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Cover image: A German map showing the operation of the German "Einsatzgruppen" of the SS in the Soviet Union in 1941. ("Memnon335bc" / CC BY-SA 3.0)

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The German Blitzkrieg Against the USSR, 1941

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Table of Contents

Abstract	۷i
Introduction	. 1
Ideology, Political Goals and Military Strategy of Blitzkrieg in 1941	.3
Hitler's Military-Strategic Plans Vis-à-Vis the USSR 1	11
Hitler's Disinformation Campaign Against Stalin and the Red Army Command1	.8
Management, Operational Art, Tactics, Organization, Technology2	<u>'</u> 4
Intelligence and Subversive Activities in the Interests of Blitzkrieg3	37
Implementation of Blitzkrieg Plans in Summer and Autumn of 19414	15

Abstract

Seventy-five years ago, on June 22, 1941, Nazi Germany attacked the Soviet Union, betting on a brief war with the firmest of goals, a type of war that came to be known as blitzkrieg.

By June 1941 the German Wehrmacht had evolved into one of the most powerful and effective military machines in history. The German armed forces had refined their blitzkrieg techniques to what seemed like perfection during their campaign against Poland in 1939 and their rout of the French and their allies in 1940.

Germany's plans to attack the USSR were heavily influenced by Adolf Hitler's racist, anti-Semitic and anti-Bolshevik postulates, which he had largely formulated much earlier in his agenda-setting book *Mein Kampf*. Joseph Stalin failed to fully take into account the highly ideological nature of Hitler's political and military-strategic thinking; this led to mistakes in interpreting the Third Reich's plans vis-a-vis the Soviet Union.

Making sure that the German attack would catch the Soviets by surprise on a tactical, operational and even strategic level was one of the most important components of planning the blitzkrieg. To that end Berlin conducted an unprecedented disinformation campaign that proved largely successful.

The enormous might of Hitler's Wehrmacht in 1941 lay in the quality of its personnel, its optimized organizational decisions (regarding operations in tank groups, air fleets and other formations), its top-notch operational art and tactics and in the fact that many of its weapons systems and military technologies were well matched to the blitzkrieg's objectives.

The summer and autumn of 1941 saw the Wehrmacht deal a number of very heavy defeats to the Red Army. It took extraordinary efforts on the part of the Soviet armed forces and the entire country to stop the enemy and then inflict a series of defeats that played a crucial role in Nazi Germany's decision to surrender in May 1945.

Hitler's Wehrmacht suffered its first major defeat outside Moscow in December 1941. This put an end to the blitzkrieg as a phenomenon of that period of history. However, three and a half more years of bloody battles lay ahead as part of World War II, which saw the Soviet Union, the United States, the United Kingdom, China and France act as allies against a most dangerous common enemy.



atzgruppen zei und des der SS in der

> Vormarsch eines Einsatzkommandos

> Vormarsch eines Sonderkommandos

Hauptquartier einer Einsatzgruppe

Weitestes Vordringen deutscher Truppen 1941

Begrenzung der Einsatzräume





Introduction

By the time Germany attacked the Soviet Union on June 22, 1941, the overwhelming majority of the components of the Nazi war machine had reached an extraordinary level of development and cohesion. The fighting spirit of the Wehrmacht units was very high after Nazi Germany had swiftly defeated France and its allies in May and June of 1940. Adolf Hitler had established his authority as a military leader in the eyes of the majority of German commanders. When preparing for war with the USSR in the wake of France's defeat, the Wehrmacht's top brass did harbor what could be described as traditional reservations about fighting a war on two fronts, according to German historian Manfred Funke. But these reservations were not pronounced and were rather fragmentary.

By June 1941, Nazi Germany boasted a thoroughly planned organization of forces. The system of command and control was well organized at all levels. The German troops' main combat and auxiliary equipment was largely consistent with the objectives of the pending blitzkrieg. The Wehrmacht's personnel were highly professional and appeared to have no equals compared with other armed forces of the time. A significant part of the Wehrmacht's personnel had mastered what I call the fine technologies of war (both at a tactical and an operational level), in which outstanding commanders of the past like Frederick the Great, Alexander Suvorov and Napoleon also excelled.

The Wehrmacht had previously acquired rich combat experience in conducting new types of military campaigns. These campaigns were distinguished by high mobility, massive use of varied military equipment, elaborate logistical support and other features. Generally speaking, the Wehrmacht had become an exceptionally dangerous adversary by June 1941.

Manfred Funke, "Gitler i Vehrmacht" [Hitler and Wehrmacht], in Wolfgang Michalka and Yevgeny Kulkov, eds., Vtoraya Mirovaya Voyna: Diskussii. Osnovnyye Tendentsii. Rezul'taty Issledovani [World War II: Discussions. Major trends. Results] (Moscow: Ves Mir, 1997), pp. 243, 247–248.

Germany's industry and its armed forces were generally characterized by a very high level of technical and scientific knowledge. One important factor was the high level of education among the German population, including technical know-how.

In comparison, the Soviet Union lagged significantly behind Germany at the time in terms of scientific and technological development as well as general levels of education, despite all the achievements of socialist modernization in the late 1920s, 1930s and early 1940s.² When assessing the achievements of the Soviet Union of that period we must keep in mind the huge costs imposed on the country by both industrialization and the collectivization of agriculture, including the large-scale losses of valuable human capital that occurred in the course of constructing the industrial centers in the Donbass and the Urals.

The Soviet Union had to make extraordinary, inordinate efforts to stop the victorious advance of the Wehrmacht in 1941 and disrupt the implementation of the Germans' Operation Barbarossa. The German blitzkrieg, coupled with numerous errors committed by the Soviet Communist Party and state leadership and the failure to solve problems the Soviet armed forces had been facing in the prewar period, pushed the Soviet Union to the brink of a catastrophe in 1941.

Until recently, the Wehrmacht's art of war has been underestimated and under-researched in Soviet and Russian scholarship, especially in comparison to studies of Soviet military strategy during the war of 1941 to 1945, known in Russian as the Great Patriotic War. This author believes there is something of a dearth of such studies in the West as well, not to mention in Chinese or Indian research.

When it came to Nazi Germany's military affairs, their operational-strategic and military-technical aspects were inextricably linked with their ideological, political and psychological aspects. Given these links and taking into account the limitations of the article format, the author has decided to focus on the following issues: the ideology, political objectives and military strategy of the German blitzkrieg on the Eastern Front in

² Lev Lopukhovsky and Boris Kavalerchik, *Iyun' 1941-go. Zaprogrammirovannoye Porazheniye* [June 1941. Programmed defeat] (Moscow: Yauza and EKSMO, 2010), p. 97.

1941; Hitler's military-strategic plans against the USSR; the German disinformation campaign against Soviet leader Joseph Stalin and Red Army commanders; command and control; operational art; tactics, organization and equipment employed by the Wehrmacht; intelligence and subversive activities in the interest of the blitzkrieg; and implementation of the blitzkrieg plans in the summer and fall of 1941.

I will pay particular attention to the analysis of Hitler's highly ideological political views and their role in the formation of German military strategy, as well as the reasons why Stalin's perception of all of this was wrong. In connection, I will note the differences in the paradigms of Hitler's and Stalin's thinking on the eve of the German attack on June 22, 1941.

I would also note that the studies of this topic that have already been conducted underestimate the role of the German disinformation campaign and its impact on the supreme leadership of the Soviet Union.

Ideology, Political Goals and Military Strategy of Blitzkrieg in 1941

Relations in the Third Reich's triangle of ideology, politics and military strategy were such that the ideology—racist, anti-Semitic and anti-Soviet (anti-Bolshevik) —all but dominated German decision-making in the sphere of military strategy.

The policy guidelines defining the military-strategic options of the planned blitzkrieg against the USSR were based on the ideology outlined by Hitler primarily in his agenda-setting book *Mein Kampf*'s chapter on "Eastern Orientation, or Eastern Policy." Hitler demonstrated surprising persistence and consistency in following this ideology in political and military affairs throughout his entire life.

³ Adolf Hitler, Mein Kampf, Vol. X (Riga: Gramatu Draugs, 2000), pp. 551–575.

Hitler's fundamental views, professed in *Mein Kampf*, were also expressed in his follow-up volume called *The Second Book*, published in 1928. There, Hitler wrote that the Slavic race was supposedly incapable of building its own state. The book professed the same racist, anti-Semitic ideas as *Mein Kampf*.

In his writings Hitler claimed that the new *lebensraum* (living space) for Germans could be located "only in the East." And only this eastern *lebensraum* could give Germany the status of a "world power" capable of leading the struggle for world domination.⁴

Hitler repeatedly made these views known when addressing various audiences behind closed doors. He told officers of the Reichswehr on February 3, 1933, that a "new living space" needs to be captured in the east and subjected to "ruthless Germanization." In two speeches that he delivered to deputies of the National Socialist German Workers' Party (NSDAP)6 in the Reichstag shortly after the Nazis came to power, Hitler declared that he favored a ruthless struggle against "Jewish-Internationalist Moscow Bolshevism."

As contemporary German studies demonstrate, Hitler's racial and ideological guidelines were shared not only by the NSDAP staff and the Nazi administration of the Third Reich (including the would-be occupational administration of Soviet territories that had been set up in advance), but also by a significant part of the Wehrmacht top brass.⁸

⁴ Gerd Ueberschaer, "Pakt's Satanoy Radi Izgnaniya D'yavola. Germano-Sovetskiy Dogovor O Nena-padenii I Voyennyye Namereniya Gitlera v Otnoshenii SSSR" [Pact with the Satan for the sake of exorcising the devil: The German-Soviet nonaggression pact and Hitler's military intentions toward the Soviet Union], in Michalka and Kulkov, Vtoraya Mirovaya Voyna, p. 447.

K.-F. Ruffman, "Klyuchevyye Daty V Germano-Sovetskikh Otnosheniyakh S Nachala Vtoroy Mirovoy Voyny" [Key dates in the German-Soviet relations from the beginning of the Second World War], in Daniil Proektor, Oleg Prudkov, Sergey Sluch, Yechen Lozner, and Hans-Adolf Yakobsen, eds., Rossiya I Germaniya V Gody Voyny I Mira (1941–1995) [Russia and Germany in years of war and peace (1941–1995)] (Moscow: Izdatelstvo "Geya", 1995), pp. 17–18.

⁶ NSDAP is the German abbreviation for Nationalsozialistische Deutsche Arbeiterpartei.

⁷ Ueberschaer, "Pakt's Satanoy Radi Izgnaniya D'yavola." p. 448; also see Wolfram Wette, "Obraz Vraga: Rasistskiye Elementy v Nemetskoy Propagande protiv Sovetskogo Soyuza" [The image of the enemy: the racist elements in the German propaganda against the Soviet Union], in Mikhail Chernov, ed., Vtoraya Mirovaya Voyna. Vzglyad Iz Germanii [The Second World War. view from Germany] (Moscow: Yauza, in conjunction with ESCMO, 2005), p. 96.

⁸ See, for example, Manfred Messerschmitt, "Vermakht. Vostochnaya Kampaniya i Traditsii" [Wehrmacht. Eastern Campaign and traditions], in Michalka and Kulkov, Vtoraya Mirovaya Voyna, p. 351. Also see Rolf Hobson, "Blitzkrieg. The Revolution in Military Affairs and Defense Intellectuals," Journal of Strategic Studies, Vol. 33, No. 4 (2010), p. 633.

Studies of various archival materials and memoirs of Stalin's contemporaries allow me to conclude that it is highly probable that the Soviet leader underestimated the extent to which Hitler had been obsessed with these ideas, as well as the powerful impact that ideological motives had on Hitler's political plans vis-à-vis the USSR and on his strategic views of the Soviet Union. Accordingly, Stalin underestimated the ultra-radical nature of Hitler's views, which presupposed a war of extermination and enslavement of the Soviet people.

When Stalin discussed Soviet-German relations and Hitler's possible plans in a narrow circle of confidants, his thinking predominantly reflected the geopolitical coordinate system shared by the overwhelming majority of state and political leaders in Europe in that period of history.

Prominent Soviet military commander Georgy Zhukov recalled: "I remember well Stalin's response to a briefing on suspicious activities of the German troops: 'Hitler and his generals are not such fools to fight on two fronts at the same time, which was what broke their neck in World War I. . . . Hitler would not have the strength to fight on two fronts, and Hitler would not attempt such a risky adventure."

So far, no direct evidence has been found that Stalin was well acquainted with the ideas Hitler first outlined in *Mein Kampf* and then developed into plans related to the future of the USSR and its people. However, there is evidence that Stalin was at least aware of some of the anti-Russian and anti-Bolshevik views expressed by Hitler. This is evident from the fact that one of the prominent figures of the Communist Party, Nikolai Bukharin, extensively quoted relevant lines from *Mein Kampf* in Stalin's presence during the 17th Congress of the All-Union Communist Party of Bolsheviks in March 1935. The official head of the Soviet government, Vyacheslav Molotov, also quoted this book at the Seventh Congress of Soviets of the USSR that same year. Nevertheless, there is a high probability that Stalin saw Hitler's statements as propaganda rhetoric rather than a foreign-policy doctrine that would have a practical application.

⁹ Leonid Reshin and Vladimir Naumov, eds., 1941 God. Sbornik Dokumentov [1941. Collection of documents], Vol. X, (Moscow: Mezhdunarodnyy Fond "Demokratiya", 1998), p. 500.

Hitler and his retinue believed that the Soviet state (which they called "a clay colossus without a head") would collapse as a result of large-scale military defeats. Nazi minister of propaganda Joseph Goebbels wrote in his diary on June 16, 1941, that "the Fuhrer expects that all this action will require about four months, but I think it will be even less than that. Bolshevism will collapse like a house of cards. We are on the eve of a victorious campaign that would be equal to none." These were the personal views of Hitler and his closest retinue based on their contempt for the Slavs, whom they saw as "subhuman" (*untermenschen*), as well as on hatred for the Bolsheviks and the Jews who had allegedly seized power in the USSR.

When planning the blitzkrieg against the Soviet Union, Hitler largely assumed that the commanding staff of the Workers' and Peasants' Red Army (RKKA) and Red Navy (RKKF) was weak and that this weakness was clearly demonstrated during the Soviet-Finnish War from November 1939 to March 1940. He believed the Red Army had been weakened by Stalin's repressions in 1937 and 1938, thinking it would need another several years to recover.

Hitler's calculations of the damage these repressions had done to the combat capabilities of the Soviet Army and Navy were not unfounded. Repressions against senior- and medium-level commanders had reached an enormous scale in 1937 and 1938. This was demonstrated in particular by the fact that 78 of the 85 members of the Military Council of the People's Commissariat of Defense of the USSR were subjected to repressions, and 68 of these 78 commanders were executed (including three of the first five marshals of the Soviet Union, Mikhail Tukhachevsky, Alexander Yegorov and Vasily Blucher). Many dozens of senior commanders and commanders of armies and fleets, as well as thousands of lower-level commanders, including those who knew the would-be enemy, Hitler's Wehrmacht, perished in the repressions.

Joseph Goebbels, "Pod Nashimi Znamenami Nas Zhdet Pobeda. Vyderzhki Iz Dnevnikov (May-Nachalo Iyulya 1941 g.)" [Victory awaits us under our banners. Excerpts from the diaries (May-Early July 1941)], in G. Ya. Rudoy, ed., Otkroveniya i Priznaniya. Natsistskaya Verkhushka o Voyne "Tret'yego Reykha" Protiv SSSR. Sekretnyye rechi. Dnevniki. Vospominaniya [Revelations and confessions. Nazi top brass on the Third Reich's war against the USSR. Secret speeches. Diaries. Memories], (Smolensk: Rusich, 2000), p. 307.

¹¹ Vadim Pervyshin, Stalin i Velikaya Otechestvennaya Voyna [Stalin and the Great Patriotic War] (Moscow: Kompaniya Sputnik+, 2004), p. 135.

These repressions led to multifaceted consequences, affecting the morale and psychological climate in the Soviet armed forces and lowering the quality of the intellectual component of military affairs in the USSR, among other things.¹²

The repressions inflicted serious damage on Soviet military and political intelligence (especially strategic intelligence), which lost many qualified officers who had worked in the central staff and in stations abroad.¹³

The pogroms perpetrated by Stalin's repressive apparatus in the Soviet intelligence agencies had a particularly negative impact on the analytical capabilities of these agencies, dramatically reducing their ability to identify and weed out disinformation. The same went for the diplomatic service of the Soviet Foreign Ministry, which was hit by severe repressions during those years.¹⁴

Had there been no repressions of 1937, "the war of 1941 might have not happened at all," according to Alexander Vasilevsky, who served as chief of the General Staff of the Red Army during the Great Patriotic War.¹⁵ Vasilevsky also noted that "Hitler's assessment of the extent to which our military

See Dmitry Volkogonov, Stalin. Politicheskiy Portret [Stalin. Political portrait], Vol. II, 3rd edition (Moscow: Izdatel'stvo Novosti, 1992), pp. 51–57. See also: Boris Sokolov, Mikhail Tukhachevskiy: Zhizn' i Smert' "Krasnogo Marshala" [Mikhail Tukhachevsky: life and death of the "Red Marshal"] (Smolensk: Rusich, 1999), pp. 379–389; Vitaliy Rapoport and Yuri Geller, Izmena Rodine [Betrayal of the motherland] (Moscow: RIK "Strelets", 1995), pp. 225–338; Leonid Mlechin, Iosif Stalin, Yego Marshaly i Generaly [Joseph Stalin, his marshals and generals] (Moscow: Tsentrpoligraf, 2004), pp. 150–214; Nikolay Cherushev, 1937: Elita Krasnoy Armii na Golgofe [Elite of the Red Army at Calvary] (Moscow: Veche with "Veche 2000", 2003); Anatoly Muranov i Vyacheslav Zvyagintsev, Dos'ye Na Marshala. Iz Istorii Zakrytykh Sudebnykh Protsessov [Marshal's dossier. From history of closed trials] (Moscow: Izdatel'stvo "Andreyevskiy Flag", 1996); and Andrei Kokoshin, Strategicheskoye Upravleniye: Teoriya, Istoricheskiy Opyt, Sravnitel'nyy Analiz, Zadachi Dlya Rossii [Strategic management: theory, historical experience, comparative analysis, tasks for Russia] (Moscow: ROSSPEN, 2003).

Vitaliy Pavlov, Tragediya Sovetskoy Razvedki [The Tragedy of the Soviet Intelligence] (Moscow: Tsentrpoligraf, 2000), pp. 91–135, 336–392; Mikhail Mil'shteyn, Skvoz' Gody Voyny i Nishchety. Vospominaniya Voyennogo Razvedchika [Through the years of war and poverty. Memories of a military intelligence officer] (Moscow: ITAR-TASS, 2000), pp. 51–58; Aleksandr Kolpakidi and Dmitry Prokhorov, Imperiya GRU. Ocherk Istorii Rossiyskoy Voyennoy Razvedki [GRU empire. essay on the history of Russian military intelligence], Vol. 1 (Moskva: OLMA-PRESS, 2000), pp. 228–252; Anatoly Pavlov, "Sovetskaya Voyennaya Razvedka Nakanune Velikoy Otechestvennoy Voyny" [Soviet military intelligence on the eve of the Great Patriotic War], in Novaya i Noveyshaya Istoriya, No. 1 (1995), pp. 51–54; Vitaliy Nikol'skiy, Akvarium-2 [Aquarium 2] (Moskva: Izdatel'stvo "Geya", 1997), pp. 28–32.

¹⁴ Vladimir Zolotarev and Grigoriy Sevostyanov, eds., *Velikaya Otechestvennaya Voyna. Voyenno-Istoricheskiye Ocherki* [The Great Patriotic War. military-historical essays], Vol. 1 (Moscow: Nauka, 1998), p. 21.

Konstantin Simonov, Glazami Cheloveka Moyego Pokoleniya. Razmyshleniya O Staline [Through the eyes of a human being of my generation. reflections on Stalin] (Moscow: Izdatel'stvo Agentstva Pechati "Novosti", 1988), p. 446.

personnel had been crushed played a major role in his decision to start the war in 1941."¹⁶

Unfortunately, the positions made vacant as a result of the repressions were often filled with ill-prepared individuals who possessed neither the necessary experience nor knowledge and were insufficiently cultured both in general and military terms. Naturally, the establishment of a trained personnel reserve was not even an option under such circumstances.

Another reason for the lack of command personnel in the Red Army was the rapid mushrooming and reorganization of the country's armed forces, which led to a dramatic increase in the number of units, formations and combined forces, all of which required qualified military personnel. As many as 20 armies of ground forces were formed from 1938 to 1941.

Spring 1940 saw a new wave of personnel reshuffles begin. This time, military leaders who had distinguished themselves during the Soviet-Finnish War were promoted to higher command positions. The period from 1938 to 1940 saw all the commanders of the military districts and 90 percent of their deputies replaced. That period also saw 80 percent of the corps and division-staff command personnel replaced along with 91 percent of the regiment command personnel.¹⁷ These reshuffles could not help but have a negative impact on the condition and combat effectiveness of the armed forces.

It is difficult to even imagine Stalin receiving any coherent briefings on Hitler's calculations of the damage that the repressions of 1937 and 1938 had inflicted upon the commanders of the Red Army and Red Navy.

While having a low opinion of the quality of the command personnel of the Soviet armed forces, the leadership of the Third Reich clearly underestimated the industrial and economic potential that had been created in the Soviet Union since the late 1920s by means of the intense mobilization of resources across the country and at great cost for the Soviet agricultural sector, among others.

¹⁶ Ibid

¹⁷ Strana v Ogne [Country in flames], Aleksandr Kovalenya, ed., Vol. 1, Ocherki [Essays] (Moscow: OLMA Media Grupp, 2011), p. 65.

The leaders of Nazi Germany could not imagine the scale of production of military equipment and ammunition in the Soviet Union, as well as the development of Soviet defense-industry science and technology because of the exceptional secrecy in which the USSR was shrouded.

Swedish researcher Lars Samuelson reasonably argues that if the Nazi leadership had been more aware of the scale of the industrialization of the Soviet economy (especially in the defense-industry sector), such information alone could have served as a deterrent against aggression.¹⁸

Berlin likewise underestimated the organizational and managerial capacities of the Soviet political and administrative system that had been created by that time, as well as its sustainability.

With the beginning of the German-Soviet war, this system was employed to successfully relocate thousands of important industrial enterprises (along with their personnel) from western parts of the USSR to the east; to draft millions more people into the armed forces in order to make up for the huge losses suffered by the Red Army; and to quickly form dozens of new divisions and brigades. Incidentally, the Soviet Union's prewar mobilization plan, known as MP-41, didn't provide for the formation of so many divisions and brigades.¹⁹

Overall, the Soviet Union's excessive secrecy undermined its supreme national security interests. As a result, Hitler and his associates clearly overestimated the degree of fragility of the Soviet governmental system, the Bolshevik Party dictatorship and Stalin's regime, and underestimated the country's economic potential, including that of the defense industry.

Hitler's regime also paid dearly for underestimating a national trait of the Russian people (including the upper strata of society and the country's leadership): When faced with an external aggressor, the Russian people had almost always, with one exception, closed ranks, putting aside all contradictions and disagreements during the course of fighting.

¹⁸ Lennart Semuelson, Krasnyy Koloss, Stanovleniye Voyenno-Promyshlennogo Kompleksa SSSR, 1921–1941 [Red colossus, formation of the military-industrial complex of the USSR, 1921–1941] (Moscow: AIRO-KHKH, 2001), p. 228.

¹⁹ Viktor Nelasov, ed., 1941-y God: Uroki i Vyvody [1941: lessons and conclusions] (Moscow: Voyenizdat, 1992), p. 71.

By the beginning of the war, the Soviet government had many hidden enemies and detractors, primarily due to the enormous socioeconomic and political transformations that took place in the country from 1917 to 1941, and also because of the harsh, repressive policies pursued by Stalin.

Hundreds of thousands of Soviet citizens in the occupied territories cooperated with the German authorities in order to somehow adapt to the occupation regime and to survive. But only some of them consciously fought against the Red Army and pro-Soviet partisans. The extent of this collaboration paled in comparison with the scope of the partisan movement and underground activities in German-occupied parts of Soviet territory. Millions of people were directly or indirectly involved in the struggle against the occupation behind the front lines. Partisan detachments were created by local party and Soviet authorities as well as by military intelligence, political intelligence and counterintelligence officers sent across the front lines by the People's Commissariat for State Security (NKGB) and the People's Commissariat of Internal Affairs (NKVD).²⁰

The overwhelming majority of the Soviet population remained loyal to the Soviet authorities, both in a commitment to socialism and thanks to a tradition of Russian patriotism. The harsh, repressive policies pursued by the Soviet authorities against accomplices of the Nazi occupiers also played an important role.

The lack of real knowledge about the Soviet Union among Hitler and his entourage was again compounded by the Nazi leader's racist notions about the Slavs and the "Jewish-Bolshevik government."

²⁰ Vladimir Zolotarev, ed., Partizanskoye Dvizheniye, Po Opytu Velikoy Otechestvennoy Voyny 1941–1945 gg [Guerilla movement: from the experience of the Great Patriotic War of 1941–1945] (Moscow and Zhukovskiy: Kuchkovo Pole, 2001).

Hitler's Military-Strategic Plans vis-à-vis the USSR

As the German historian Bernd Wegner rightly wrote, Hitler's strategic calculations vis-à-vis the Soviet Union "should be evaluated only as a function of ideological chimeras that dominated his thinking." Hitler's initial guidelines for the preparation of the war plan against the USSR date back to the very first days after the surrender of France in 1940. As early as June 1940, Hitler raised the question of how to carry out an attack on the Soviet Union, but German generals Wilhelm Keitel and Alfred Jodl found the proposed dates to be totally unacceptable given the concentration and deployment capabilities of the Wehrmacht groups, as well as the weather conditions. It was on July 22, 1940, that Chief of the German General Staff of the Army Franz Halder tasked Colonel Hans von Greiffenberg, the head of the operations department of OKH, with developing a war plan against the Soviet Union.

To accelerate the development of a detailed plan of attacking the USSR, Halder assigned chief operations officer of the 40th Corps, Lieutenant Colonel G. Feyerabend, and chief of staff of the 18th Army, Maj. Gen. Erich Marcks, who was reputed to be an important specialist on Russia among German officers. Late July saw Greiffenberg, Feyerabend, and Marcks present the first variants of the eastern campaign plan to Halder.²⁵ Hitler signed Directive No. 21 on Operation Barbarossa only on December 18, 1940.

Building on Hitler's order, commander of the German ground forces Walther von Brauchitsch signed an OKH directive on January 31, 1941, that detailed strategic concentration and deployment of the Wehrmacht forces.

²¹ Bernd Wegner, "Osnovnyye Cherty Strategii Germanii v Voyne s Sovetskim Soyuzom" [The main features of Germany's strategy in the war with the Soviet Union], in Proektor et al., *Rossiya i Germaniya*, p. 99.

²² Ibid., p. 97.

²³ OKH is the German abbreviation for Oberkommando des Heeres, or Supreme High Command of the German Army, from 1936 to 1945.

²⁴ Anatoly Yakushevskiy, "Germaniya: Podgotovka Agressii protiv Sovetskogo Soyuza" [Germany: preparing aggression against the Soviet Union], in Zolotarev and Sevostyanov, Velikaya Otechestvennaya Voyna, p. 94; Nelasov, 1941-y God, p. 47.

²⁵ Velikaya Otechestvennaya Voyna 1941–1945 Godov [The Great Patriotic War of 1941–1945], Oleg Rzheshevskiy, ed., Vol. 2, Proiskhozhdeniye i Nachalo Voyny [Origin and beginning of the war] (Moscow: Kuchkovo pole, 2012), p. 244.

Directive No. 21's section on "General Concept" stated that "the main forces of the Russian ground forces stationed in western Russia should be destroyed in bold operations through deep, fast deployment of armored spearheads."²⁶

As had been the case with Poland in 1939 and with France and its allies in 1940, the Germans were counting on covert mobilization of forces and their concentration and deployment in combat order immediately before the beginning of combat operations. That was one of the defining characteristics of the blitzkrieg strategy. The German command assigned an extremely important role to ensuring surprise.²⁷

The authors of Operation Barbarossa did not plan for the possibility that the rapid war for which they had been preparing could become protracted. When planning for war against the USSR, Hitler did not even entertain the thought that he might have to order a total mobilization of the German economy (something he tried to do in early 1943 after the Wehrmacht suffered its worst defeat at Stalingrad), primarily for domestic political reasons. The war planned against the Soviet Union was to be total in its racial ideology and political and military objectives, but not in its mobilization of resources or manpower. The Nazi leadership assumed that the rapid nature of the war against the Soviet Union would make it possible to win with the production of military equipment proceeding at routine rates and without total mobilization of the German economy. As prominent Soviet and Russian military historian and theorist Valentin Larionov rightly pointed out, Operation Barbarossa was "a war plan without reserves or large materiel inventories, a one-act campaign." ²⁸

At the same time, the military-economic organization of the Wehrmacht did tap into the production capabilities of countries the Germans had

²⁶ Direktiva N. 21 Verkhovnogo Komandovaniya Vooruzhennymi Silami Germanii (Operatsiya "Barbarossa"), Stavka Fyurera, 18 Dekabrya 1940 g., Sovershenno Sekretno, Otpechatano 9 Ekz, Tol'ko Dlya Komandovaniya [Directive 21 of the Supreme Command of the German Armed Forces ("Operation Barbarossa"), Fuhrer's headquarters, December 18, 1940, top secret, 9 copies printed, only for the Command], in Reshin and Naumov, 1941 God. Sbornik Dokumentov, p. 452.

²⁷ Vladimir Yampol'skiy, Unichtozhit' Rossiyu Vesnoy 1941 g. (Adol'f Gitler, 31 lyulya 1940 goda): Dokumenty Spetssluzhb SSSR i Germanii. 1937–1945 [To destroy Russia in spring 1941 (Adolf Hitler, July 31, 1940): documents of secret services of the USSR and Germany, 1937–1945] (Moscow: Kuchkovo Pole, 2008), pp. 611–619.

²⁸ Valentin Larionov, "Politika i Strategia v Voine" [Policy and strategy in war], in Proektor et al., Rossiya I Germaniya, p. 129.

occupied by then. It was Czechoslovakia's defense industry that Nazi Germany used the most, producing tanks, artillery systems, optical instruments, communications equipment and other items for the Wehrmacht. Likewise, the French automobile industry was put to use, as were Dutch production facilities, which supplied various communications and electro-mechanical equipment. A Norwegian concern produced explosives for the German army, and so forth.

In addition to their own reserves of arms, military equipment and ammunition, the German armed forces also came into possession of huge amounts of equipment captured from adversaries. The Wehrmacht had the armaments of 34 Polish, 92 French, 12 British, 22 Belgian and 9 Dutch divisions at its disposal, as well as other huge stocks of various equipment and ammunition.²⁹ However, the German military did not use a significant part of this captured hardware in the course of its preparation for the invasion of the Soviet Union for various reasons, including the incompatibility of these weapons and auxiliary assets with German army standards, the desire to avoid complications in the system of materiel and technical support and difficulties that Wehrmacht personnel would have encountered when training to operate these systems.

A series of discussions in Berlin ended with a decision to carry out the eastern offensive along three strategic directions simultaneously. The plan of war against the USSR provided for establishment of three army groups: north, center and south. These groups were to advance toward Leningrad, Moscow and Kiev, respectively. A number of Russian historians believe this decision was one of the biggest mistakes by the Nazi leadership in planning the war against Soviet Russia, especially given that this plan left the German High Command without strong reserves. As Bernd Wegner rightly notes: "Hitler and the General Staff of the Ground Forces had failed to come to a genuine agreement on what would constitute the center of gravity of the Barbarossa plan before launching the operation."

²⁹ Rzheshevskiy, Velikaya Otechestvennaya Voyna, Vol. 2, p. 432.

³⁰ Sergey Mikhalev, Voyennaya Strategiya: Podgotovka i Vedeniye Voyn Novogo i Noveyshego Vremeni [Military strategy: preparing and conducting modern and contemporary wars] (Moscow and Zhukovskiy: Kuchkovo pole, 2003), p. 351.

³¹ Wegner, "Osnovnyye Cherty Strategii Germanii," p. 103.

Greiffenberg, Feyerabend and Marcks advocated concentration and deployment of the bulk of the formations and combined forces in the southern sector of the front in order to deliver the main strike in the direction of Kiev and then turn to the north with the aim of capturing Moscow. They planned to use the territory of Romania for deployment of German troops in that main direction. The trio believed that 80 to 100 German divisions deployed in the northern and southern parts of the Eastern Front would be enough to defeat the Red Army in several weeks of a concentric offensive.

Halder had a different vision. He proceeded from the assumption that the shorter the road to Moscow, the faster Germany could capture the Soviet capital and defeat the USSR. The idea of a strategic deployment of the most powerful grouping of forces in occupied Poland for a direct attack against Moscow via Minsk seemed more appealing to him. After the capture of Moscow, this grouping would turn south to hit the rear of the Soviet forces in Ukraine, forcing the RKKA units there to fight the Germans along an inverted front. It was ultimately this vision that prevailed.

Initially, the main strike was to have been delivered by the Army Group Center, which was commanded by Field Marshal Fedor von Bock. It was to this group of armies that two of the Wehrmacht's four tank groups were attached. The two panzer groups were commanded by Hans Guderian and Hermann Hoth, respectively. Special importance was attached to surrounding the bulk of the forces of RKKA's Western Special Military District, which were primarily concentrated in the Bialystok salient. Wehrmacht commanders and staff analysts found the fact that a large number of RKKA units were deployed along the border, including the Bialystok salient and Lviv salient, to be extremely advantageous for the German side. The Germans also planned to quickly surround the large group of Soviet troops at the Lviv salient.³²

When planning the war against the Soviet Union, the Wehrmacht considered a range of possible options of how the Soviet side could respond. This was reflected in the so-called Lossberg study, which was completed by Lieutenant Colonel Bernhard von Lossberg on September

³² Rzheshevskiy, Velikaya Otechestvennaya Voyna, Vol. 2, p, 463.

15, 1940. The study was commissioned by General Alfred Jodl in the course of preparing Barbarossa. Lossberg determined that the Red Army could pursue three possible courses of action: (1) deliver a preemptive strike against the Wehrmacht forces before the latter could complete their strategic deployment; (2) fight defensive battles in the border areas in order to hold the territory; and (3) withdraw into the interior with subsequent counterattacks. Lossberg considered the second variant to be most likely and desirable for the Wehrmacht. General Marcks, who was among the main planners of the attack against the USSR, held a similar view. The Wehrmacht considered the third variant to be least acceptable.³³

Goebbels made some remarkable observations in this regard. The Third Reich's propaganda chief wrote in his diary on June 14, 1941, that "the Russians are deploying their troops in a way that we could only wish for: concentrated, which makes them easy prey in the form of prisoners of war." And on June 16, 1941, Goebbels wrote that "the Russians concentrated their troops precisely on the border, which is the best possible outcome for us. If they were spread further away, inside the country, they would represent a far greater threat." Goebbels returned to this topic on June 18, 1941: "If only the Russians keep their troops concentrated along the border."

Zhukov noted self-critically in his memoirs that the Soviet military command of that period underestimated the level of operational and strategic art of the Wehrmacht commanders and their superb ability to command huge masses of troops, especially mobile formations.³⁷ Given this underestimation, the leadership of the Red Army could not foresee the power and the highest level of organization of the strikes that the Wehrmacht began to deliver from the very first hours of the war, even though the actions of the Wehrmacht against Poland in 1939 and against France and its allies in 1940 had been pointing in that direction all along.

³³ Lopukhovsky and Kavalerchik, Iyun' 1941-go. Zaprogrammirovannoye Porazheniye, pp. 318-319.

³⁴ Goebbels, "Vyderzhki Iz Dnevnikov," p. 305.

³⁵ Ibid., p. 302.

³⁶ Ibid., p. 311.

³⁷ Georgy Zhukov, *Vospominaniya i Razmyshleniya* [Reminiscences and reflections], Vol. I, 10th edition (Moscow: Izdatel'stvo Agentstva pechati "Novosti," 1990), p. 324.

People's Commissar of Defense Marshal of the Soviet Union Semyon Timoshenko made the following observation when addressing a meeting of the high command of the Red Army six months before the German attack: "In the sense of strategic creativity, the war in Europe, perhaps, produced nothing new." And that was one of the worst, fundamental mistakes that the Soviet high command committed when assessing the nature of modern warfare. At the same time, Timoshenko acknowledged that "there are major changes underway in the sphere of operational art, in army and front operations." It would have been more accurate for Timoshenko to refer to the revolutionary changes in operational art that then generated enormous results at the strategic level.

Beginning in the mid-1930s, military commanders of the RKKA were practically forbidden from delving into issues of military strategy. This level of the art of war was declared to be the prerogative of the highest leadership of the country, i.e., Stalin.⁴⁰ But Stalin had been clearly not paying enough attention to the issues of military strategy prior to World War II (if he had been paying any attention to them at all). In comparison, Chinese communist leader Mao Zedong distinguished himself as a political independent thinker on the military and military-strategic level in the 1930s and 1940s.⁴¹ Stalin did pay much attention to the foreign-policy and political-military aspects of this policy and personally wrote many works on this topic. But as Academician Ashot Sarkisov rightly pointed out, "many of Stalin's works were characterized by excessive simplification and schematic analysis of events and phenomena, substituting for the necessary deep studies and proof with dogmatic schemes."⁴²

[&]quot;Zaklyuchitel'naya Rech' Narodnogo Komissara Oborony Soyuza SSR Geroya i Marshala Sovetsko-go Soyuza S.K. Timoshenko na Voyennom Soveshchanii 31 Dekabrya 1940 Goda" [Closing speech People's Commissar of Defense of the USSR and Hero of the Soviet Union Marshal S. K. Tymoshenko at a military conference on December 31, 1940], in Zolotarev and Sevostyanov, Velikaya Otechestvennaya, Vol. 12, No. 1 (Moscow: TERRA, 1993), p. 339.

³⁹ Ihid

⁴⁰ Matvey Zakharov, *General'nyy Shtab v Predvoyennyye Gody* [General Staff in the Prewar Years] (Moscow: AST, 2005), p. 110.

⁴¹ The author would like to note the following among Mao Zedong's most important independent works: "Strategicheskiye Voprosy Revolyutsionnoy Voyny v Kitaye" [Strategic issues in China's Revolutionary War] (December 1936); "Voprosy Strategii Partizanskoy Voyny protiv Yaponskikh Zakhvatchikov" [Questions of strategy of guerrilla war against the Japanese invaders] (May 1938); "O Zatyazhnoy Voyne" [On protracted war] (May 1938); "Voyna i Voprosy Strategii" [War and strategy issues] (November 6, 1938), in *Mao TSze-dun, Izbrannyye Proizvedeniya* [Mao Tse-tung, selected works] (Moscow: Izdatel'stvo Inostrannoy Literatury, 1953).

⁴² Ashot Sarkisov, "O Roli Stalina v Velikoy Otechestvennoy Voyne 1941–1945 gg." [The role of Stalin in the Great Patriotic War of 1941–1945], Vol. 83, No. 10 (Moscow: Vestnik Rossiyskoy akademii nauk, 2011), p. 900.

Stalin enthusiastically (and largely fruitfully) supervised many aspects of the development of weapons and military equipment, as shown both in memoirs of the period and a large number of documents. He studied performance characteristics of attack aircraft, artillery systems, tanks, large warships, self-loading rifles, submachine guns and other systems in great detail.⁴³ However, according to many accounts, Stalin paid significantly less attention to radio communications, signals intelligence, reconnaissance aircraft and radar.⁴⁴ This should come as no surprise. In spite of his enormous capacity for work and his thirst to manage the development of the RKKA and RKKF and their armaments, Stalin could not possibly grasp the entire scope of increasingly sophisticated military technologies. Analysis of the existing documents and materials, memoirs and studies of strategic management (and oversight) in the USSR convincingly demonstrates that Stalin did not have military and civilian experts permanently working as advisers in his inner circle.⁴⁵

Both before and for quite a long time during the war, Stalin relied little on the General Staff of the Red Army, underestimating its role. Alexander Vasilevsky noted in his memoirs that Stalin "fully mastered new methods and forms of commanding armed struggle only during the Battle of Kursk," i.e., in summer 1943.⁴⁶

The level of preparedness of the command cadres of the Red Army for the coming war was threateningly low. Directive 503138/op by the People's Commissariat of Defense of the USSR "On the Results and Problems of Operational Training of Senior Command Personnel of the Red Army" stated: "The experience of recent wars, campaigns and field deployments and exercises has shown a low level of operational training of the supreme

⁴³ Aleksandr Yakovlev, Tsel' zhizni: Zapiski Aviakonstruktora [The purpose of life: notes of an aircraft designer], 6th edition (Moscow: Respublika, 2000); Vasiliy Grabin, "Sud'ba Kazhdoy Pushki Reshalas' v Kremle" [The fate of every gun was decided the Kremlin], in Oruzhiye Pobedy [Weapons of Victory], 2nd edition (Moscow: Respublika, 2000), pp. 123–145; Nikolai Kuzntesov, Nakanune [On the eve] (Moscow: Voyenizdat, 1966), pp. 258–260.

⁴⁴ Zhukov, Vospominaniya i Razmyshleniya, Vol. I, pp. 314-316.

Yuriy Gor'kov, Gosudarstvennyy Komitet Oborony Postanovlyayet (1941–1945). Tsifry, Dokumenty [State Defense Committee's resolutions (1941–1945). figures, documents] (Moscow: OLMA-Press, 2002); Zhukov, Vospominaniya i Razmyshleniya, Vol. I; Aleksandr Vasilevskiy, Delo Vsey Zhizni [Matter of entire life] (Moscow: Politizdat, 1973); Sergey Mikhalev, Strategicheskoye Rukovodstvo [Strategic management] (Krasnoyarsk: Redaktsionno-izdatel'skiy Otdel Krasnoyarskogo Gosudarstvennogo Pedagogicheskogo Universiteta, 2000); Kirill Meretskov, Na Sluzhbe Narodu, Stranitsy Vospominaniy [On the people's service, pages of memoirs], 2nd edition (Moscow: Politizdat, 1971), pp. 165–208.

⁴⁶ Alexander Vasilevsky, Op. cit., p. 127.

command staff as well as of the staff of the military headquarters, army and front directorates and especially of the air force staff. . . . With the operational training of senior commanders and staff officers at such a low level one cannot hope for a decisive success in a modern operation."⁴⁷ That directive was issued on January 25, 1941—just five months before Hitler's invasion.

Hitler's Disinformation Campaign Against Stalin and the Red Army Command

As noted above, surprise was to have played an enormous role in the implementation of the blitzkrieg plans. To this end Berlin conducted an unprecedented disinformation campaign at a political, military-strategic, operational and tactical level, with top officials of the Third Reich including Hitler himself taking part.

Berlin focused its disinformation efforts primarily on Stalin. These efforts included such actions by Hitler as his conversation with Molotov, head of the Soviet government, when he led a large Soviet delegation on a visit to Berlin in November 1940. In the course of this conversation, Hitler sought to assure Molotov—who was also at the time the People's Commissar for Foreign Affairs—that Germany had already "fully secured the territory that would last her for more than one hundred years" in the course of the wars against Poland and France. As for "colonial additions, Germany will get them in North Africa, in areas in which the USSR is not interested." As preparations for the war against the USSR were gaining momentum and scope, Hitler, together with Italy and Japan, showered the Soviet leadership with proposals to carry out a further division of spheres of influence in the world. He suggested that the Soviet Union participate in the "Tripartite"

^{47 &}quot;Prikazy Narodnogo Komissara Oborony SSSR 1937 –21 Jiuna 1941 Goda" [Directives of the People's Commissar of Defense of USSR, 1937–June 21, 1941], in Zolotarev and Sevostyanov, *Velikaya Otechestvennaya*, Vol. 13, No. 2-1, pp. 224–229.

^{48 &}quot;Beseda Predsedatelya Sovnarkoma, Narkoma Inostrannykh Del SSSR V.M. Molotova s Reykhskantslerom Germanii A. Gitlerom v Berline12 Noyabrya 1940 g., Osobaya Papka" [Conversation of Chairman of the CPC and Commissar for Foreign Affairs of the USSR Vyacheslav Molotov with German Chancellor Adolf Hitler in Berlin, November 12, 1940, special folder], in Reshin and Naumov, 1941 God. Sbornik Dokumentov, p. 363.

Pact" as a fourth partner. ⁴⁹ Molotov initially found these proposals to be interesting in spite of the fact that Hitler had evaded a number of his specific questions on current policies vis-à-vis Finland, Turkey and Bulgaria. That interest was reflected in his telegram to Stalin on November 13, 1940. ⁵⁰ Only in his final cable from Berlin did Molotov give a very restrained assessment of the results of his negotiations with Hitler and other leaders of the Third Reich. ⁵¹

Through its campaign of disinformation via political and diplomatic channels, the leaders of the Third Reich sought to mislead Soviet leaders into thinking that a military action by Germany against the Soviet Union (if it ever came to that) would be preceded by negotiations. As State Secretary of the German Ministry of Foreign Affairs Ernst von Weizsäcker wrote in his diary, Berlin sought to convince Moscow that it could supposedly hope for a "normal diplomatic procedure: complaint, reply, ultimatum, war," rather than a sudden massive attack by the Wehrmacht.⁵²

There is a high probability that familiarizing various Soviet delegations and commissions with the achievements of German military hardware production, including offers to sell samples of this hardware, was also meant to misinform the Soviet leadership.⁵³ Such actions were designed to make Soviet political and military leaders think that German-Soviet relations

⁴⁹ Ibid., p. 365.

[&]quot;Telegramma Narkoma Inostrannykh del SSSR V.M. Molotova General'nomu Sekretaryu TSK VKP(b) I.V. Stalinu iz Berlina. 13 Noyabrya 1940 g. 0 chas. 40 min" [Telegram from Berlin by the People's Commissar of Foreign Affairs Vyacheslav Molotov to General Secretary of the Communist Party Joseph Stalin, November 13, 1940, 12:40 am], in Reshin and Naumov, 1941 God. Sbornik Dokumentov, pp. 367–368; "Telegramma iz Berlina Narkoma Inostrannykh Del SSSR V.M. Molotova General'nomu Sekretaryu TSK VKP(b) I.V. Stalinu. 13 Noyabrya 1940 g. 15 chas. 00 min" [Telegram from Berlin by the People's Commissar of Foreign Affairs Vyacheslav Molotov to General Secretary of the Communist Party Joseph Stalin, November, 13, 1940, 3:00 pm], in Reshin and Naumov, 1941 God. Sbornik Dokumentov, p. 384.

[&]quot;Telegramma Narkoma Inostrannykh del SSSR V.M. Molotova General'nomu Sekretaryu TSK VKP(b) I.V. Stalinu iz Berlina. 14 Noyabrya 1940 g. 12 chas. 20 min." [Telegram from Berlin by the People's Commissar of Foreign Affairs Vyacheslav Molotov to General Secretary of the Communist Party Joseph Stalin, November, 14, 1940, 12:20 am], in Reshin and Naumov, 1941 God. Sbornik Dokumentov, pp. 393–394.

⁵² Oleg Vishlov, *Nakanune 22 Iyunya 1941 Goda, Dokumental'nyye ocherki* [On the eve of June 22, 1941, documentary essays] (Moscow: Nauka, 2001), p. 46.

⁵³ Aleksandr Osokin, *Velikaya Tayna Velikoy Otechestvennoy. Glaza Otkryty* [The Great Secret of the Great Patriotic War. Eyes Open] (Moscow: Vremya, 2013), pp. 164–179; Yakovlev, *Tsel' zhizni: Zapiski Aviakonstruktora*; Ivan Petrov, *Aviatsiya i Vsya Zhizn* [Aviation and the whole life] (Moscow: Izdatel'skiy Otdel Tsentral'nogo Aerogidrodinamicheskogo Instituta, 1993); "Komandirovka v Germaniyu pod 'kryshey Aeroflota. Otchet Mayora Nikolaya V. Chistyakova. May 1940 goda" [Trip to Germany under the cover of Aeroflot. Report by Major Nicholas V. Chistyakov, May 1940], in *Istoricheskiy Arkhiv*, No. 3 (1995), pp. 4–20.

were lasting and stable, as well as to somewhat intimidate the Soviet side with the achievements of German industry. While intensively preparing for war against the Soviet Union, the German government was also confident that Soviet industry would not have time to master Germany's achievements in the spheres of aviation, armored vehicles, naval shipbuilding and other areas observed by Soviet specialists and industry managers during these visits. In return, Germany received strategic raw materials (chrome ore, manganese ore, mineral oil, raw cotton), fuel and food from the Soviet Union, bypassing the sea blockade imposed by the United Kingdom.

The Third Reich's Ministry of Propaganda headed by Goebbels played a significant role in the disinformation campaign. In particular, this agency disseminated rumors in the German and international media meant to confuse the Soviet leadership about the real military-political situation. As Goebbels wrote in his diary on June 18, 1941, "We flooded the world with streams of rumors to such an extent that we can hardly find our own bearings in these streams ourselves."⁵⁴

The Wehrmacht also waged an active disinformation campaign in accordance with a special directive issued by Field Marshal Wilhelm Keitel, with the involvement of the military intelligence and counterintelligence agency Abwehr.⁵⁵ The directive came into force after the adoption of a specific plan of concentration and deployment of troops in line with Barbarossa.⁵⁶ As early as September 6, 1940, the chief of staff of the OKW, the Wehrmacht's high command, issued a special order to disguise all activities related to the preparation of the "eastern march," to conduct disinformation activities and gather strategic and operational intelligence.⁵⁷

Another important component included activities designed to mislead the Soviet side into thinking that Germany's efforts in 1941 would focus on "Operation Sea Lion," aimed at routing the UK. A complex set of disinformation activities was initiated for that purpose: English-language translators were assigned to the German troops; large quantities of

⁵⁴ Goebbels, "Vyderzhki Iz Dnevnikov," pp. 310.

⁵⁵ Abwehr is the German abbreviation for Auslandnachrichten und Abwehramt, or Foreign Intelligence and Defense Agency.

⁵⁶ Yampolsky, pp. 619-623.

⁵⁷ OKW is the German abbreviation for Oberkommando der Wehrmacht, or Supreme Command of the Wehrmacht. Zolotarev and Sevostyanov, *Velikaya Otechestvennaya Voyna*, Vol. 1, p. 102.

topographic literature on Britain were printed; information was spread about a nonexistent German airborne corps tasked with landing on the British Isles; German officers were told that their deployment to the east was either meant to be a vacation or a prelude to passage through Soviet territory for a campaign against India.⁵⁸

In an effort to mislead the political and military leadership of the USSR about the actions of German troops in Poland and East Prussia, Field Marshal von Bock, who was the commander of Army Group B (renamed Army Group Center on June 22, 1941) issued an order on March 24, 1941, to construct various fortifications along the border that were supposedly designed to defend against a possible Soviet attack. German forces were ordered not to obstruct observation of these construction works by the Red Army (Air Force) aircraft. Subsequent orders by Keitel (on April 3, 1941) and von Brauchitsch (on April 7, 1941) also called for presenting the concentration of German troops in the east as a purely defensive measure.⁵⁹

On April 24, 1941, Brauchitsch ordered the preparation of an operation codenamed Haifish ("Shark") that supposedly provided for deployment of German troops from northern France to the coast of the British Isles. In fact, it was a mere simulation. Almost simultaneously German troops began imitating preparations for an invasion of the British Isles from Norway. Keitel ordered that the upcoming landing of German troops on the island of Crete for the destruction of the British garrison there (Operation Mercury) be presented in the German propaganda as a "dress rehearsal for landing in Britain."

After the occupation of the Balkans in the spring of 1941, the Western press became awash with speculations about a German offensive supposedly prepared in the Middle East. These rumors were also used by Berlin as part of the disinformation campaign aimed at diverting the Soviet leadership's attention from Germany's preparations for attacking the USSR.⁶¹

⁵⁸ Rzheshevskiy, Velikaya Otechestvennaya Voyna, Vol. 2, p. 474.

⁵⁹ Zolotarev and Sevostyanov, Velikaya Otechestvennaya Voyna, Vol. 1, p. 103.

⁶⁰ Yevgeniy Kulkov, "Dokumenty o Podgotovke Fashistskoy Agressii protiv SSSR" [Documents on the preparation of the Nazi aggression against the USSR], in *Voyenno-istoricheskiy zhurnal*, No. 6 (1971), p. 107.

⁶¹ Mikhail Meltyukhov, *Upushchennyy Shans Stalina*. Sovetskiy Soyuz i Bor'ba za Yevropu, 1939–1941 gg., *Dokumenty, fakty, suzhdeniya* [Lost chance of Stalin, the Soviet Union and the struggle for Europe, 1939–1941, documents, facts, judgments] (Moscow: Veche, 2002), p. 254.

According to Zhukov, when the Red Army command proposed to put troops in the western border districts on full combat alert on June 11, 1941, Stalin refused to do so, arguing that Germany was in dire need of oil and therefore it would rush to the Middle East.⁶²

Resisting such a complicated and large-scale disinformation campaign required a whole system of analytical centers that could serve as reliable filters: in the central apparatus of political and military intelligence; in the Operations Department of the General Staff; in the staff of the People's Commissariat of Defense; in the People's Commissariat of Foreign Affairs; in the staff of Molotov himself, who had been chairman of the Soviet government until Stalin assumed this post on May 6, 1941; and in the staff of the party's Politburo. In reality, the capacity for such work was minimal.

Stalin established a procedure that required all original intelligence reports that came directly from intelligence sources to be sent to him. He apparently did so out of concern that something important could be omitted in the course of processing of these original reports. By doing so, Stalin assumed responsibility for the analytical component of intelligence activities, and also the burden of making mistaken conclusions and projections in the course of assessing intelligence.

A huge amount of information—streaming in from intelligence sources, the People's Commissariat of Foreign Affairs and the People's Commissariat of Foreign Trade, as well as through the Communist International (Comintern) and other channels—was sent up in raw form without proper critical evaluation or comparison against information coming in from other sources.⁶³ The most valuable intelligence was often intertwined with disinformation in one and the same message. The unfortunate result was that Nazi Germany's huge efforts to misinform the Soviet leadership were not in vain.

⁶² Ibid.

⁶³ Viktor Gavrilov, ed., Voyennaya Razvedka Informiruyet. Dokumenty Razvedupravleniya Krasnoy Armii, Yanvar' 1939 – Iyun' 1941 g, [Military intelligence briefs, documents of the Intelligence Directorate of the Red Army, January 1939 – June 1941] (Moscow: Mezhdunarodnyy Fond "Demokratiya", 2008), pp. 323–714; Andrey Fesyun, ed., Delo Rikharda Zorge: Neizvestnyye Dokumenty [The case of Richard Sorge: unknown documents] (St. Petersburg and Moscow: Letniy Sad, 2000); Anatoly Maksimov, Razvedka Velikoy Otechestvennoy Voyny: Netraditsionnyy Vzglyad na Masterstvo Razvedki Sovetskoy Gosbezopasnosti, [Intelligence of the Great Patriotic War: an unconventional look at the tradecraft of the intelligence of the Soviet State Security] (Moscow: Izdatel'stvo "VeGa", 2010).

Nevertheless, the incoming intelligence data was sufficient to allow Stalin to form a fairly precise opinion on the inevitability of a military attack by Germany and the timing of that attack.

Stalin was trying to avoid a war in 1941 by all means because he understood the many weaknesses of the Red Army (though not all of them). His understanding of these weaknesses can be inferred from a document meant to take stock of the state of affairs at the People's Commissariat of Defense (the document was not dated, but appears to have been finalized in the second half of December 1940 as Timoshenko took over the defense agency from Marshal of the Soviet Union Kliment Voroshilov). The document noted there were not only weaknesses but also outright failures in efforts to ensure the combat capabilities of the Red Army, as well as in the work of the commissariat's various branches.

When reading numerous reports of Soviet intelligence agencies and diplomats, Stalin primarily sought confirmation of his own hopes that Hitler would not dare to attack the Soviet Union in 1941 without finishing the business with Britain. Nonetheless, on June 18, 1941, as the threat of war increased, commanders of the Baltic, Leningrad, Western, Kiev and Odessa military districts, as well as the Baltic, Black Sea and Northern fleets, received orders to put troops and ships on high alert.

However, even after the German aggression had begun, there are indications that Stalin—due to his failure to understand the peculiarities of Hitler's and his entourage's thinking, coupled with the effect of the disinformation campaign—still harbored hopes for some time that the war would be a limited one, rather than a war for the complete destruction of the USSR. This had a direct impact on strategic-military decision-making, as reflected in two directives issued on Stalin's orders in the last hours before Hitler's attack and immediately after it.⁶⁵

^{64 &}quot;Akt Priyema Narkomata Oborony SSSR S.K. Timoshenko ot K.Ye.Voroshilova. Sovershenno Sekretno" [Act of acceptance of the USSR People's Commissariat of Defense by Semyon Tymoshenko from Kliment Voroshilov, top secret], in Zolotarev and Sevostyanov, Velikaya Otechestvennaya, Vol. 13, No. 2-1, pp. 298–309.

Tsentral'nyy Arkhiv Ministerstva Oborony Rossiyskoy Federatsii (TSAMORF) [Central Archives of the Ministry of Defense of the Russian Federation], Fund 208, inventory 2513, case 71, sheet 69; Rzheshevskiy, Velikaya Otechestvennaya Voyna, Vol. 2, p. 732.

Management, Operational Art, Tactics, Organization, Technology

The principles of command and control that were applied at different levels of the Wehrmacht as part of the successful implementation of the blitz-krieg strategy had been developed in Germany over the course of decades. Helmuth von Moltke, Sr., who served as chief of the Prussian General Staff from 1858 to 1871 and then chief of the German General Staff from 1871 to 1888, insisted that commanders at all levels adopt a unified approach to examining the combat situation and decision-making. He taught the German officer corps "to avoid any shackles of schematics in command and control" and strove "to develop independent thinking and action in all commanders."

Autonomous operational and tactical thinking was instilled in generation after generation of German army commanders, stressing flexible decision-making that allowed for adjustments as the prevailing situation changed. An important role in this was played by officers of the General Staff Service, established in the early 19th century thanks to the efforts of such major Prussian military figures as Gerhard von Scharnhorst and August von Gneisenau.⁶⁸ The General Staff and its service officers channeled common views on strategy, tactics and later on operational art. Such activities of the German General Staff were based on extensive scholarly work, without which the General Staff "becomes just another bureaucratic office, unable to perform its critical service," according to Russian researcher Arseniy Zaitsov.⁶⁹

The aforementioned qualities were developed in the Reichswehr in the 1920s under the leadership of General Hans von Seeckt, even though

⁶⁶ Nikolay Vlasov, *Gel'mut fon Mol'tke, Polkovodets Industrial'noy Epokhi* [Helmuth von Moltke, commander of the Industrial Era] (St. Petersburg: Izdatel'stvo S,-Peterburgskogo gosudarstvennogo universiteta, 2011), p. 124.

⁶⁷ Burkhart Mueller-Hillebrand, *Sukhoputnaya Armii Germanii*, 1933–1945 [German Army in 1933–1945] (Moscow: Izografus with EKSMO, 2002), p. 278.

⁶⁸ Aleksander Svechin, *Klauzevits* [Clausewitz] (Moscow: Izdatel'stvo Gazetno-zhurnal'nogo ob"yedineniya, 1935); *Voyennaya Entsiklopediya* [Military Encyclopedia], Vol. VIII, reprint edition (St. Petersburg: Izdatel'stvo Tovarishchestva I.D. Sytina, 1912), (Moscow: "Moskovskiy ilzdatel'skiy Dom" with "Reytar", 2005), pp. 344–345; *Sovetskaya Voyennaya Entsiklopediya* [Soviet Military Encyclopedia] (Moscow: Voyenizdat, 1980), Vol. 8, p. 492.

⁶⁹ Arseniy Zaitsov, *Sluzhba General'nogo Shtaba* [The service of the General Staff] (Moscow and Zhukovskiy: Kuchkovo pole, 2003), p. 46.

Germany was prohibited from having a General Staff after being defeated in World War I. German panzer commander Erich von Manstein rightly wrote in his memoirs: "No other army in the world granted such independence to commanders—down to junior officers and soldiers of infantry—that's what the secret . . . of success was. And the Reichswehr preserved this legacy and passed it on."

According to Wehrmacht General Burkhart Mueller-Hillebrand, the "combination of freedom that the commander enjoyed in executing the combat mission and the commander's personal initiative become a particular hallmark and power factor of the Prussian-German army."⁷¹

Sergeant-majors (*Feldwebel* in German) were an important element of command and control on the tactical executive level (company) in the Wehrmacht. Sergeant-majors ensured the proper level of discipline in the company. They also had a good knowledge of tactics at the section/platoon/company level and therefore could confidently assume command in case their officers were disabled.

During the civil war in Russia from 1918 to 1922, both Red and White commanders widely displayed initiative, if only due to the specific circumstances of the war (including the lack of continuous fronts and high maneuverability). This spirit of initiative was preserved in the Red Army, but it was almost entirely wiped out in the course of repressions in 1937-1938 and subsequent years.

The principle of unity of command played an important role in command and control of the Wehrmacht troops. That principle was almost never questioned from the 1920s to the 1940s. According to Mueller-Hillebrand, "this principle of a commander's unlimited power was consistently implemented in the ground forces as before, unlike the supreme bodies of the OKW."⁷²

⁷⁰ Manshteyn Erikh fon, Uteryannyye Pobedy [Erich von Manstein, Lost Victories] (Moscow and St. Petersburg: AST with Terra Fantastica, 1999), http://militera.lib.ru/memo/german/manstein/index. html.

⁷¹ Mueller-Hillebrand, Sukhoputnaya Armii Germanii, p. 278.

⁷² Ibid.

In the Red Army, the principle of unity of command was violated several times by the introduction of the system of political commissars into the armed forces. This was done mainly for political and ideological reasons several times from 1917 to 1941. Lev Mekhlis, as head of the Political Directorate of the Red Army, told the 18th Congress of the Communist Party that "commissars and political workers are the eyes and ears of the party in the Red Army." The system of political commissars was reintroduced yet again after heavy losses suffered by the Red Army in the first months of the war, and the commissars were given great powers. Many in the Red Army saw this move as an act of political distrust in the command staff, the overwhelming majority of whom were party members. It was also believed to have disorganized command and control. The unity of command in the Red Army was restored again in October 1942.74

The German leadership also paid considerable attention to reorganizing the Wehrmacht and introducing technological modifications. The organization of the first training of the Wehrmacht Panzer Division was finalized on October 12, 1934. By October 15, 1935, three armored divisions had been formed in Germany: the 1st, 2nd and 3rd. Two so-called light divisions (each consisting of two infantry regiments, a reconnaissance battalion, an artillery regiment, a tank battalion and other units) were also formed at that time along with four motorized divisions. All four were, in essence, conventional infantry divisions that were fully motorized.

Then the 14th Army Corps, which consisted of the motorized divisions, was formed along with the 15th Army Corps, which consisted of the light divisions, while the three armored divisions were made part of the 16th Army Corps. It was fundamentally important that all three corps were consolidated into the newly created 4th Group, over which General von Brauchitsch assumed command on April 1, 1937. The headquarters of the group was located in Leipzig and was responsible for manning and training

⁷³ XVIII S"yezd Vsesoyuznoy Kommunisticheskoy Ppartii (Bol'shevikov). Stenograficheskiy Otchet, [18th Congress of the All-Union Communist Party (Bolsheviks), minutes] (Moscow: Glavnoye izdatel'stvo politicheskoy literatury OGIZ, 1939), p. 274.

⁷⁴ RGVA (Rossiyskiy Gosudarstvennyy Voyenno-istoricheskiy Arkhiv) [RSMA (Russian State Military History Archive)], fund 4, inventory 15, case 30, sheet 739.

these aforementioned formations as well as for operational training of their staffs.⁷⁵

Thus, as early as 1935 and 1936, a prototype of a panzer army emerged in Germany and it was capable of carrying out operational and even strategic missions. The formation of this group continued without either radical organizational or staff changes or any other major overhauls in the years that preceded World War II. Hundreds of Wehrmacht officers underwent training in this group.

Russian researchers are still not paying sufficient attention to the organizational decisions of the German command of that time. The author could not find even a trace of research that would indicate that the formation of the 4th Group drew any special attention by the Soviet military intelligence or command, to say nothing of the country's supreme leadership. Such a lack of attention was particularly astounding given that it was these combined forces that defined the new forms of warfare against Poland in 1939, against France and its allies in 1940, and against the Soviet Union in 1941.

The Wehrmacht's panzer corps and panzer groups were not oversaturated with tanks. The German planners thoroughly thought through the optimal ratio of tanks to towed and self-propelled artillery pieces, including special artillery systems for antitank defense, motorized infantry, motorcyclists and infantry on armored personnel carriers.

Wehrmacht troops (especially armored and motorized units) were well equipped with high quality radios. Each German tank had VHF radio equipment. The headquarters and commanders had a good knowledge of communication schemes and modes of communication.⁷⁶

A Wehrmacht panzer division equipped with radios was like an octopus that used its mobile reconnaissance detachments as tentacles to feel out

⁷⁵ Heinz Guderian, *Tanki –Vpered!* [Tanks, forward!] (Nizhniy Novgorod: "Vremena", 1996). See also Mueller-Hillebrand, *Sukhoputnaya Armii Germanii*, p. 79.

⁷⁶ Guderian, Tanki -Vpered!, p. 69.

enemy positions.⁷⁷ Soviet armored forces lagged significantly behind their German counterparts in the number of radios installed in tanks.⁷⁸

Production of tanks and self-propelled artillery was steadily growing in Germany. The country produced 1,643 light and medium tanks in 1940 and 1,621 of these vehicles in the first half of 1941. The number of medium tanks in the armored formations increased by a factor of 2.3 (from 627 to 1,423). And the overwhelming majority of T-III tanks were equipped with 50-mm rather than 37-mm guns. Medium tanks accounted for 44 percent of the total number of tanks that the Wehrmacht allocated for Barbarossa. And if we were to factor in the 250 self-propelled assault guns, which by their tactical and technical characteristics were approaching the medium tanks, then the share of such tanks increased to 50 percent (compared to 25 percent during the Germans' Western Campaign of 1940). 79 At the same time, the number of tanks that the Wehrmacht positioned for attacking the Soviet Union was several times smaller than the number of tanks in the western districts of the Red Army. These districts had more than 1,600 new tanks, such as T-34s, KV-1s and KV-2s, but at the same time there were a lot of obsolete tanks and tanks in need of repair.

Aware of the Soviet numerical superiority in tanks, the German command gave high priority to the saturation of its troops with antitank weapons. Antitank units and subunits began to commission new 50-mm antitank guns and heavy 28-mm antitank rifles beginning in late 1940. The number of antitank cannons (not counting those captured from adversaries) increased by 21 percent, while the number of antitank rifles increased by a factor of more than 20.

The qualitative improvement of the German troops also manifested itself in the fact that 23 out of 84 new divisions formed from September 1940 to June 1941 were mobile, including 11 tank, eight motorized and four light

⁷⁷ Sergei Ivanov, Blitskrig kak Tekhnologiya Voyny: Effektivnyy Voyennyy Menedzhment [Blitzkrieg as the technology of war: effective military management], http://www.popmech.ru/article/214.

⁷⁸ For example, according to contemporary researchers, only 221 out of the 832 T-34 tanks deployed in the border military districts as of June 1, 1941 were equipped with radios. Those 71TKZ radios were temperamental and difficult to configure. See Mikhail Bariatinsky, *T-34 V Boyu* [T-34 in Combat] (Moscow: Yauza with ECSMO, 2008) p. 33.

⁷⁹ Semen Platonov, ed., *Operatsii Sovetskikh Vooruzhennykh Sil v Period Otrazheniya Napadeniya Fashistskoy Germanii na SSSR, Voyenno-istoricheskiy Ocherk* [Operations of the Soviet Armed Forces in the period of repelling the attack by Nazi Germany on the Soviet Union, military-historical essay] (Moscow: Voyenizdat, 1958), Vol. 1, p. 185.

infantry divisions. Accordingly, the share of armored and motorized formations in the active German army increased from 12 percent in May 1940 to 18 percent in June 1941.80

This allowed the Wehrmacht to form four tank groups that were later transformed into tank armies. Meanwhile, the number of tanks in each division decreased while the share of medium tanks in the overall number of tanks increased. The production of medium tanks was boosted after Germany defeated France and its allies. German panzer forces decommissioned almost all light machinegun T-1 tanks, which were widely used against Poland in 1939 and France and its allies in 1940. At the same time, these forces commissioned significant quantities of very successful light tanks, which were made in Czechoslovakia and armed with guns.

The Wehrmacht had no heavy tanks as of June 22, 1941, just like it did not have such tanks in 1939 or 1940. The RKKA did have heavy tanks. Some of them were the obsolete five-turret T-35 tanks, while others were KV-1s and KV-2s, considered modern at the time. Despite a number of flaws and shortcomings, KV-1s and KV-2s had far greater armor protection than any of the Wehrmacht tanks, and their vulnerability to German antitank defense weapons was low. However, by the beginning of the war, Soviet tank crews had yet to master most of these tanks.⁸¹

The Germans used their most prepared infantry and mechanized divisions, which had highly educated personnel with multiple technical skills, to form these new armored divisions. The Red Army had all but pioneered the creation of tank units and formations. The first mechanized regiment of the RKKA was established in 1929 and it was then expanded into a mechanized brigade with tanks forming the core of these newly established units. In 1932, the RKKA began the formation of mechanized corps. Separate tank regiments were also formed at that time and, by 1935, expanded into separate tank brigades. These brigades became part of the Supreme

⁸⁰ Mueller-Hillebrand, Sukhoputnaya Armii Germanii, pp. 53, 105, 152.

⁸¹ See Mikhail Baryatinskiy, Mikhail Dmitriyev, *Tanki Vtoroy Mirovoy. Krasnaya Armiya*, [World War II tanks. Red Army] (Moscow: Izdatel'stvo "Tekhnika –molodezhi", 2000), pp. 10–12; Vitaliy Zhilin, *Geroi-tankisty* [Heroic Tankers] (Moscow: Yauza with EKSMO, 2008), p. 8; Ilya Moshchanskiy, *Sredniy Tank T-34-76: Oruzhiye Nashey Pobedy* [Medium Tank T-34-76: the weapon of our victory] (Moscow: Veche, 2010), p. 6; Vitaliy Chernikov, ed., *Boyevaya Tekhnika i Oruzhiye*, 1939–1945 [Military Equipment and Weapons, 1939–1945] (Moscow: Voyenizdat, 2001), p.108.

⁸² Rzheshevskiy, Velikaya Otechestvennaya Voyna, Vol. 2, p. 467.

Command's Reserve. In the mid-1930s, separate tank battalions were introduced into RKKA infantry divisions, while mechanized regiments were incorporated into cavalry divisions. In August 1938, the mechanized corps were turned into tank corps without any significant changes to their organizational structure. By the end of 1938 the Red Army already had four tank corps consisting of armored brigades. There were also 24 separate tank brigades and four heavy tank brigades.⁸³ That laid a good foundation for creating tank formations and armies (tank groups). But following the civil war in Spain, the Soviet leadership made a decision in 1939 to disband the tank corps altogether because tanks were used on a relatively small scale in that war. That decision was made even though the civil war in Spain offered only limited lessons about the nature of future wars.⁸⁴

In June 1940, the RKKA began to reestablish large tank formations under the influence of the tank blitzkrieg conducted by the Wehrmacht in the west. Mechanized corps were formed. Each corps was to have a total of 1,032 tanks. Initially the plan had been to create nine such corps, but a decision was made in February or March 1941 to form another 20 mechanized corps, although the RKKA had neither the equipment nor personnel for these additional units. It was also decided to disband the armored brigades and establish armored divisions instead. That proved to be one of the greatest organizational mistakes made during the development of RKKA forces on the eve of the war, with very serious consequences for the Soviet army and the country as a whole.⁸⁵

The process of establishing of such formations led to a significant reduction in the combat capabilities of the Soviet armored forces. In fact, the RKKA's armored forces were still being formed anew and suffered from a huge deficit of personnel at all levels and specializations by the beginning of the war.⁸⁶

⁸³ Sovetskaya Voyennaya Entsiklopediya, Vol. 8, pp. 669-670.

⁸⁴ Valeriy Zamulin, "Slozhnost' Obstanovki –Vot Ob"yektivnyy Faktor, Opravdyvayushchiy Takikh Nachal'nikov" [The complexity of the situation is an objective factor justifying actions of such leaders], Voyenno-istoricheskiy Zhurnal, No. 6 (2012), p. 22.

⁸⁵ Mikhail Baryatinskiy, *Tankovyy Blitskrig* [Tank Blitzkrieg] (Moscow: Yauza with EKSMO, 2009), p. 87; Mikhail Svirin, *Bronevoy Shchit Stalina*, *Istoriya Sovetskogo Tanka*, 1937–1943 [Armored shield of Stalin, history of the Soviet tank, 1937–1943] (Moscow: Yauza with EKSMO, 2007), p. 262.

⁸⁶ Svirin, Bronevoy Shchit Stalina, pp. 262-263.

One of the key elements in the organization of the German armed forces for the attack on the Soviet Union was that they included the highest-level operational-strategic formations of the air fleets of the German Air Force (Luftwaffe).⁸⁷ These fleets included Air Defense Corps. The composition and structure of the German air fleets allowed them to both conduct independent air operations and provide support to the Army and Navy (Naval Forces) in various directions.⁸⁸ The RKKA had no such formations prior to the war in 1941.

By June 22, 1941, the Luftwaffe was numerically inferior to the RKKA Air Force, but it had significant advantages when it came to the tactical and technical characteristics of the aircraft, as well as to the level of flight and tactical training of the pilots (many of whom had real combat experience). The advantages also included the fact that a greater number of the Luftwaffe's aircraft had radios. The aforementioned organizational and personnel decisions also played to the German air force's advantage.⁸⁹

Thanks to numerous joint-command and staff exercises and games, commanders and commanders in chief of the German Army and Luftwaffe achieved an exceptionally close cohesion between units and formations at both the operational and tactical level. Field-Marshal Albert Kesselring wrote that he had instructed generals of the air force and air defense units under his command "to treat the wishes of our colleagues from the ground forces as if they were my orders and in doing so they should not be deterred by the fact that I was their immediate commander." Representatives of Luftwaffe air controllers were constantly located in combat formations of infantry and tank units. This was also one of the Wehrmacht's "fine technologies of war." There was no such close interaction between the Air Force and the ground forces in the RKKA in 1941, on the eve of the war. Nor was it the case in the armies of the Western Allies in May 1940, before the onset of the Wehrmacht offensive on the Western Front.

⁸⁷ Soviet intelligence materials and studies on foreign armies that are currently available contain no data on the existence of fleets in the German Air Force and their role in the Germany's western campaign in 1940.

⁸⁸ Rzheshevskiy, ed., Velikaya Otechestvennaya Voyna, Vol. 2, p. 466.

⁸⁹ Ibid.

⁹⁰ Albert Kesselring, Lyuftvaffe: Triumf i Porazheniye. Vospominaniye Fel'dmarshala Tret'yego Reykha. 1933–1947 [Luftwaffe: triumph and defeat. Memoirs of field marshal of the Third Reich, 1933– 1947] (Moscow: Tsentrpoligraf, 2004), pp. 128–129.

At that time, Messerschmitt-109 (Bf-109) was the Luftwaffe's main fighter aircraft, designed primarily for achieving air supremacy. It underwent numerous modifications that significantly improved its performance, the power of its weapons and other characteristics.⁹¹

An increasing number of MiG-1s, Yak-1s and LaGG-3s began reaching the RKKA's Air Force units before the beginning of the war. These fighters had a variety of characteristics that were comparable with the modified Messerschmitt-109. However, these aircraft were still raw. They were plagued by many flaws and pilots had yet to master them fully. At the same time, most of the fighter fleet of the Soviet Air Force was clearly outdated and inferior to Messerschmitt-109s.⁹²

One of the main technological components of the blitzkrieg was the single-engine dive bomber Junkers Ju 87. The use of these bombers was of fundamental, systemic importance. The level of training of Ju 87 pilots was so high that many of them dove on targets almost vertically, at an angle of almost 90 degrees, experiencing tremendous physical and mental stress. As a rule, Ju 87s dove at low speed along a stable trajectory from which they did not fishtail, giving pilots more time to aim. Soviet Pe-2 dive bombers (which were developed as high-altitude fighter-interceptors) began arriving in the Soviet Air Force in late 1940. Pe-2 pilots took a very long time to master diving techniques at angles like the Ju 87s, which affected the accuracy of bombing. And even then, only a minority of the Soviet Pe-2 pilots mastered the techniques at all.

The command of the Soviet Air Force did not pay attention to the Ju 87, despite the fact that Soviet delegations had seen a large number of these bombers during their numerous visits to Germany. "The blindness in this respect was striking," as aircraft designer and Deputy People's Commissar of the Aviation Industry Alexander Yakovlev said of the failure of Soviet Air Force commanders and specialists to appreciate the Ju 87s'

⁹¹ Dmitry Sobolev, *Istoriya Samoletov.* 1919–1945, [History of planes, 1919–1945] (Moscow: ROSSPEN, 1997), pp. 219, 227–229.

⁹² Rzheshevskiy, Velikaya Otechestvennaya Voyna, Vol. 2, p. 225.

⁹³ Andrey Smirnov, *Boyevaya Rabota Sovetskoy i Nemetskoy Aviatsii v Velikoy Otechestvennoy Voyne* [Combat operations of Soviet and German aircraft in the Great Patriotic War] (Moscow: Izdatel'stvo "AST, Tranzitkniga", 2006), p. 344.

⁹⁴ Ibid., pp. 169-170.

importance.⁹⁵ As British Premier Winston Churchill noted in his postwar memoirs, the Soviet command repeated the mistakes of the French and English in this regard.⁹⁶

In operational art, or "operatics," the Wehrmacht did not emphasize the physical destruction of the enemy's masses of people, but rather on the disorganization of enemy troops in order to sow panic, on cutting troops off at the rear, on disrupting communications and command and control and, in the end, on surrounding and capturing large numbers of personnel. 98 The Wehrmacht also calculated that such tactics would help reduce its own personnel losses.

As for the panzer units, it was the speed of action and the ability to penetrate as deeply as possible through enemy defenses that mattered most. Quickness was more important for German tanks from 1939 to 1941 than firepower and armor protection. German armored forces were not intended to fight tank units and formations of the enemy. Nor were Wehrmacht tank formations tasked with ramming through the adversary's deeply echeloned defense in the way envisioned by the main author of the Soviet theory of "deep operations," Vladimir Triandafillov.⁹⁹ The German panzer forces were supposed to stream into gaps that were to be created by well-coordinated air, artillery and infantry strikes targeting junction points between the enemy's formations and combined forces. German tanks were to circumvent fortified areas with permanent fire positions, overcoming

⁹⁵ Aleksandr Yakovlev, *Tsel' zhizni: Zapiski Aviakonstruktora* [The purpose of life: notes of aircraft designer], 6th edition (Moscow: Respublika, 2000), p. 128.

⁹⁶ Winston Churchill, *Vtoraya Virovaya Voyna* [The Second World War], Vol. X (Moscow: Al'pina-non-fikshn, 2010), pp. 342.

⁹⁷ Russian military theorists of the 1970s and 1980s often referred to operational art as *operatika* ("operatics"), a term they modeled after the Russian word *taktika* (tactics).

⁹⁸ It is known that the captured Soviet citizens were used as slave laborers in the German industry and agriculture as well as sent to concentration death camps.

⁹⁹ See Ivan Korotkov, *Istoriya Sovetskoy Voyennoy Mysli, Kratkiy Ocherk, 1917–lyun' 1941 g.* [History of Soviet military thought, shorte, 1917–June 1941] (Moscow: Nauka, 1980); Roman Savushkin, *Razvitiye Sovetskikh Vooruzhennykh Sil i Voyennogo Iskusstva v Vezhvoyennyy Period (1921–1941)* [Development of the Soviet Armed Forces and art of war in the interwar period (1921–1941)] (Moscow: Voyenno-politicheskaya akademiya imeni V.I. Lenina, 1989).

whatever weak resistance (having not anticipated such an attack) the foe's infantry could offer. ¹⁰⁰

The mission of German armored formations and combined forces (which initially played a major independent role in fulfilling such missions) was to encompass the flanks of the adversary's large groupings of forces and encircle hundreds of thousands in the spirit of the Battle of Sedan in 1870, as envisioned by von Moltke the Elder, and by Alfred von Schlieffen in his treatise on the Battle of Cannae in 216 B.C.¹⁰¹

Such ramming operations became especially typical for the panzer forces of the Wehrmacht and Waffen SS during the Battle of Kursk in 1943. During that battle, Hitler had special hopes for Tiger T-VI heavy tanks, Panther T-V medium tanks, Ferdinand heavy self-propelled artillery systems and for modernized T-IV medium tanks. German panzer strikes became especially powerful in the course of fighting at Prokhorovka and Oboyanya. In both cases the Germans were close to breaking out to gain maneuver room, but ultimately their tank formations failed to accomplish the mission assigned to them. The strength of the Soviet antitank defenses, which had been built in these areas in the course of several months preceding the battle, played a major role in foiling the Germans' plans, as did counterattacks launched by the RKKA's own tank forces. These counterattacks did not expand into an offensive as had been planned, but they did contribute to defeating the most dangerous of the enemy's forces. (Overall, though, Soviet troops suffered greater losses than the Wehrmacht, especially in tanks.)102

Motorized infantry was instrumental in ensuring the combat effectiveness of the Wehrmacht's tank forces, especially when infantry operated on armored personnel carriers (APCs). The Wehrmacht had significantly

¹⁰⁰ Several years ago the author had a conversation with Helmut Schmidt, who had served as the chancellor of Germany and defense minister of West Germany. Schmidt also served as an air defense officer in one of the Wehrmacht's armored divisions during World War II. The author learned from that conversation that the German panzer forces had no combat manuals, but that each tank officer carried Guderian's Attention! Tanks! book in his field bag and that book substituted for manuals.

¹⁰¹ Kokoshin, Strategicheskoye Upravleniye, p. 391.

¹⁰² Lev Lopukhovskiy, Prokhorovka, Bez Grifa Sekretnosti, [Prokhorovka, without secrecy] (Moscow: Yauza with EKSMO, 2006), pp. 258; Valeriy Zamulin, Zasekrechennaya Kurskaya Bitva, Neizvestnyye Dokumenty Svidetel'stvuyut [Classified battle of Kursk, unknown documents give evidence] (Moscow: Yauza with EKSMO, 2007), p. 734; Aleksey Isayev, Antisuvorov: Desyat' mifov Vtoroy Virovoy [Anti-Suvorov: ten myths of World War II] (Moscow: Yauza with EKSMO, 2004), p. 301.

increased the number of APCs in its forces by the summer of 1941. At that time, APCs were completely absent from the RKKA.¹⁰³

Armored and mechanized units of the Wehrmacht also possessed formidable antitank capabilities to repel counter-offensives of the adversary's armored units. Knowing that the armored vehicles in the RKKA's possession greatly outnumbered those of the Wehrmacht, Hitler's commanders had taken pains to reinforce antitank defenses of their tank and other divisions, procuring artillery and antitank guns. ¹⁰⁴

In contrast, the RKKA's infantry units had decommissioned their antitank rifles just before the war. As a result, Soviet infantry platoons and companies had no means of defense against tanks, while battalions had only two artillery guns. Also, Soviet divisions suffered from shortages of air defense. Prior to the war most Red Army divisions had only 30 to 50 percent of the air-defense guns they were supposed to have.¹⁰⁵

German tanks were not superior to Soviet tanks in armor protection, armament and off-road capability, but they excelled in some important technical areas that ensured the effectiveness of crews and their comfort: They featured high-quality surveillance devices in the commander's cupola, and gunners were positioned near the tank's center of gravity, meaning they were more stable when the vehicle was moving and enjoyed more advantageous firing conditions. ¹⁰⁶ In this respect, German tanks in 1941 were superior even to the famous Soviet T-34 tank and were superior to the German T-IV medium tank in a number of ways. ¹⁰⁷ The Wehrmacht's system of training tank crews, including by practicing cannon and machine-gun firing, was also high-quality. ¹⁰⁸

¹⁰³ David Glantz, Sovetskoye Voyennoye Chudo 1941–1943, Vozrozhdeniye Krasnoy Armii [Soviet Military Miracle of 1941–1943, revival of the Red Army] (Moscow: Yauza with EKSMO, 2008), p. 341.

¹⁰⁴ Andrey Vasil'chenko, "Faustniki" v Voyu [Antitank guns in combat] (Moscow: Yauza with EKSMO, 2008), p. 47.

¹⁰⁵ Sovetskiy Soyuz: Nakanune Velikikh Ispytaniy, (Moscow: Izdatelstvo GUP "Klintsovskaya gorodska-ya tipografiya", 2004), p. 499.

¹⁰⁶ Lopukhovskiy and Kavalerchik, *Iyun' 1941-go. Zaprogrammirovannoye Porazheniye*, pp. 43–44; Aleksey Isayev, *Dubno 1941: Velichaysheye Tankovoye Srazheniye Vtoroy Mirovoy* [The greatest tank battle of World War II] (Moscow: EKSMO, 2009), p. 8; Baryatinskiy, *Tankovyy Blitskrig*.

¹⁰⁷ Mikhail Baryatinskiy, T-34 v Boyu [T-34 in Combat] (Moscow: Yauza with EKSMO, 2008), pp. 65-68.

¹⁰⁸ Vasiliy Bryukhov, *Pravda Tankovogo Asa: "Broneboynymi, Ogon'!"* [Truth told by a tank ace: "fire the armor-piercing shell!"] (Moscow: Yauza with EKSMO, 2013), p. 27.

The so-called assault guns, which were essentially artillery systems placed on the chassis of German tanks to become self-propelled, also played an important role. Neither the Soviet Union nor its Western allies had these kinds of systems in 1941. 109 The RKKA did not begin to field self-propelled artillery until 1942 (with SU-76 self-propelled systems armed with 76-mm guns), even though the Soviet defense industry had begun to develop such technologies in the early 1930s. Towed artillery systems of various calibers also played quite an important role. The Wehrmacht's 88-mm anti-aircraft gun was perhaps one of the best-known guns of World War II. It was used effectively to destroy both tanks and field fortifications. 110

In the campaign against the Soviet Union in 1941, the German panzer groups operated hundreds of kilometers from the main forces of the German Army. Such an operational mode boggled the minds of the RKKA's top brass for quite a while.¹¹¹

As said above, according to the concept of blitzkrieg, the main purpose of the German panzer groups was to rapidly advance deep into the defenses of the adversary and surround its troops in line with what was described in von Schlieffen's writings on Cannae.

The Germans believed that delivering a strong initial strike was crucial for achieving victory in war, and therefore also believed it was expedient to concentrate the main forces and means in a single strategic echelon without creating significant strategic reserves. These actions (just like the strategy and operational art of blitzkrieg as a whole) were associated with greater risk: The hypothetical enemy could have struck at the flanks of a German tank grouping as it was breaking through. But such flanking would have required the adversary to display a commensurate level of tactical and operational skills and coordination of formations. It would have required armored and motorized units and formations to conduct high-quality reconnaissance, which had its own peculiarities and which

¹⁰⁹ Eicke Middeldorf, Russkaya Kampaniya: Taktika i Vooruzheniye [Russian campaign, tactics and weaponry] (Moscow and St. Petersburg: AST with "Poligon," 2001), p. 78.

¹¹⁰ Manfred Messershmidt, "German Military Effectiveness between 1919 and 1939," in Allan R. Millett and Williamson Murrey, eds., Military Effectiveness, Vol. II, The Interwar Period (Boston: Allen and Unwin, 1988), p. 245.

¹¹¹ Viktor Anfilov, Nachalo Velikoy Otechestvennoy Voyny (22 lyunya–Seredina lyulya 1941 Goda), Voyenno-Istoricheskiy ocherk [Beginning of the Great Patriotic War (June 22–Mid-July 1941), military-historical essay] (Moscow: Voyenizdat, 1962), pp. 208.

required coordination with superiors up the chain of command. A successful flank attack followed by penetration of the German grouping's rear would require stable communications at all levels (including horizontal), and enthusiastic, tactically and operationally competent commanders. These necessary qualities were largely absent in the Soviet mechanized corps, their commanders and the supreme command in the summer of 1941.

Intelligence and Subversive Activities in the Interests of Blitzkrieg

German intelligence boosted its eastern activities once Hitler made the decision to attack the Soviet Union.

Military intelligence was carried out by the Office of Intelligence and Counterintelligence (Abwehr), which reported to the German Supreme Command (OKW). Operational groups called Konigsberg, Warsaw, Krakow and Military Organization Finland were assigned in November 1940 to conduct intelligence, counterintelligence and sabotage activities against the Soviet Union.

In March and April of 1941, Abwehr-1 sabotage and reconnaissance departments were established as part of army groups. Beginning on May 1, 1941, all of Germany's intelligence bodies were subordinated to the Abwehr's newly created joint staff, dubbed "Wally." A special-purpose regiment called Brandenburg-800 (later transformed into a division of the same name) was employed for subversive activities along with nationalist organizations in Western Ukraine and the Baltic states.¹¹²

¹¹² Nelasov, 1941-y God: Uroki i Vyvody, p. 18.

The Abwehr made massive use of intelligence groups, primarily tasking them with determining the location of headquarters, transportation hubs and airdromes. Human intelligence (HUMINT) was gathered at a depth of 150 to 200 km, and in areas around the cities of Minsk, Kiev and Leningrad HUMINT operations were conducted at a depth of 300 to 400 km and more. The number of German secret service agents was estimated to have totaled 1,596 prior to the Nazi German aggression against the USSR. Of these, 1,338 worked in parts of western Ukraine, the Baltics and western Byelorussia, while the rest operated on territory that had been part of the Soviet Union before 1939. The second s

A considerable number of German agents were representatives of western Ukrainian, Lithuanian, Latvian and Estonian nationalist organizations. These nationalists cooperated closely with Abwehr (and then increasingly cooperated with the Security Service of the Reich Security Main Office, or RSHA). German intelligence learned many important details about the grouping of RKKA forces in the border areas, including particulars about the theater of military operations. The first quarter of 1941 saw the number of individuals detained at the Soviet Union's western borders increase fivefold in comparison with the same period of the preceding year, with the increase in major operational areas as high as a factor of 10 to 12. 116

Once military operations commenced, the Abwehr's special groups began to conduct various acts of sabotage. These included capturing bridges and bridgeheads, obstructing evacuation and destruction of classified documents by Soviet military and civilian agencies, capturing the city of Lviv (carried out by the 1st Battalion of the Abwehr's Brandenburg-800 regiment, in cooperation with a reinforced company of the Ukrainian

¹¹³ See testimony of former head of department "Abwehr-1", Lieutenant-General Heinz Piekenbrock, at the Nuremberg trial, in Konstantin Gorshenin, ed., *Nyurnbergskiy Protsess. Sbornik materialov* [The Nuremberg trials, collection of materials], Vol. 2, 3rd edition (Moscow: Gosyurizdat, 1955), p. 647.

¹¹⁴ Christer Jorgensen, Gitlerovskaya Mashina Shpionazha, Voyennaya i Politicheskaya Razvedka Tret'yego Reykha [Nazi espionage machine, military and political intelligence of the Third Reich] (Moscow: Tsentrpoligraf, 2012), p. 113; see also Sergey Smirnov, ed., Velikaya Otechestvennaya Voyna 1941–1945 Godov [The Great Patriotic War of 1941–1945], Vol. 6 (Moscow: Kuchkovo pole, 2013), p. 372.

¹¹⁵ The Security Service, or SD, refers to Der Sicherheitsdienst des Reichsführers SS. RSHA is the German abbreviation for Reichssicherheitshauptamt.

¹¹⁶ Andrey Khor'kov, "Nakanune Groznykh Sobytiy" [On the eve of terrible events], *Voyenno-istoriches-kiy Zhurnal*, No. 5 (1988), p. 45.

nationalists' Nightingale battalion), launching the mass extermination of Lviv's Jews and attacking the headquarters of various Red Army units.¹¹⁷

The personnel of the Wehrmacht's battlefield and operational reconnaissance units meticulously cooperated with the personnel of other branches of their units' headquarters, including operators. The same applied to the military intelligence leadership and the supreme command. Such relationships between reconnaissance officers and operators were part of what I would call the "fine features" of the Wehrmacht's command and control.

The Wehrmacht attached great importance to conducting aerial reconnaissance, especially using high-quality optics, film and photography, and to the reliability of photo equipment in general. The Wehrmacht paid great attention to the technical and organizational aspects of rapidly processing received data and to transmitting data from the Luftwaffe to ground forces. The availability of stable and highly qualified staff to analyze photographs taken by German aerial reconnaissance planes also played an important role. The Germans conducted aerial reconnaissance of the Soviet Union and the Soviet armed forces on a massive scale on the eve of Operation Barbarossa, paying special attention to the tactical and operational depth of the Soviet military formations. The share of special reconnaissance aircraft in the Luftwaffe was several times higher than in the Soviet Air Force at the time.

Given that the Wehrmacht envisioned that war against the Soviet Union would be of a maneuvering nature, the German supreme command decided in December 1940 to set up short-range reconnaissance squadrons on the basis of the existing Luftwaffe units. In March 1941 these squadrons were subordinated to the commanders of the armies and tank groups.

As for the RKKA Air Force, "reconnaissance and spotter aircraft units were the Cinderellas of the Soviet Air Force in the prewar period—they received

¹¹⁷ Yulius Mader, *Abver: Shchit-Mech Tret'yego Reykha* [Abwehr: shield and sword of the Third Reich] (Rostov on Don: "Feniks", 1999), http://militera.lib.ru/research/mader/index.html.

¹¹⁸ Ernest R. May, Strange Victory: Hitler's Conquest of France (New York: Hill and Wang, 2000), p. 457.

¹¹⁹ Rzheshevskiy, Velikaya Otechestvennaya Voyna, Vol. 2, p. 47.

neither modern materiel nor experienced crews," according to Russian author Dmitry Khazanov. 120

That the Luftwaffe operated specially designed reconnaissance and observation aircraft, Focke-Wulf Fw 189 (FW-189), characterized by high performance and low vulnerability, gave a significant advantage to the German side, considerably increasing the Nazi troops' combat capabilities. FW-189s routinely monitored maneuvers of the Wehrmacht's own troops, among other missions. In addition to FW-189s, the Luftwaffe also operated a large number of other reconnaissance aircraft, including 275 long-range reconnaissance aircraft (Dornier-17s) and 356 other reconnaissance aircraft, including the Henschel Hs 45, Henschel Hs 46 and Henschel Hs 128.

The success of German intelligence was largely facilitated by the ban that the supreme Soviet leadership had imposed on obstructing reconnaissance flights over Soviet territory. The Kremlin did not seem to understand the importance of aerial reconnaissance, disastrously underestimating the damage that was being done to the Red Army by the virtually unimpeded flights of German reconnaissance aircraft. German aircraft intruded into Soviet airspace over 500 times to a depth of 100 to 150 km from October 1939 to June 22, 1941. Typically, these flights would have no consequences for the German side, other than that commanders of the

¹²⁰ Dmitry Khazanov, *Voyna v Vozdukhe, Gor'kiye Uroki* [War in the air, bitter lessons] (Moscow: Yauza with EKSMO, 2006), p. 45.

¹²¹ Yuriy Borisov, Samolet-Razvedchik Foke-Vul'f FW189 "Rama" [Reconnaissance Plane Focke-Wulf FW189 "Frame"] (Moscow: Tseykhgauz, 2007).

¹²² Messershmidt, "German Military Effectiveness," pp. 247-248.

Soviet border-guard units would lodge protests with the representatives of German, Finnish and Romanian border authorities.¹²³

General Field Marshal Kesselring noted in his memoirs that the German Air Force achieved air supremacy in the early days of the war against the Soviet Union largely thanks to "great aerial photography" (and generally "continuous aerial reconnaissance"). 124 It was this reconnaissance, according to Kesselring, that allowed the Germans to destroy Soviet aircraft in large numbers on the ground.

During the prewar period, the Wehrmacht paid much more attention to signals intelligence than the RKKA. Such a focus allowed the German supreme command to glean additional, highly valuable information that it then used against essential elements of the RKKA's command and control, especially on the operational level, during the first stage of the war. German signals intelligence scrupulously detected the deployment and structure of RKKA Air Force units and formations and collected information even on the tactical and technical characteristics of Soviet military aircraft. Wehrmacht signals intelligence also specifically focused on the combat dispositions of the Soviet Air Force, its supply system and movement of its units, identifying potential targets for bombing.

The Wehrmacht then used the data collected through signals intelligence in combination with information gleaned from the interrogation of prisoners and analysis of documents. It was beyond the technical capabilities of Wehrmacht signals intelligence to acquire information about RKKA reserves located deep inside Soviet territory.

¹²³ See Tovarishchu Stalinu, Tovarishchu Molotovu, Tovarishchu Timoshenko "O Neodnokratnykh Narusheniyakh Germanskimi Samoletami Gosudarstvennoy Granitsy SSSR 15 Aprelya 1941 g." [To comrades Stalin, Molotov and Tymoshenko "on repeated violations of the state border of the USSR by German planes on April 15, 1941], top secret, Deputy Commissar of the Internal Affairs of USSR Lieutenant General Maslennikov; identical to O Sluchayakh Narusheniya Granitsy SSSR Germanskimi Samoletami 4 Iyunya 1941 g [On violations of the state border of the USSR by German planes on June 5, 1941]; Tovarishchu Stalinu, Tovarishchu Molotovu "O Roste Kolichestva Narusheniy Granitsy SSSR Samoletami Germanii s 28 sentyabrya 1939 g. po 10 lyunya 1941 g. i Zaderzhannykh Narushitelyakh Granitsy so Storony Germanii [To comrades Stalin and Molotov on growing number of violations of the state border of the USSR by German planes from September 28, 1939 to June 10, 1941 and on detention of border violators who crossed it from the German side], top secret, June 12, 1941, People's Commissar for Internal Affairs of USSR Lavrenty Beria; General'nomu Komissaru Gosudarstvennoy Bezopasnosti Ttovarishchu Beriya "O Sluchayakh Narusheniya Granitsy SSSR InostrannymiSsamoletami 21 Iyunya 1941 g." [To General Commissar for Internal Affairs of USSR Lavrenty Beria "on cases of violation of the border of the USSR by foreign planes on June 21, 1941], Lieutenant General Maslennikov, Historical Archive, 1955, No. 2, pp. 7–10, 14, 16, 17, 20, 21, and others.

¹²⁴ Kesselring, Lyuftvaffe: Triumf i Porazheniye, p. 131.

The RKKA's radio operators, especially at the divisional level, often displayed low levels of professionalism and were poorly educated and, therefore, could not master sufficiently complex, resistant ciphers. The RKKA did employ qualified coders at the middle and senior levels of command and, as a result, communications at these levels were much better protected.¹²⁵

As far as the German blitzkrieg is concerned, one point that deserves special mention is the activity of the Reich Security Main Office's Department 6, Germany's service for strategic intelligence, both military and political. Judging by documents and other evidence available to us today, German strategic intelligence did not achieve any significant successes in its operations in the USSR. ¹²⁶ As a result, the German side underestimated both the industrial potential of the Soviet Union and the mobilization capabilities of the Red Army.

Soviet military and political intelligence services worked very intensively in the prewar period, despite the fact that these agencies' personnel had suffered huge losses in the course of Stalin's repressions in 1937-1938. A number of undercover intelligence networks in various European countries were very active. These included networks led by S. Rado in Switzerland, L. Trepper and A. Gurevich in Belgium and France, as well as the Red Chapel in Germany. A great deal of important information was also obtained by Soviet military attaches, especially in Germany and Romania.

But while often very valuable, this information was not from the horse's mouth. Soviet intelligence had no agents in the high headquarters of the Wehrmacht. Nor did Soviet intelligence succeed in obtaining very important documents on the Germans' operational and strategic planning. Similar problems existed at the level of the intelligence departments of Soviet military districts, as well as in the intelligence departments of the border guard forces that were part of the People's Commissariat of Internal Affairs. One

¹²⁵ Doron Arazi, "Nemetskaya Voyennaya Radiorazvedka vo Vtoroy Mirovoy Voyne" [German military radio intelligence in World War II], in Michalka and Kulkov, Vtoraya Mirovaya Voyna, pp. 400–401; Praun Albert, "German Radio Intelligence" in All World Wars, http://allworldwars.com/German-Radio-Intelligence-by-Albert-Praun.html. See also German Traffic Analysis of Russian Communications, Army Security Agency, May 1, 1946, top secret, Vol. 9, European Axis Signal Intelligence in World War II, in National Security Agency, Central Security Service, http://.NSD.gov/public_info/declass/european_axis_signit.shtml.

¹²⁶ Jorgensen, Gitlerovskaya Mashina Shpionazha, p. 172.

factor that hindered the collection of such information was that German counterintelligence was quite effective both inside the Third Reich and in the territories occupied by the Wehrmacht.

A major shortcoming of Soviet intelligence was that it was not sufficiently prepared to operate in wartime. The destruction of Soviet clandestine intelligence during the repressions was one major factor behind this unpreparedness, since it was this clandestine intelligence that was supposed to ensure the smooth operation of Soviet agents in the enemy's territory in wartime.

Most of the field stations of the Intelligence Department of the RKKA's General Staff had restored some of their capabilities to acquire information by the second half of 1940, as did the political wing of the Soviet intelligence community. However, the consequences of the repressions continued to be felt at that time. This was noted when the leadership of the People's Commissariat of Defense was being transferred from Marshal of the Soviet Union Kliment Voroshilov to Marshal Semyon Timoshenko on December 7, 1940. The official act documenting the transfer assessed the state of Soviet military intelligence as follows: "The organization of intelligence is one of the weakest spots in the work of the People's Commissariat of Defense. There is neither organized collection of intelligence nor systematic transmission of information on foreign armed forces. The work of the Intelligence Directorate is not connected with the work of the General Staff. The Intelligence Directorate falls short of the People's Commissariat of Defense's need for an agency that would provide the Red Army with information on foreign armed forces' organization, condition, armaments and preparations for deployment. The People's Commissariat of Defense does not have such information at the time of this transfer. Theaters of operations and preparation of these theaters have not been studied."127 All this was written just over six months before the outbreak of war.

Nevertheless, many of the reports that Soviet military intelligence was sending from January to June 1941 quite accurately reflected formations of the German battle groups in the eastern direction, preparation of the theater of operations and creation of strategic reserves in Germany. But as

¹²⁷ Izvestia of CPSU Central Committee, No. 1 (1990), pp. 193-208.

noted above, the flow of this accurate information was muddied by a flood of misinformation that hampered decision-making.

On June 20, 1941, the Intelligence Department of the RKKA General Staff sent a report titled "On Signs of Inevitability of the German Attack on the Soviet Union in the Next Several Days" to Stalin, People's Commissar of Foreign Relations Vyacheslav Molotov, People's Commissar of Defense Semyon Timoshenko, and Chief of the General Staff Georgy Zhukov. 128 This report quite accurately reflected the reality of the pending invasion, but there was practically no time left for the Soviet military-political leadership to act upon it.

Nor could Soviet signals intelligence or the aerial-reconnaissance or decryption services produce any significant achievements on the eve of the war. Aerial photography data was almost nonexistent on the Soviet side. Collecting such data was difficult, given that the Soviet party and state leadership categorically prohibited the Soviet Air Force from crossing into the Third Reich's airspace.

The signals services of the Wehrmacht took extensive measures to protect information transmitted via radio, using Enigma cryptographic machines, among other things. The high level of protection of radio-transmitted information enabled commanders and officers of Wehrmacht headquarters to safely and intensively use this kind of communication. This conferred an enormous advantage over commanders and officers of the Red Army headquarters. As stated above, the use of radio was instrumental in ensuring effective deployment of mobile formations, coordination of arms of services across ground forces (artillery, tanks, infantry and engineer units), and in ensuring reliable interaction between the Luftwaffe and ground forces. Soviet intelligence proved unable to break German ciphers and codes until 1943, which significantly reduced the quality of the intelligence that the Soviet state and party leadership and the RKKA high command were receiving. 129

¹²⁸ TSAMORF, fund 23, inventory 7272, case 1, inventory 3775, p. 146.

¹²⁹ Boris Anin, Radioelektronnyy Shpionazh [Radio-electronic espionage] (Moscow: Tsentrpoligraf, 2000), pp. 59–60.

Implementation of Blitzkrieg Plans in Summer and Autumn of 1941

The strategic deployment of German forces was conducted according to a strict schedule and was timed to ensure that the concentration of forces in areas adjacent to the Soviet border would be completed just before the invasion, in order to surprise the Soviet side.¹³⁰

The directive to put Soviet troops on alert, which the Kremlin sent to head-quarters of the military districts, arrived too late and was not sufficiently clear. The second and third directives set unrealistic tasks for the Soviet forces located in the first echelon. These forces were ordered to completely defeat the invading enemy and then move fighting to the enemy's territory.¹³¹

The Wehrmacht managed to achieve not only tactical but also operational surprise. The plan of wartime operations, which the RKKA General Staff had developed in the prewar period, proved to be ill-founded. The Soviet political leadership was partially to blame for this because its bad decisions had prevented the timely implementation of mobilization plans (in effect, preventing this mobilization).¹³²

As mentioned above, the German General Staff officers tasked with developing plans to attack the USSR thought it would be least favorable for the German side if the Soviet Union responded to the planned attack by transitioning to strategic defense.

Unfortunately, the Soviet leadership and the RKKA command failed to appreciate the importance of strategic defense, which became the Soviet Achilles' heel in the war's early stage. Soviet researchers did not pay

¹³⁰ Boris Panov, Vladimir Kiselev, Igor Kartavtsev et al., *Istoriya Voyennogo Iskusstva* [History of the art of war] (Moscow: Tsentrpoligraf, 2000), pp. 59–60.

¹³¹ TSAMORF, fund 48a, inventory 1554, case 90, pp. 257-259, 260-262.

¹³² Ibid., p. 351.

sufficient attention to this for a long time.¹³³ Zhukov wrote in his memoirs that the Soviet "military strategy in the prewar period was based mainly on the assumption that only offensive actions could defeat the aggressor and that the defense would play a purely supportive role, helping the groupings—that were on offensive—to achieve their goals."¹³⁴

In many ways, this attitude toward strategic defense was a result of the direct influence that Soviet party and state ideology exercised on military strategy.

Alexander A. Svechin, an outstanding Russian and Soviet military theorist, presented in the mid- and late 1920s an extremely thorough analysis as to why the Soviet armed forces should focus on strategic defense in the initial period of a future war (with a subsequent transition to the offensive). Svechin's writings were then supported by such prominent Russian theorists as A. I. Verkhovsky, V. A. Melikov and A. A. Neznamov.¹³⁵

The Soviet military command lost control of its troops in a number of directions right after the start of the German invasion. This was particularly evident on the RKKA's western front, which bore the brunt of the Wehrmacht offensive. Despite their numerical superiority, the RKKA forces were neither morally and psychologically nor institutionally prepared for the kind of war that Hitler's Germany unleashed on the Soviet Union. One factor that played a particularly negative role was that the Red Army was in the middle of a huge reorganization and experiencing a tremendous shortage of personnel when the Germans attacked. Moreover, in the prewar period, Soviet military planners had failed to discern the

¹³³ Makhmut Gareyev was among the first to speak about this. Makhmut Gareyev, M. V. Frunze – Voyennyy Teoretik [Mikhail Frunze: military theorist] (Moscow: Voyenizdat, 1985). See also Lopukhovsky and Kavalerchik, Iyun' 1941-go. Zaprogrammirovannoye Porazheniye, p. 90.

¹³⁴ Georgy Zhukov, Vospominaniya i Razmyshleniya, Vol. I, p. 323.

¹³⁵ A detailed discussion is available in Andrei Kokoshin, Armiya i Politika. Sovetskaya Voyenno-politich-eskaya i Voyenno-strategicheskaya Mysl.'. 1918–1991 Gody [The army and politics. Soviet military-political and military-strategic thought, 1918–1991] (Moscow: Mezhdunarodnyye otnosheniya, 1995), p. 38.

¹³⁶ The ratio of forces of Germany and its allies on the one hand and the Soviet Union on the other (at the moment they faced off on the eve of June 22, 1841) was as follows: personnel strength 1:1.4; tanks 3.1:1; aircraft 2.2:1; and artillery 1.03:1. Oleg Vishlov, *Nakanune 22 Iyunya 1941 Goda, Dokumental'nyye Ocherki* [On the eve of June 22, 1941, documentary essays] (Moscow: Nauka, 2001), p. 34; Rzheshevskiy, *Velikaya Otechestvennaya Voyna*, Vol. 2, pp. 625–626.

nature of the pending campaign from any point of view—ideological, political, military-strategic or operational.¹³⁷

Within the few first days of the war, the RKKA lost battles in the border areas and the enemy fully seized the strategic initiative. Aside from the element of surprise, a wide range of various (and varied) factors played a major role in the initial success of the German armies, most of which have been described above.

In summer and fall 1941, the Wehrmacht achieved great successes on the Eastern Front as German forces repeatedly implemented ideas outlined in von Schlieffen's Cannae writings on an operational-strategic scale. The Wehrmacht's first major success was the defeat of the Soviet western front by Army Group Center.¹³⁸

The units of the Soviet 3rd and 4th armies were surrounded and roundly defeated at Bialystok and Minsk—primarily as a result of actions by the tank groups commanded by Hoth and Guderian. Only some scattered units of these two Soviet armies managed to break through to the east. By the end of June 1941 the Soviet Supreme High Command General Headquarters and the General Staff had concluded that the main strategic direction on the German-Soviet front was west.¹³⁹

In the first 18 days of fighting, the Soviet western front and Pinsk Flotilla lost 417,790 servicemen (including 341,073 fatalities), 4,799 tanks (including those rendered unfit for combat), 9,427 cannons and mortars and 1,777 aircraft. Soviet troops retreated 600 km, leaving almost all of Byelorussia to the advancing enemy.

In the course of fighting in the Soviet border areas, the German Army Group Center lost about 40,000 soldiers and officers, including those

¹³⁷ See also Mikhail Myagkov, "Na Grani Katastrofy, 22 Iyunya – Sentyabr' 1941 goda" [On the brink of disaster, June 22–September 1941], in Kovalenya, 1941. Strana v Vgne, Vol. 1, p. 81.

¹³⁸ Dmitry Yegorov, *Iyun' 1941, Razgrom Zapadnogo Fronta* [June 1941, defeat of the western front] (Moscow: Yauza with EKSMO, 2008), pp. 6–7; Aleksey Litvin and Ivan Voronkov Ivan, "Bitva za Belarus' Letom 1941 Goda" [Battle for Belarus in summer 1941], in Kovalenya, *1941. Strana v ogne*, Vol. 1, pp. 302–402.

¹³⁹ TSAMORF, fund 208, inventory 2511, case 36, pp. 21, 25.

¹⁴⁰ Kryvosheev et al., Otechestvennaya bez Gryfa Sekretnosty, p. 78; Zolotarev and Sevostyanov, Velikaya Otechestvennaya Voyna, Vol. 1, p. 147.

killed, wounded and missing. Overall, the Germans lost about 80,000 in the initial period of the Soviet-German war¹⁴¹

The rapid defeat of the RKKA's western front was the first tragedy that the Soviet military had to endure in summer and fall 1941. This defeat largely predetermined the further development of the overall situation along the entire Soviet-German front—a situation that proved quite dramatic for the RKKA. Colonel-General Hoth, who commanded one of the two German panzer groups, wrote in his memoirs, Army Group Center managed to wage one of those battles of annihilation that rarely occur in the history of war. . . . The victory in the battle at Bialystok and Minsk gave the entire Army Group Center full freedom of operational maneuver.

The three first weeks of fighting in the northwestern sector of the German-Soviet front saw Soviet troops leave almost all of the Baltics, retreating 450 km. The RKKA's losses there included 88,500 servicemen (including 75,000 fatalities), more than 1,000 tanks, 4,000 artillery cannons and mortars and more than 1,000 aircraft.¹⁴⁴

The defeat of the Soviet troops near Dubno and Rovno—in what became one of the biggest tank battles of the war—largely guaranteed the rapid retreat of the RKKA's southwestern and southern fronts (groups of armies). According to Soviet estimates, the southwestern front and the 18th Army of the southern front lost 241,594 servicemen (including 172,323 fatalities), 4,381 tanks, 5,806 artillery pieces and mortars and 1,218 combat aircraft in the battle in the border areas.¹⁴⁵

As many as 170 Soviet divisions participated in the frontier battles and 28 of these were completely destroyed. Losses in frontline battles incurred by the three Soviet fronts (western, northwestern and southwestern)

¹⁴¹ TSAMORF, fund 500, inventory 12454, case 65, pp. 44–331; TSAMORF, fund 500, inventory 12454, case 133a, pp. 1, 332.

¹⁴² Zolotarev and Sevostyanov, Velikaya Otechestvennaya Voyna, Vol. 1, p. 125.

¹⁴³ Hermann Hoth, Tankovye Operatsii [Tank Operations] (Moscow: Voyenizdat, 1961), p. 82.

¹⁴⁴ Grigory Kryvosheev, Vladymyr Andronykov, Petr Burykov, and Vladimir Gurkin, Otechestvennaya Bez Gryfa Sekretnosty: Knyga Poter [Great Patriotic War without secrecy: book of losses] (Moscow: Veche, 2009), p. 76; Zolotarev and Sevostyanov, Velikaya Otechestvennaya Voyna, Vol. 1, p. 154.

¹⁴⁵ Kryvosheev et al., *Otechestvennaya Bez Gryfa Sekretnosty*, pp.76, 80; Zolotarev and Sevostyanov, *Velikaya Otechestvennaya Voyna*, Vol. 1, p. 164.

amounted to 600,000 fatalities, more than 11,700 tanks, 18,800 artillery pieces and mortars and about 4,000 aircraft.¹⁴⁶

Estimated German losses as of July 10 totaled 79,058 servicemen, 826 tanks, 1,061 guns and mortars and 350 aircraft, which the Germans, at that time, were able to quickly replace. By mid-July, the Germans had 183 divisions and 21 brigades.¹⁴⁷

In August 1941, the Red Army suffered more major military disasters. Formations of the 5th, 26th and 37th Armies of the southwestern front, as well as the 21st Army of the central front and part of the 38th Army, were encircled. Soviet sources estimated the personnel strength of the encircled forces to have totaled 452,700. The Red Army lost 28,000 artillery pieces, 411 tanks and many other weapons. According to German sources, 665,000 Soviet soldiers were captured in the Kiev area alone. According to Russian sources, the southwestern front suffered 531,000 fatalities in the course of the RKKA's defensive operations in the Kiev area from July 7, 1941, to September 26, 1941.

Before that, the Germans had encircled Soviet troops near Uman on the southern flank of the Soviet-German front in late July and early August 1941. The Wehrmacht encircled and destroyed the RKKA's 6th and 12th Armies there. According to estimates released by the German side shortly after the encirclement of the Red Army forces, as many as 103,000 Soviet soldiers and officers were captured. This estimate of Soviet POWs needs to be verified, however.

According to official Soviet data, losses suffered by the Soviet side in the course of the RKKA's Moscow strategic defensive operation from

¹⁴⁶ Zolotarev and Sevostyanov, Velikaya Otechestvennaya Voyna, Vol. 1, p. 164.

¹⁴⁷ Oleg Kiselev, "Prigranichnyye Srazheniya 1941 goda" [Border area battles of 1941], in Aleksandr Chubaryan, ed., Velikaya Otechestvennaya Voyna 1941–1945 gg., Illyustrirovannaya Entsiklopediya [The Great Patriotic War of 1941–1945. Illustrated Encyclopedia] (Moscow: OLMA-Press, Obrazovaniye, 2005), p. 445.

¹⁴⁸ Bykov Konstantin, *Velichayshaya Voyennaya Katastrofa. Kiyevskiy Kotel* [Greatest military disaster. Kiev entrapment] (Moscow: Yauza with EKSMO, 2008), pp. 18–20; Kryvosheev et al., *Otechestvennaya bez hryfa sekretnosty*, p. 85.

¹⁴⁹ Aleksandr Isayev, Ot Dubno do Rostova [From Dubno to Rostov] (Moscow: Izdatel'stvo "AST, Tranzitkniga", 2004), p. 29; see also Zolotarev and Sevostyanov, Velikaya Otechestvennaya Voyna, Vol. 1, p. 188; Kurt von Tippelskirch, Istoriya Vtoroy Mirovoy Voyny [History of the Second World War] (Moscow: Inostrannaya Literatura, 1956), p. 185.

September 30, 1941, to December 5, 1941, amounted to 658,279 servicemen, including 514,338 fatalities.¹⁵⁰

It is difficult to imagine that Stalin did not know about this state of affairs, at least approximately. In 1941 the RKKA lost as many as 3.9 million people as POWs alone.¹⁵¹

The number of Soviet soldiers and officers captured in the course of the war became generally known in the late 1950s, thanks to German sources. More than 5.7 million people were captured by the Germans between June 22, 1941, and February 1, 1945. The lion's share of these POWs were captured in 1941, which turned out to be a catastrophic year for the RKKA. American historian Alexander Dallin retrieved this information from German archives and published it in his 1957 book *German Rule in Russia*, 1941–1945: A Study of Occupation Policies. Other researchers give comparable estimates for the number of Soviet POWs captured in 1941: 3.8 million people. 152

Despite being encircled, many of the Red Army units continued to fight fierce battles for long periods of time in an effort to break out. These battles kept a significant part of German troops bogged down, slowing the overall pace of the Wehrmacht's *Drang nach Osten*, which had strategic-level consequences in later stages of the war.

There is copious German evidence on how fiercely the Soviet soldiers fought. When testifying at the Nuremberg trials about the mass deaths of Soviet POWs captured at Vyazma in October 1941, Colonel-General Jodl, former chief of staff of the OKW, said "the surrounded Russian armies offered fanatical resistance, despite being cut off from any kind of supplies for eight to 10 days. Upon retreating into impenetrable forests they would literally eat the bark and roots of trees. They were in such a state of

¹⁵⁰ Aleksander Isayev, "Vyaz'minskiy Kotel" (Vyazma entrapment), in *Aktual'naya Istoriya*, http://actualhistory.ru/wiazma_kessel; Valentina Zhiromskaya, ed., *Naseleniye Rossii v XX veke: Istoricheskiye Ocherki* [The population of Russia in the twentieth century: historical essays], Vol. 2 (Moscow: ROSSPEN, 2001), p. 143.

¹⁵¹ Zhiromskaya, Naseleniye Rossii v XX veke, Vol. 2, p. 143.

¹⁵² Kristian Shtrayt, Soldatami Ikh ne Schitat': Vermakht i Sovetskiye Voyennoplennyye v 1941–1945 Godakh, [Do not consider them soldiers: the Wehrmacht and the Soviet prisoners of war in 1941–1945] (Moscow: Voyenizdat, 1979), pp. 99; Pavel Polyan, Zhertvy Dvukh Diktatur: Ostarbaytery i Voyennoplennyye v Tret'yem Reykhe i Ikh Repatriatsiya [Victims of two dictatorships: Ostarbeiters and POWs in the Third Reich and their repatriation] (Moscow: Vash vybor TSIRZ, 1996), pp. 65, 71.

exhaustion when captured that they were barely able to move. It was simply impossible to transport them. . . There was nowhere nearby to house them... Very soon the rains began, and later the cold weather came. This was the reason most of the Soviet servicemen taken prisoners at Vyazma died."¹⁵³

By the winter of 1941, the Soviet Union had lost practically all of its regular armed forces. The enemy controlled a huge part of Soviet territory. But even these extraordinary Wehrmacht achievements could not break the will of the Soviet leadership, military command and general population, who were determined to continue resisting the German onslaught.

The RKKA's regular attempts to stage large-scale counterattacks (and even counteroffensives) usually did not produce the desired results and led to huge losses. Still, in some cases these attacks slowed the advance of Hitler's troops, forcing them to sustain unplanned losses. Such counteractions included, for example, the massive counterstrike that several RKKA mechanized corps attempted at Brody and Dubno (which some Russian historians have recently begun to refer to as "the largest tank battle of World War II"). This Soviet counterstrike had little effect. The RKKA's tank forces suffered huge losses, including large noncombat losses sustained during deployment to the battle area. 154

The Battle of Smolensk played an important role. It delayed the advance of German troops for almost two months.¹⁵⁵ In the course of that battle the Red Army staged an offensive near Yelnya from August 30 to September 8, 1941. RKKA units participating in the Yelnya offensive managed to break through the enemy's strong defenses and defeat a significant Wehrmacht grouping, which lost a total of seven infantry divisions and one motorized

¹⁵³ Vladimir Andronikov, Yevgeniy Chekharin, et al., eds., *Vserossiyskaya kniga Pamyati.* 1941–1945, review volume [All-Russian book of remembrance, 1941–1945] (Moscow: Voyenizdat, 1995), p. 260.

¹⁵⁴ See Isayev, *Dubno 1941*; Yevgeniy Drig, *Mekhanizirovannyye Korpusa RKKA v Boyu. Istoriya Avtobronetankovykh Voysk Krasnoy Armii v 1940–1941 Godakh* [Mechanized corps of the Red Army in combat. History of the armored forces of the Red Army in 1940–1941] (Moscow: Izdatel'stvo AST, Tranzitkniga, 2005); Andrey Ulanov and Dmitry Shein, *Poryadok v Tankovykh Voyskakh* [Order in armor forces] (Moscow: Veche, 2011); Vladimir Beshanov, *Tankovyy Pogrom 1941 Foda (Kuda Ischezli 28 Tysyach Sovetskikh Tankov?*) [Tank mayhem of 1941 (Where did the 28,000 Soviet tanks disappear?)] (Minsk: Harvest, 2004), pp. 336–340.

¹⁵⁵ Mikhalev, Voyennaya Strategiya, p. 690.

infantry division.¹⁵⁶ As a result, the Germans' Army Group Center was forced to transition to defense on July 30, 1941, and had to remain in defense for quite a significant period of time.¹⁵⁷

By the end of July 1941, Hitler had come to the conclusion that not only had he defeated the Red Army "but also the power [of the Soviet Union] had been so undermined that no recovery could save it from total destruction due to the incredible losses of hardware." Hitler pointed out during a meeting on July 4 that "I keep trying to put myself in the enemy's shoes. The enemy has practically already lost the war. It is a good thing we defeated the Russians' tank forces and their air force in the very beginning. The Russians will not be able to restore them anymore." Franz Halder wrote in his diary on July 3, the 12th day of the war, that "in general, we can now state that the task of defeating the main forces of the Russian ground forces located in front of the Western Dvina and the Dnieper has been accomplished. . . . East of those we can encounter resistance by disparate groups, which, given their personnel strength, cannot seriously hamper the German offensive. Therefore it would not be an exaggeration to say that we won the campaign against Russia within 14 days. Of course, it is not finished yet."158

Yet in December 1941, the Red Army inflicted a major defeat on the Wehrmacht's Army Group Center outside Moscow. Overcoming incredibly difficult conditions, the Soviet Supreme Command and the General Staff managed to accumulate significant reserves and supplied these units with new military hardware to compensate for arms and systems that had been lost in previous battles. The Soviet Union's supreme leadership and military command (including commanders like Zhukov, Boris Shaposhnikov, Konstantin Rokossovsky and Leonid Govorov) displayed strong will and

¹⁵⁶ Yevgeny Kulkov, "Napadeniye Germanii na SSSR" [The German attack on the Soviet Union], in Oleg Rzheshevskiy, ed., *Mirovyye Voyny 20go Veka* [The world wars of the twentieth century], Vol. 3 (Moscow: Nauka, 2002), p. 141; R. V. Shilyakov, I. A.Chukanov, A. A. Volkov, et al., *SSSR –Pobeda vo Vtoroy Virovoy Voyne* [USSR: victory in World War II] (Moscow: Logos, 2008), p. 271.

¹⁵⁷ Mikhail Myagkov, "Na Grani Katastrofy, 22 Iyunya – Sentyabr' 1941 Goda" [On the brink of disaster, June 22–September 1941], in Kovalenya, 1941. Strana v Vgne, Vol. 1, p. 111.

¹⁵⁸ Franz Halder, *Voyennyy Dnevnik: 22.06.1941–24.09.1942* [War Diary: 22.06.1941–24.09.1942] (Moscow: OLMA-Press, 2004), p. 72; see also Wilhelm Keitel, *Razmyshleniya Pered Kazn'yu* [Reflections before execution] (Moscow: Veche, 2012), pp. 299–300; TSAMO RF fund 217, inventory 1297, case 2, pp. 110–112.

endurance. The German forces were pushed back from Moscow to a distance of 150 to 200 km.¹⁵⁹

The victory of the Red Army in the Battle of Moscow guaranteed that the Germans' hopes for a successful blitzkrieg would be crushed. Yes, a long war was still ahead with many fierce battles to be fought until May 1945. But the blitzkrieg was finished. Hitler had to claim in November 1941 that he had never used the term "blitzkrieg" because it was an absolutely stupid word. 160

There was another factor that played an important role in ensuring the ultimate failure of the blitzkrieg strategy: The Wehrmacht's strategic planners had hesitated when deciding on the target for their main strike, and also made serious adjustments to the operational and strategic plans during the summer and fall of 1941.¹⁶¹

The Soviet side had to incur enormous costs as it fought to foil the German blitzkrieg. ¹⁶² Soviet losses exceeded German losses by far in 1941. ¹⁶³ The factors that had guaranteed such a disparity in losses included the Wehrmacht's overall might, its mastery of the fine technologies of warfare and the quality of its hardware. But a number of factors also contributed to this

¹⁵⁹ Boris Nevzorov, Moskovskaya Bitva: Fenomen Vtoroy Mirovoy Voyny [Battle of Moscow: the phenomenon of the Second World War] (Moscow: Si Di Press, 2011), pp. 87–88; Mikhail Myagkov, "Bitva Pod Moskvoy: ot Oborony k Kontrnastupleniyu" [The Battle of Moscow: from defense to counterattack] in Novaya i Noveyshaya Istoriya, No. 3 (2010), pp. 22–61; Boris Shaposhnikov, Bitva za Moskvu, Moskovskaya Operatsiya Zapadnogo Fronta 16 Noyabrya 1941 g, –31 Yanvarya 1942 g., [Battle for Moscow, Moscow Operation of the Western Front, November 16, 1941–January 31, 1942] (Moscow: Izdatel'stvo "AST, Tranzitkniga", 2006), p. 286.

¹⁶⁰ See http://www.bolshoyvopros.ru/questions/264353-otkuda-poshlo-i-chto-oznachaet-vyrazhenie-blickrig.html.

¹⁶¹ Mikhalev, Voyennaya Strategiya, p. 306.

¹⁶² In his November 6, 1941 speech at the ceremonial meeting of the Moscow Soviet of People's Deputies with the party and public organizations in Moscow, Stalin exaggerated the losses of the enemy by 6.5 to 6.9 times and underestimated Soviet losses by 6 to 8 times. Joseph Stalin, O Velikoy Otechestvennoy Voyne Sovetskogo Soyuza [On Great Patriotic War of the Soviet Union], 5th edition (Moscow: Politizdat, 1952), p. 20; Boris V. Sokolov, Pravda o Velikoy Otechestvennoy Voyne [The Truth about the Great Patriotic War] (St. Petersburg: Aletheia, 1998). See also Vadim Pervyshin, Stalin i Velikaya Otechestvennaya Voyna [Stalin and the Great Patriotic War] (Moscow: Sputnik + Company, 2004), p 325.

¹⁶³ If we were to believe Halder's diary, the Wehrmacht's losses from June 22, 1941 to September 26, 1941 were as follows: 12,604 officers and 385,326 noncommissioned officers and privates wounded; 4,864 officers and 108,487 noncommissioned officers and privates killed; 416 officers and 23,273 noncommissioned officers and privates missing; total losses of 17,884 officers and 517,086 noncommissioned officers and privates. The total losses of the whole army on the Eastern Front (excluding those sick) totaled 534,970 persons. Franz Halder, Voyennyy Dnevnik. Yezhednevnyye Zapisi Nachal'nika General'nogo Shtaba Sukhoputnykh Voysk [War diary. Daily records of the chief of General Staff of the Army], Vol. 3 (Moscow: Voyenizdat, 1971) p. 388.

disparity on the Soviet side. These included an entire range of errors committed during the development of the Soviet armed forces, shortcomings in the development of the art of war by the Red Army and problems with the quality of the RKKA's command personnel. Other contributing factors include: the poor quality of some of the RKKA's military hardware; the problems RKKA personnel encountered when using this hardware; failing to correctly assess Hitler's intentions and correctly estimate the timing of the German aggression; and the inability of Red Army commanders to grasp the essence of the strategy and operational art of blitzkrieg.

Hitler's war machine, which was fine-tuned and unique in many ways and which mastered many "fine technologies of war," taught the Soviet leaders and military commanders a serious lesson.

Some of the tragic mistakes that the Soviet leadership made were not inevitable. But that is a subject for another study.



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