonel Jacob Wuest, *The German Maneuvers, September 19-22, 1932*, 25 November 1932, USMI, XIX, 851.
- <sup>42</sup> Wuest, *The German Maneuvers, September 19-22, 1932*, USMI, XIX, 847 - 851.
- <sup>43</sup> Wuest, *The German Maneuvers, September 19-22, 1932*, USMI, XIX, 850-859.
- <sup>44</sup> Citino, *The Path to Blitzkrieg*, 215.
- <sup>45</sup> Citino, *The Path to Blitzkrieg*, 215.
- <sup>46</sup> Wuest, *The German Maneuvers, September 19-22, 1932*, USMI, XIX, 850-865.
- <sup>47</sup> Wuest, *The German Maneuvers, September 19-22, 1932*, USMI, XIX, 847-850.

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- <sup>48</sup> Wuest, *The German Maneuvers, September 19-22, 1932*, USMI, XIX, 858, 859.
- <sup>49</sup> Wuest, *The German Maneuvers, September 19-22, 1932*, USMI, XIX, 858-859.
- <sup>50</sup> Wuest, *The German Maneuvers, September 19-22, 1932*, USMI, XIX, 849-850.
- <sup>51</sup> Corum, *The Roots of Blitzkrieg*, (Lawrence, Kansas: University of Kansas Press, 1994), 199-200.
- <sup>52</sup> Corum, *The Roots of Blitzkrieg*, 200.
- <sup>53</sup> Corum, *The Roots of Blitzkrieg*, 200.
- <sup>54</sup> Colonel B.R. Perton, *The German Campaign in Poland*, 2 December 1939, USMI, XXII, 788-800; An excellent explanation of these operations in Poland see, Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence, Kansas: University of Kansas Press, 2004), 28-30.
- <sup>55</sup> Colonel B.R. Perton, *The German Campaign in Poland*, USMI, XXII, 800-801.
- <sup>56</sup> Lieutenant Colonel Sumner Waite, *German Tactics in Poland: Use of Armored Forces*, 22 November, USMI, XXII, 726.
- <sup>57</sup> Lieutenant Colonel Sumner Waite, *German Tactics in Poland: Use of Armored Forces*, 22 November 1939, XXII, 727-728.
- <sup>58</sup> Lieutenant Colonel Sumner Waite, *Employment of German Armored Forces in Poland*, 15 November 1939, USMI, XXII, 720-721.
- <sup>59</sup> Von Seeckt, *Thoughts of a Soldier*, 59.

# CONCLUSION

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The trail of destruction the Wehrmacht left in Poland beginning in September 1939, made The Reichswehr's achievements in the Weimar era offer an interesting case study in military innovation. The interwar German army's capstone service manuals, the 1923 *F.u.G.* and the 1933 *Truppenführung*, were unbelievably accurate in predicting the future landscape of modern warfare, and inarguably provided the Wehrmacht with the most devastating tactics in the opening years of World War II. The Germans developed the first effective combined arms doctrine which embodied a lethal synergy between mass and mechanization, and they cultivated this doctrine without access to any of the weapons that essentially defined modern war – tanks, airplanes, and artillery. The Treaty of Versailles gutted the German army in 1919, but ironically it was the treaty's restrictions that provided the conditions necessary for the German army to experience a military renaissance.

The Versailles treaty placed military genius General Hans von Seeckt in charge of the army in November 1919. An experienced general and superlatively intelligent leader, Seeckt successfully consolidated the remnants of the once grand Imperial force into a single national army and guided it through turbulent post-World War reconstruction. Seeckt built a professional micro-army of leaders by exploiting the loopholes in the Versailles treaty to the fullest degree, filling the 100,000 man army with tens of thousands of non-commissioned officers and training them to operate at the rank of a junior officer.

Only one week after becoming Chief of Army Command, Seeckt established fifty-seven committees, comprised of officers of all grades, to conduct a study on the tactics, regulations,

equipment, and doctrine used in World War I. By the mid 1920's the Reichswehr had over 400 staff officers working to analyze and compile information for doctrinal revision, which became the largest collaborative military reform project of any interwar army. With the blood stained images of trench battles fresh in their memory, the Reichswehr officer corps had no problem churning out heaps of literature with theories on modern war. Journals like *Militärwochenblatt* and *Wissen und Wehr* became the army's medium for change, publishing radically progressive articles on everything from mass paratroop operations to large-scale tank operations. The brilliant 1923 *F.u.G.* was the final product of the officer corps' studies, and it spread like wildfire throughout army's reformed educational system.

Similar to army organization, Seeckt put the army's officer education system through a major reform process. His goal from the beginning was to create an "army of leaders" (*Führerheer*) by building upon the army's meritocratic values and increasing emphasis on scholarly military study. The Reichswehr raised officer candidate entrance qualifications considerably, requiring aspirants to demonstrate high levels of proficiency in modern languages, biology, health, physics, law and several other advanced subject areas. Furthermore, the Reichswehr required all officer candidates to take the general staff exam, and extended the officer training program from one to four years of study. U.S. attaché Lieutenant A.L. Conger saw firsthand the comprehensive nature of the German officer training program when he visited the Third Divisional Officer Schools in 1926. Conger's intelligence report warned U.S. government officials of a highly capable, tactically adept German army. He even went so far as to call a Second World War inevitable if the U.S. waited long enough for a German leader to come to the fore that, through some means or another, managed to rearm the motherland.

The Reichswehr operated on the cutting edge of not only educational and tactical development, but also peacetime training. The age-old tradition of German field maneuvers reached new heights under Generals Hans von Seeckt and Wilhelm Groener. These massive annual exercises tested the troops' ability to operate under warlike conditions by postulating realistic battle situations. Offensive and defensive situations were practiced meticulously using as many as ten German divisions, and took into consideration all aspects of modern technology by substituting restricted weapons and hardware with various materials or "dummy" versions. As the Reichswehr matured and changes in army leadership occurred, the maneuvers responded by taking into account an even wider range of wartime possibilities. These factors included everything from the employment of sanitation units and bridge building strategies to the transportation of food supplies and the feeding of entire army groups.

Even in the Weimar's twilight years, when the German government began to crumble, the Reichswehr continued to make substantial progress. From 1927 through 1932 the Reichswehr held the largest, most comprehensive field maneuvers yet, which reached a boiling point with the impressive 1932 fall maneuver. The 1932 maneuver acted as a synthesis of nearly every major military development in the Weimar period, combining the theoretical and educational progress made in the army's early years with the lessons learned from the past maneuvers. The army's performance in flanking, independent command, motorized reconnaissance, and combined arms left no question that a storm had been brewing within the interwar German army for several years.

The release of the revised service manual in 1933, *Truppenführung*, marked the last major tactical development before the Wehrmacht tore through Poland in 1939. Enriched with the knowledge of Germany's leading tank specialist Oswald Lutz, the 1933 *Truppenführung*

offered the first solid guidelines for employing armored units in war. When Hitler came to power he inherited the most progressive, well educated, and best trained combat fighting force in the world. Even the expansion of the Reichswehr into a mass army was preplanned by the interwar officer corps. Unsurprisingly, the Wehrmacht experienced very few problems when it came time to grow into a military behemoth.

The rise of Hitler to power brought new faces into the German army, advanced weaponry, and a new enthusiasm for war that overshadowed all of the Allied nations combined. However, the keystone elements of the German army went unchanged in the Nazi period. The military tactics finalized in 1933's *Truppenführung* went untouched until the end of World War II. The army education system saw no major readjustments or changes after the Seeckt years, and there were no maneuvers after the Weimar era that came close to the groundbreaking exercises held during the late Seeckt and Groener years. Most importantly, the brightest soldiers and officers in the Reichswehr – the brains behind Blitzkrieg – became the core leadership within the Wehrmacht, navigating a generation of German soldiers through the most daring, violent, and astonishing military victories of the century.