

Breaking the Seelow Heights: the Zenith of Combined Arms Warfare

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Nearly four years after the commencement of Operation Barbarossa, the German Army stood on the verge of annihilation. What Adolph Hitler expected in 1941 to be a quick victory for National Socialism over its archenemy, "Jewish Bolshevism", had become a brutal war of attrition. By April 1945, the remnants of the German war machine had been pushed back into the Fatherland where they would fight a final battle for survival against the endless masses of the Red Army. The Germans constructed their last prepared defensive positions before Berlin along the Seelow Heights overlooking the level plain of the Oder River valley. From their positions on the high ground, the German defenders faced the largest concentration of force to space in the history of warfare. Looking up to the Heights, the restless soldiers of the 1st Byelorussian Front commanded by Marshal G. K. Zhukov were positioned to destroy the German defenders and demonstrate their proficiency in modern combined arms operations to the rest of the world. During this devastating battle, the weight of Soviet combined air and ground operations proved successful despite tactical errors and personality conflicts within the Soviet command structure. Along the Seelow Heights and in the Oderbruch Valley, the new methods of modern combined arms operations reached their zenith as the largest concentration of force in the history of modern warfare opened the final offensive of World War II.

The early years of World War II in Europe saw the evolution of a new kind of warfare exemplified by Germany's decisive victories over Poland, France and the Balkans. The new tactics of the German armed forces utilized a revolutionary doctrine known as *Blitzkrieg* or lightning war. *Blitzkrieg* as defined by author and Eastern Front historian Christopher Duffy was, "an offensive way of fighting, which uses the combined efforts of tanks, mechanized infantry, mobile artillery and combat engineers, and calls on the greatest possible close air support." [1] These same tactics were used with great success against Stalin's armies in the opening days of Operation Barbarossa. By the end of 1941, German Army Group North had surrounded and begun a siege of the city of Leningrad, and Army Group Center was approaching the gates of Moscow. Subsequent German offensives in the spring of 1942 by Army Group South drove the Soviet Army back to the City of Stalingrad. The power and effectiveness of the *Blitzkrieg* seemed unstoppable. However, Soviet leadership above all had learned from their costly mistakes, and by the winter of 1942/43 they were ready to unleash their own version of *Blitzkrieg* on the Nazi invader.

In November 1942, the Soviets launched a surprise offensive, which completely encircled the German Sixth Army and a large part of the German Fourth Panzer Army at Stalingrad. The encirclement and subsequent surrender of the German forces at Stalingrad were the first signs of a new Soviet confidence and competence in conducting successful combined arms operations. Eastern Front Historian, David Glantz states that the encirclement of Stalingrad, "wrested the strategic initiative from the German hands." [2] However, the Soviets in the summer of 1943 went on the strategic defensive in anticipation of a German attack. The earlier Soviet victories had created a bulge in the front lines near the city of Kursk. Called the Kursk Salient, this large concentration of Soviet forces became the target of Hitler's 1943 summer offensive.

The resulting battle at Kursk in July 1943 was a massive defeat for the German army, which lost a substantial portion of its remaining armoured reserves. This was precisely what Soviet leaders were trying to achieve. The Soviets had also planned in the summer of 1943 to accomplish much more than just win a defensive victory. Soviet planners prepared massive offensive counterattacks to be unleashed once the Germans had been defeated at Kursk. These offensives were a resounding success. The tide had indeed turned in the East. The Correlation of forces, according to Glantz, "had shifted decisively in favor of the Soviets. From August 1943 on, the Soviets maintained firm control of the strategic initiative." [3]

Beginning in January of 1944, the Soviets conducted the first in a series of successful offensives that would drive the German Army further back to the Vistula River. To accomplish this enormous feat, the Soviets made extensive preparations and concentrated enormous quantities of men for their offensives. Massive use by the Soviets of combined arms including artillery, infantry, armour and close air support ensured a rapid penetration of the German defensive line. This penetration was quickly exploited by Soviet tank armies, which rapidly moved through German rear areas creating fear and confusion. The soviet tank armies were able to advance into the operational depths of 150km or as far as the strategic depths of up to 400km. In general, the Soviets were able to overcome the first line of German defenses on the first day of their offensive and the second line of defense by the second or third day. Duffy states that Zhukov, during these offensives, "held back until the infantry, the engineers and the close-support tanks and assault guns had chewed a way clear through the tactical zone of defense to the open country, and he did not commit his tank armies until the second and third days of the offensive." [4] This strategy of penetrating the enemy defenses, exploiting the penetration and then quickly surrounding enemy forces proved extremely successful. A summary of the 1944 offensives by Glantz describes them as having, "considerable maneuver, and demonstrated Soviet mastery of the problem of coordinating the use of all types of combat arms." [5] The success of the 1944 offensives would lay the foundation for the future planning of the 1945 offensives and ultimately for the final battle of Berlin.

The Soviet 1945 winter offensive began on 12 January. Aided by the frozen ground and ice covered rivers, this offensive proved as equally successful as the offensives of the previous year. The German defenses were penetrated quickly. On 17 January, Warsaw fell. The city of Posen was reached and surrounded on the 22nd. Zhukov's troops of the 1st Byelorussian Front crossed the 1939 German boarder on 26 January. The first Soviet troops reached the river Oder on 30 January near the city of Kienitz. At 0600 hours the following day, Soviet infantry crossed the ice on the Oder River and established a small bridgehead four kilometers wide and two kilometers deep. Further south, a second bridgehead was established near the town of Reitwein. These bridgeheads were only 60 miles from Berlin and there were no organized German defenses in place to prevent a Soviet advance on the German capital city. The Vistula-Oder Operation had been a resounding success. However, the Soviets needed time to secure their flanks and reduce German strong points. The speed of the advance had also created supply problems. Supply trucks had to travel great distances, and railroads had to be repaired. Stocks of fuel and ammunition were running low. The Soviets needed time to replace battle casualties and to rebuild airfields. For these reasons, the Soviets chose to halt their advance along the Oder River, and to build up and expand their existing bridgeheads in preparation for a final assault on Berlin. The 5th Shock Army, part of the 1st Byelorussian Front, received specific orders from the Front commander, Marshal Zhukov on the 4th of February, which read:

"Attention of the Military Council, Corps Commanders and Division Commanders of the 5th Shock Army:

The 5th Shock Army has been assigned an especially important mission, that of holding the bridgehead on the west bank of the Oder and expanding it at least up to 20 km in frontage and 10 to 20 km in depth.

I ask that you all understand your historic role in carrying out your mission and, after explaining this to your men, to demand that they display the utmost fortitude and courage.

Unfortunately, we cannot yet help you with aircraft, because all the airfields have been turned into bogs and the planes cannot take off. Enemy planes are flying from Berlin aerodromes with concrete runways. I recommend:

1. to dig in deep;
2. to organize massive anti-aircraft fire;
3. to move to night combat operations, launching each attack with a limited objective; to repulse enemy attacks during the day. In another two or three days the enemy will be wiped out.

I wish you and your troops historic success which you not only can, but must ensure." [6]

The next three months were a flurry of activity for both sides. The German forces hastily organized a new defensive front and launched costly counter attacks to drive the Soviets back across the Oder. The Soviets tenaciously defended their bridgeheads while simultaneously building up enormous quantities of men and materiel for the final offensive.

Key to the Soviet build up was the difficult task of expanding of the bridgeheads. Hitler ordered the 9th Army commanded by General Busse to destroy the Soviet bridgeheads. Throughout the month of February and into March, the 9th Army conducted several unsuccessful counter attacks against the Soviet positions along the Oder River. These futile attacks cost the 9th Army as many as 35,000 casualties; casualties which could not be replaced by the German High Command. Unable to throw the Soviets back across the Oder, General Busse's attention turned to holding the German position blocking the main avenue of approach to Berlin. Located between the Reitwein and Kienitz bridgeheads was the ancient, fortress city of Kustrin. It was a formidable obstacle centered on the main road to Berlin, *Reichsstrasse 1*. Holding this fortress severely restricted Marshal Zhukov's ability to advance on Berlin.

The bitter contest over Kustrin was a costly one for both sides but the Soviets eventually surrounded the fortress and slowly began to squeeze the pocket closed. The German defenders were finally forced to surrender the fortress on March 30th. The defense may have cost the Germans and the Soviets as many 20,000 casualties each.[7] The loss was more significant for the German defenders. The Soviets were now able to consolidate and expand their bridgehead to a size of 50 km wide and 7-10 km deep. On the eastern bank of the Oder River, the main road to Berlin, *Reichsstrasse 1* was secured. The geographic stage was now set for the final offensive. On 27 March, Stalin ordered his Front Commanders to Moscow to finalize plans for the attack on Berlin.

Marshal Zhukov arrived in Moscow on 29 March followed by the commander of the First Ukrainian Front, Marshal Koniev two days later. They both met with Stalin to present their plans for the final offensive. The two marshals were fierce rivals. Each wanted to be the one to capture the German capital city. Marshal Zhukov had clearly earned the right but Stalin decided to use the rivalry as a motivation between his two commanders. Stalin's orders to Zhukov gave him the primary mission of taking Berlin and pushing on to meet the allied armies on the Elbe River. The operation was to begin no later than 16 April and Berlin was to be surrounded by the 21st. However, Stalin opened the door of opportunity to Marshal Koniev by saying, "In the event of stiff enemy resistance on the eastern approaches to Berlin and a possible hold-up of the offensive of the First Byelorussian Front, the First Ukrainian Front is to be in readiness to strike at Berlin with its tank armies from the south." [8] The final offensive would be a race between Zhukov and Koniev to see who would be the first into Berlin. This race would significantly impact Zhukov's operations against the Seelow Heights.

Zhukov had two weeks to make his final preparations for the great offensive to take Berlin. The logistics requirements in preparation for the attack were immense. "On the whole the work done to prepare the Berlin Operation had no parallel in scale or intensity. Concentrated on a fairly narrow sector of the front and within short time-limits were 68 infantry divisions, 3,155 tanks and self-propelled guns and about 42,000 artillery and mortar pieces." [9] Of these, 41 infantry divisions, 2,655 tanks and SPGs, 8,983 guns and 1,401 rocket launchers were located in the bridgehead. This concentration of force was unprecedented compared with other well-known operations. Hitler had deployed 3,332 tanks to invade the Soviet Union along a total frontage of 930 miles. For the attack against the Kursk Salient, "Operation Citadel", he would deploy 2,700 tanks and assault guns along a front sixty miles wide.[10] In Normandy during the West's great invasion of Europe, by D-Day +3, Allied forces ashore were scheduled to number only 13 divisions.

Soviet supply and transportation services hastily brought forward thousands of replacements and tons of supplies of every variety. Millions of gallons of fuel, for the thousands of tanks and tens of thousands of trucks, were required along with tons of food, ammunition, bridging materiel, medical

supplies, and other equipment. Zhukov reported, "In terms of artillery ammunition alone 7,147,000 shells were required by the start of the operation." [11]

Twenty-three bridges were constructed to support the Oder River crossings. An additional forty ferries supplemented these bridges. Zhukov had 194 engineer battalions and 14 military construction units supporting the bridging operations. These engineer units performed brilliantly, building and rebuilding the bridges after many were destroyed by German air and artillery attacks.

The extensive preparations and build-up of the Soviet air forces matched the enormous concentration and build-up of Soviet ground forces. Zhukov's 1st Byelorussian Front was supported by a total of 4,188 combat aircraft. Immense amounts of fuel and ammunition were required to support these aircraft. In addition, Soviet engineers had to build or repair enough airfields to accommodate them. In all, some 290 airfields were constructed to accommodate Zhukov's massive air forces. [12]

Zhukov's attack plan was simple. Using the proven tactics of the previous 1944 and January 1945 offensives, he would utilize his overwhelming concentration of force to breach the German defensive lines on the first day of battle and then exploit the breakthrough using his reserve tank armies, which would race ahead to encircle the city of Berlin. In his own words, "We decided to hurl ourselves upon the defending enemy forces with such strength as to stun and shake them to the very foundations right from the start, using for that purpose a mass of aircraft, tanks, artillery, and material supplies." [13]

The offensive would begin during the early morning hours of darkness and be led by a short, intensive artillery barrage utilizing the over 40,000 available guns. The number of guns squeezed into the narrow front meant that there were 270 guns of 76-mm and higher per kilometer of front. Soviet armies contained more artillery than any other army in the world. They deployed artillery regiments and independent artillery divisions. According to Soviet Marshal Koniev, "We saw well-organized artillery as the embodiment of our army's power. We held that whatever we would do with gunpowder rather than the bayonet would be to our great advantage and would safeguard our troops against superfluous losses. Hence we should spare neither time nor effort in preparing the artillery attack." [14]

To overcome the darkness, Zhukov introduced an unconventional plan to utilize 123 searchlights. Immediately following the artillery strike, these lights were to switch on in order to have the dual effect of providing the Soviet infantry and tanks with artificial light and to create fear among the German defenders.

The lead element in the attack was the Soviet 8th Guards Army commanded by General Chuikov. His army was to breach the first German defensive belt utilizing his tanks and infantry, supported by close support aircraft, and then push forward and take the Seelow Heights by the end of the first day. It was planned that once the 8th Guards Army breached the Seelow Heights Zhukov would release his reserve tank armies to exploit the breach and move on towards Berlin.

The remnants of the German Army facing Zhukov, commanded by Colonel General Heinrici, were determined to prevent a Soviet breakthrough not with the expectation of defeating the Soviets but in the hope of delaying them long enough for the Western Allies to capture Berlin. They constructed defensive positions in depth for 40 km separated into three defensive belts. The first defensive belt was located in the Oderbruch and provided very limited advantages with regard to terrain. The second defensive belt consisted of three defensive trench lines. The first of these ran along the front edge of the Seelow Heights. Subsequent trench systems were located in positions on the reverse slopes of the Seelow Heights. Located in this second defensive belt were five flak regiments deploying the formidable German 88mm Flak Gun in an anti-tank role. The 88mm gun was used throughout the war and up to the summer of 1942 it was the most effective weapon available to stop the Soviet T-34 and KV tanks. It could kill a T-34 out to 4,000 yards. With a high rate of fire and

optics designed to track aircraft, it crushed slow moving tanks with ruthless efficiency.

All the German infantry divisions lacked superior combat effectiveness. They were all either under strength or had not received proper combat training. Many of the units manning the front lines were *Volksturm* units, consisting of old men, many of whom were veterans of the First World War. Others were untrained sailors or *Luftwaffe* personnel hastily thrown into the line by the senior leadership of the Reich to impress upon Hitler their loyalty and fanaticism. There was also an extreme shortage of small arms and artillery ammunition. Many soldiers arrived and were sent to the front armed with a variety of old captured rifles or only with a *Panzerfaust*.

The *Panzerfaust* was anti-tank weapon carried by a single infantryman. Used since late 1943, it proved to be a highly effective tank killer capable of destroying any Soviet tank. However, in order to destroy a Soviet tank the individual infantryman only had one projectile and was required to fire the hand-held weapon at almost point blank ranges not to exceed 100 meters. The *Panzerfaust*, when fired, generated a large flash of sparks and a plume of smoke, which immediately gave away the tank hunters' position. Regardless of the dangers, infantrymen armed with this formidable weapon proved highly efficient at destroying Soviet armour, creating fear among all those in the Soviet tank corps.

The real strength of the German defense was the terrain. Once the Soviets began to move forward of their positions in the bridgehead, they would have to cross the flat and open landscape of the Oderbruch. This terrain contains several small canals acting as natural tank ditches. In addition, the Germans drained a natural lake allowing the water to flood the low areas turning much of the ground into a marsh incapable of supporting tanks and forcing all vehicles to remain on the few available roads. While moving through this part of the battlefield, Soviet tanks and infantry were under constant observation from German artillery spotters positioned on the high ground. The German 88mm anti-tank guns could engage Soviet tanks in the open, over extended ranges, and all the approaches were heavily mined. The forces that made it through the killing fields of the Oderbruch would then have to assault the Seelow Heights themselves.

The Seelow Heights slope up to 30 meters above the valley bed and contain inclines too steep for Soviet tanks to climb. Hidden within the trees and twists of the terrain were German anti-tank guns, machinegun nests, and *Panzerfaust* teams. Beyond the heights the last remaining German armoured reserves waited. These tanks were positioned to conduct counter attacks against any Soviet breakthrough in order to reestablish the German line of defense. The Seelow Heights represented the last strong defensible position between the Soviets and Berlin. According to General Busse, "the retention or loss of the Seelow Heights, dependent upon the situation and strengths, would decide the result of the coming battle." [15]

On 14 April, Hitler issued his order of the day. He believed that the recent death of the American President, Franklin Roosevelt on April 12th was a sign that all was not lost and that the war would turn in favor of Germany.

"Soldiers on the German Eastern Front:

The Jewish Bolshevik arch-enemy has gone over to the attack with his masses for the last time. He attempts to smash Germany and to eradicate our nation. You soldiers from the east today already know yourselves to a large extent what fate is threatening, above all, German women, girls, and children. While old men and children are being murdered, women and girls are humiliated to the status of barracks prostitutes. Others are marched off to Siberia.

We have anticipated this thrust, and since January of this year everything has been done to build up a strong front. Mighty artillery is meeting the enemy. Our infantry's casualties were replenished by countless new units. Reserve units, new formations and the *Volksturm* reinforce our front. This time the Bolsheviks will experience Asia's old fate. That is, he must and will bleed to death in front of the capital of the German Reich.

Whosoever does not do his duty at this moment is a traitor to our nation. The regiment or division that leaves its position acts so disgracefully that it will have to be ashamed before the women and children who are withstanding the bombing terror in our towns.

Above all, look out for the treacherous few officers and soldiers who, to secure their own miserable lives, will fight against us in Russian pay, perhaps even in German uniforms. Whosoever gives you a command to retreat is, unless you know him well, to be arrested immediately, and if necessary to be executed immediately, irrespective of his rank.

If in these coming days and weeks every soldier on the Eastern Front fulfills his duty, Asia's last onslaught will collapse just as in the end our enemies' penetration in the west will despite everything, come to naught. Berlin remains German, Vienna will again be German and Europe will never be Russian.

From one community, sworn to defend not a vain conception of a fatherland, but to defend your homeland, your women, your children and thus your future.

In this hour the entire German nation looks to you, my soldiers in the east, and only hopes that by your fanaticism, by your arms and by your leadership, the Bolshevik onslaught is drowned in a blood bath.

At the moment when fate has taken the greatest war criminal of all times from this earth, the war will take a decisive turn.

Adolph Hitler [16]

To observe and control the battle, General Chuikov had an elaborate bunker system built on top of the only high ground occupied by the Soviets West of the Oder, the Reitwein Spur. From this position Chuikov was able to observe all the approaches his forces were to use for their attack. This position was so favorable that the Front Commander, Marshal Zhukov co-located his headquarters on top of the Reitwein Spur. This move irritated General Chuikov who wrote, "Unexpectedly the observation post of the front commander (Zhukov) was also transferred here. Frankly speaking many officers, including myself, did not particularly welcome the presence of superior officers at their command and observation posts; it was easier to control the course of an action without them." [17]

By the night of 15-16 April, all the preparations had been made, orders had been given, and the time for the attack had come. Zhukov arrived in his bunker along with Chuikov shortly before the three o'clock start time. They each had a cup of tea served by a young female soldier who according to Zhukov had a very non-Russian name. In the bridgehead Soviet soldiers stood ready. The fear and excitement of moment was overwhelming but they were ready. The Berlin Operation, as described by Zhukov, "was to be the crowning point of the triumphant road traveled by the heroic Soviet troops who had battled their way over thousands of kilometers, grown wise with the experience of major battles and become steeled in ferocious fighting. They were aflame with the desire to deal the enemy the final blow and to end the war as swiftly as possible." [18]

At three o'clock on the morning of 16 April 1945, the largest artillery barrage in the history of warfare was unleashed on Zhukov's order. From his position on the Reitwein Spur, Zhukov watched as the firepower of 40,000 guns (including mortars and rockets) began their orchestra of death. Zhukov remembers the opening barrage, "In that same instant the entire area was brilliantly lit up by the fire of many thousands of guns, mortars and our legendary Katyushas followed by the deafening thunder of the explosions of shells, mines, and aerial bombs." [19] Chuikov describes his witness to the awesome firepower of the Soviet Army, ". . . in an instant it became light as day. In the flashes of artillery fire we saw the unfurled Guards colors moving forward along the trenches to the assault positions. A volcanic rumble resounded as 40,000 guns began to fire. The Oder valley seemed to rock. Fountains of dust and smoke shot up into the air." [20]

From atop the Seelow Heights, a German officer, Lt. Tams observed the artillery barrage. He provides a first-hand account of this event seen from those who were the object of this destruction. "It seemed as if the dawn was suddenly upon us, then vanished again. The whole Oder valley bed

shook. In the bridgehead it was as light as day. The hurricane of fire reached out to the Seelow Heights. It seemed as if the earth was reaching up into the sky like a dense wall. We were soon covered in sand, dirt, and glass splinters. None of us had experienced anything like it before, and would not have believed it possible. There was no escape. The greatest concentration of artillery fire in history was directed immediately in front of us. We had the impression that every square yard of earth would be ploughed up."[21] Another German soldier, Friedhelm Schoneck provides a vivid recollection of this terrifying event, "It is 3 o'clock but still night. The night has gone mad. An ear-deafening din fills the air. In contrast to what we have experienced previously, this is no bombardment but a hurricane tearing apart everything in front of us, over us and behind us. The sky is glowing red as if it will crack open at any moment. The ground rocks, heaves and sways like a ship in a Force 10 gale. We crouch down in our defensive positions, our hands grasping our weapons in deadly fear, and our bodies shrunken into tiny crouching heaps at the bottom of the trench. The bursting and howling of the shells, the whistling and hissing of shrapnel fills the air or what remains of it for us to breathe. Screams and orders are choked by steel, earth, and the acrid smoke of the volcano that has suddenly opened up on top of us with incredible force. Our trench system has disappeared, collapsed or been flattened by thousands of shells and bombs. The dugout we are sitting in has become even narrower, the walls driven inward, packing us together like sardines in a tin can. We tremble and pray, the beads of rosaries slipping through soldiers' dirty hands. We have lost all shame. Dear God, hear us calling to you from this hell!"[22]

During this first bombardment, the Soviets fired the majority of the 1,236,000 artillery rounds fired on the first day of attack. Zhukov describes this number as being 2,450 railway carloads of shells.[23] Very often, the First World War is considered to have been the zenith for artillery. The massive use of artillery by the Soviets in their final offensives proves otherwise when compared with the enormous bombardment described during the British Somme Offensive of 1916. The British utilized only 1,437 guns along an 18-mile front; the bombardment taking seven days to fire 1,500,000 shells.

At 0320 hours, the searchlights were turned on and the combined infantry and tank assault of the 8th Army began. Unfortunately for the Soviets the searchlights had never been used in combat. The massive artillery barrage produced a cloud of smoke and dust so thick that the beams of light could not penetrate it. Visibility was reduced to zero. Front line commanders requested that the lights be turned off. Zhukov, seeing the lights turned off immediately ordered them turned back on. Confusion reigned as the fog of war overcame the troops moving through a fog of dust and debris. Many units elected to wait until daylight before proceeding forward. The Soviets had lost all the advantages of attacking in the darkness.

The Soviet ground attack was moving slowly but the full might of their Air Force was not. The 18th Air Army joined the attack utilizing 743 heavy bombers to drop 884 tons of bombs on German strong points. At daybreak over 1600 ground attack *Sturmoviks* and bombers of the 16th Air Army screamed in low over their heads to attack positions on the Heights. The main task of the air forces was to provide close air support to the main strike force during the breakthrough battle. There were 6,500 sorties flown on the 16th alone.[24]

The combined artillery and air attacks of the morning of the 16th had completely devastated the first German defensive belt. Only a few strong points located in the small towns were able to resist the Soviet masses. What Zhukov and Chuikov didn't know was that the German commander Heinrici, a seasoned veteran of the Eastern Front, had anticipated the attack and had moved the majority of his forces off the front lines and back to the second defensive belt. The vast majority of Zhukov's initial strike had fallen on empty positions. Few of those who remained in the front line positions survived to describe the attack. For those positioned on top of the Seelow heights, the site of the Soviet Army moving forward that morning was chilling. Lt. Tams writes, "Cautiously we risked a peep over the Heights down into the Oderbruch, and what we saw made the blood run cold. As far as we could see in the grey light of dawn came a single wave of heavy tanks. The air was filled with the noise of tank

engines and the rattling of tank tracks. As the first row came closer we saw behind them another, and then hordes of running infantry." [25] East Front veteran Heinz Landau remembered, "I was watching the Ivans approaching from the top of our position, (the Seelow Heights) and it sent shivers down my spine. Tanks of assorted sizes but mostly T-34s in vast numbers, probably outnumbering our guns, How does one describe the sight of the Russian army on the move? I for one do not know. Even an army of ants is an understatement." [26]

The Soviet assault appeared invincible but their movement through the Oderbruch was not easy. Small streams and canals crossing attack routes stopped the Soviet tanks and Self-propelled guns while forcing them to wait for engineer support. The infantry, proceeding through these obstacles became separated from the supporting armor and began to take heavy casualties from German artillery and machine gun fire. Chuikov reported, "The troops were unable to move until the engineers had set up crossings. Any kind of maneuver by motor vehicles or tanks was impossible for the roads were jammed, and to try and move across country, in this marshy valley with its well-mined fields, would have been impossible." [27] Casualties mounted as the German Flak 88's decimated Soviet tanks in the open. German artillery was able to provide devastating fire support. Again, the Soviet Airforce began pounding German rear areas in an attempt to cover the attacking ground forces. They were able to silence a large number of German artillery batteries. It was noon before Chuikov's tanks made it to the foot of the Seelow Heights. However, the terrain made it impossible for the tanks to move up to the Heights. Chuikov was bogged down and needed to move his artillery forward, in order to provide better support the attacking tanks and infantry during an attempt to take the Heights.

The original Soviet plan of attack was in chaos. It was about to get worse. While Chuikov ordered his artillery to move forward, Zhukov was becoming displeased with the progress of his troops. Fearing that Marshal Koniev, whose attack in the South was proceeding favorably, would beat him to Berlin, Zhukov without confronting his commanders ordered his two tank armies to move forward at 1430 hours to break the Seelow Heights. He was certain the weight of forces alone would be enough to achieve a breakthrough. Zhukov's interference during a critical period of the battle proved disastrous. Further congestion on the roads made movement almost impossible and severely hindered Chuikov's artillery from moving forward to re-deploy. Added confusion ensued along with an ever-increasing loss of command and control as these new tank armies became intermixed with those forces already engaged. Zhukov's order to send in his tank armies failed to achieve the decisive breakthrough he had hoped for. By the end of the day the Seelow Heights were still occupied by the stubborn German defenders. General Busse reported that April 16th, "was a great defensive success in view of the unequal strength." [28]

That evening, Stalin called Zhukov for an update. He was unhappy with Zhukov's progress and warned that Koniev was making good progress in the South and that perhaps Koniev's tank armies should be sent towards Berlin. Zhukov assured Stalin that the Heights would be taken the following day.

By morning the large quantities of Soviet artillery had had time to deploy forward within range of the Seelow Heights. The next morning began with another devastating barrage of artillery fire and close air strikes. Lt. Tams remembers, "Dawn brought yet another blast of artillery fire, which was supplemented and supported by wave after wave of bombing attacks by heavy aircraft. It was horrific." [29] The German defenders stubbornly held onto their positions as Zhukov's tank armies made another advance against the Seelow Heights. Once again, the 88mm Flak Guns and the tank hunting infantry armed with deadly *panzerfausts* destroyed many Soviet tanks. However, the Soviets began to make some progress. German casualties were mounting and no replacements were coming. Soviet tanks made small breakthroughs but were thrown back by the few German Panzer reserves. By the end of the day, the German defense was precarious but Soviet casualties had once again been tremendous caused in a large part by Zhukov's tactics of attacking in mass. Zhukov was losing the race for Berlin.

General Heinrici and General Busse were well aware that they could not continue to hold the positions along the heights for another day without immediate reinforcements. Elements of the two SS Panzer Divisions, *Nederland* and *Nordland*, were eventually released but they were unable to arrive in time. Hans Hansen was positioned behind the Heights near the city of Seelow and remembers the events of the morning of 18 April in his sector, "We were thrown into a sector of the front line a bit further to the north, between Seelow and Muncheberg. One could hardly talk of a front line, for, apart from two heavy flak batteries from our battalion and several infantry stragglers, there was nothing else available. No sooner had we arrived than the Russians attacked head-on with a large armored force. It looked dangerous, as the fire-spitting monsters rolled slowly toward us, the 88mm flak was superior, and the Soviets changed their direction of attack further to our left, where they found no resistance worthy of the name, and rolled past us. There was no doubt where they were going: to Berlin!"[30] Soviet tanks were able to breach the German positions in numerous places and threatened to flank others. Still, the remnants of the German Army continued to fight through the day and hold were they could as other units ambushed Soviet tanks. The Soviets may have cracked the dike but the cost was high.

The following morning, the final defenses were torn apart by the powerful Soviet forces. The survivors began a general retreat. Lt. Tams was one of those survivors and remembers, "the depression that came over us as we moved back defeated and exhausted through the countryside. The overwhelming might thrown against us had broken our backbone. Our regiment had ceased to exist as a regiment. It was the first time that I had experienced such a loss of self-confidence among our troops, as we recognized our powerlessness against this steamroller from the east. I was reminded of a line from our regimental song: 'A Hanseatic regiment knows only victory-or death!'"[31] The decisive battle for the Seelow Heights was over. Over 12,000 German soldiers had been killed and the last reserves had been used up. Germany would continue to conduct a fighting retreat back into the city of Berlin and those who survived would fight in the streets of the once great German capital city until the end.

Zhukov would win the race to Berlin, despite entering the city after Marshal Koniev's tanks. With two army fronts converging in the streets of Berlin, Stalin ordered Koniev back giving Zhukov the prize. The price in blood paid by the Soviet people to win Zhukov his place in history was enormous. During the breakout from the Oder, the Soviets had lost a reported 33,000 dead along with 743 tanks and self-propelled guns. Although we shall never know the final answer, it can be estimated that the total casualties sustained in killed and wounded may have exceeded 150,000 soldiers over four days in Zhukov's 1st Byelorussian Front alone.

For most of the Soviet and German leadership, the success of the operation, given the overwhelming Soviet superiority in manpower, armor, and air power seemed a certainty. Clearly, Zhukov expected much greater success. The unexpected high casualties may have come as a result of Zhukov's pride and determination to beat Koniev into Berlin or perhaps it was the lack of surprise and the overall ineffectiveness of the opening attacks. Chuikov wrote, ". . . we also underrated the specific features of the terrain, which abounded in canals, streams, lakes and other natural obstacles. Lack of roads restricted our freedom of maneuver and made it impossible to commit large forces during the attack."[32]

As in every battle, what Clausewitz called friction came into play making even the best plans and the most overwhelming advantages less so. What cannot be denied is the fact that the outnumbered German Army positioned along the Seelow Heights confronted the largest concentration of forces in the history of warfare in a final battle for their country. Given the advantages the terrain offered them in these positions, it took far more than just the sheer weight of the Soviet forces to overwhelm them. It required the combined arms of Soviet infantry and tank forces supported by artillery, engineers, supply troops, and the Soviet Air Force. Combined arms operations have been the standard doctrine for all modern military forces fighting in theaters of war around the world through the second half of

the twentieth century. However, none of the battles fought since April 1945 equaled Zhukov's overwhelming use of force. The decisive battle for the Seelow Heights remains the zenith of combined arms warfare.

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Footnotes

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- [5]. Glantz, 150.
- [6]. Tony Le Tissier, *Zhukov at the Oder*, (Connecticut: Praeger Publishers, 1996), 41.
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- [27]. Tissier, *Zhukov at the Oder*, 178.
- [28]. Tissier, *Zhukov at the Oder*, 187.
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