

MODERN WAR STUDIES

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When Titans Clashed

HOW THE RED ARMY STOPPED HITLER

David M. Glantz
Jonathan M. House

Maps by Darin Grauberger and George F. McCleary, Jr.



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Operation Uranus: The Destruction of Sixth Army

SOVIET PLANNING

Stalingrad marked a turning point not only in the actual conduct of the war but also in the *Stavka's* planning system. While Stalin and many field commanders were gravely concerned with German advances in the South, *Stavka* strategic planners remained remarkably consistent from July 1942 through February 1943. Although the Germans parried various limited Soviet counterattacks during July and August 1942, *Stavka* strategic planners never lost sight of their goal, which was to resume large-scale offensive operations and destroy at least one German army group. The long series of strategic and operational failures—produced in part by Stalin's reliance on his own military intuition and that of numerous political cronies instead of the sound advice of his military experts, such as G. K. Zhukov and A. M. Vasilevsky—finally persuaded Stalin to trust his professional military subordinates and grant them a larger role in planning and conducting major operations. Stalin, however, remained the ultimate authority. He determined the political aims of operations and often shaped the ultimate form of operations after listening to and acting on the recommendations of his senior commanders.¹

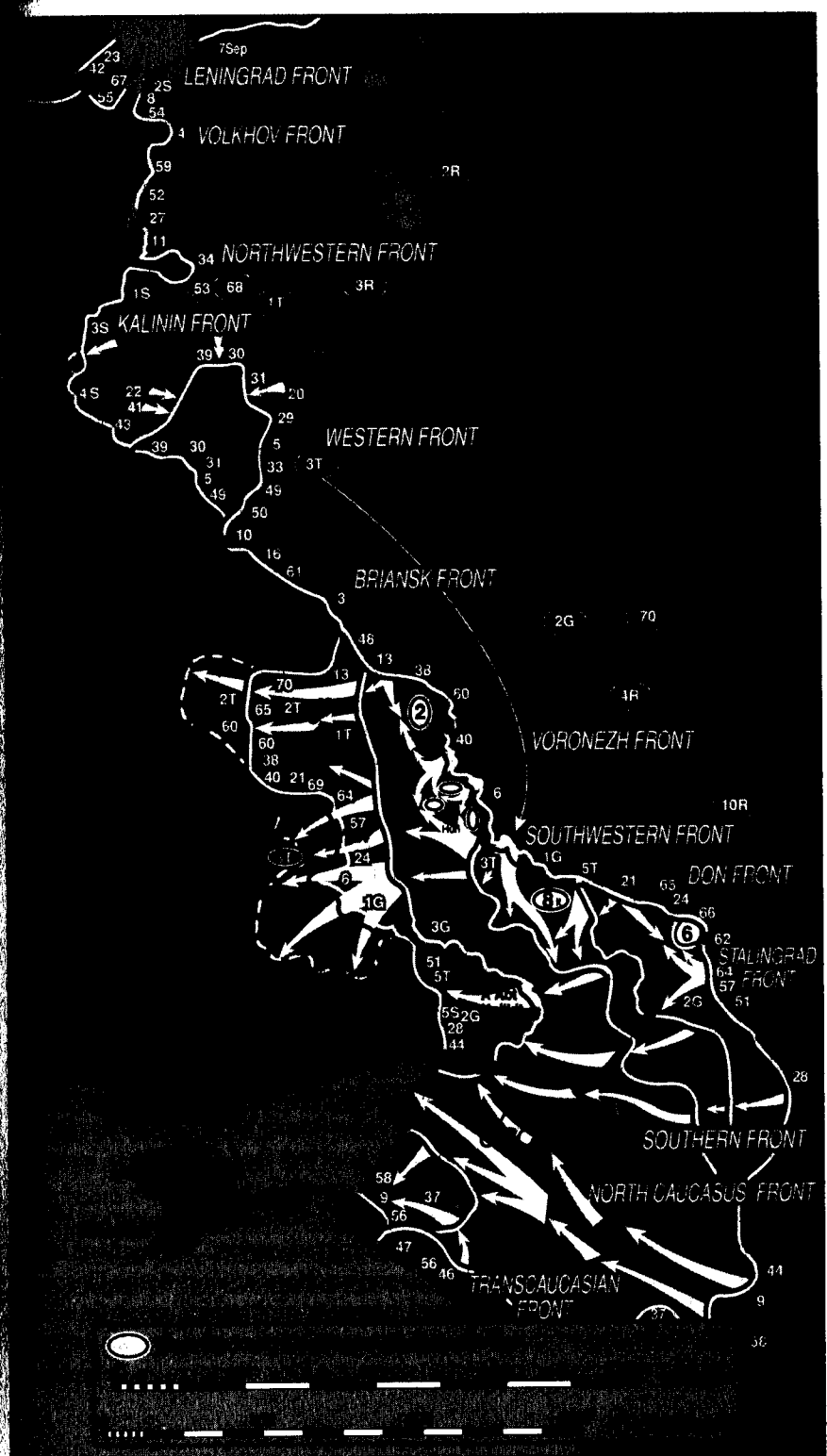
In June 1942, B. M. Shaposhnikov's fragile health had given way under the enormous strain, and he had been replaced as chief of the General Staff. His successor, A. M. Vasilevsky, remained chief of staff, deputy defense commissar, and sometime field representative of the *Stavka* until February 1945, when he assumed command of 3d Belorussian Front, followed in July by command of the Far Eastern Theater. Far less temperamental than Zhukov, Vasilevsky exercised a calm, rational influence on the dictator. Vasilevsky surrounded himself with superbly competent General Staff officers, appointing Colonel General A. I. Antonov as his first deputy and chief of the Operational Directorate in December 1942. To replace the cumbersome Strategic Direction headquarters, Stalin and Vasilevsky began using *Stavka* representatives to coordinate and supervise the conduct of major operations. These senior officers, who included Zhukov, N. N. Voronov, Timoshenko, and others, provided the critical link between operating *fronts* and the General Staff.

They were the vehicle for carrying out *Stavka* decisions effectively and in timely fashion.²

Throughout the darkest hours of the defense of Stalingrad, Vasilevsky kept a small group of staff officers, headed by N. I. Bokov, working on plans for a strategic counteroffensive, designed to be the first phase of an ambitious winter campaign that would embrace the entire central and southern regions of the front (see Map 9). On 13 September, Bokov briefed Stalin on the concept of cutting off the German spearhead at Stalingrad by attacking the weak Rumanian forces on its flanks. By mid-October, Stalin was sufficiently confident to focus on this proposal, which became the basis for two major operations planned by the *Stavka* to occur in November 1942.³ The first, Operation Uranus, was designed to destroy Axis forces in the Stalingrad region. It was to be followed by Operation Saturn, designed to destroy all Axis forces in the southern Soviet Union (Army Groups B and A). At the same time, the Western and Kalinin Fronts, coordinated by Zhukov, would conduct Operation Mars against German Army Group Center to collapse the Rzhev salient, distract German reinforcements from the south, and do as much damage as possible to that army group.

The plan for Uranus was a classic of encirclement. Colonel General N. F. Vatutin, the 41-year-old commander of the Southwestern Front, played a significant role in planning Uranus, although a dispute still rages over who, in fact, was responsible. Vatutin's appointment to *front* command was based largely on his prior *front* staff service and on his close association with Vasilevsky.⁴ The shape and form of the ensuing offensive reflected the audacious nature of Vatutin.

In general, Operation Uranus involved the redeployment and use of large mobile formations to penetrate Axis defenses north and south of Stalingrad and subsequently to encircle and destroy German and Axis forces in the region. It was no coincidence that the initial Soviet targets were the threadbare satellite armies deployed on German Sixth Army's flanks. During early November, Lieutenant General P. L. Romanenko's newly refitted 5th Tank Army secretly redeployed from the Briansk Front sector to positions northwest of Stalingrad in the Don River Serafimovich bridgehead held by the Southwestern Front. Vatutin planned to employ his 5th Tank and 21st Armies and the 65th Army of Rokossovsky's Don Front to achieve a shallow encirclement of the overextended Third Rumanian Army. At the same time, 5th Tank Army's 1st and 20th Tank Corps and 21st Army's 4th Tank and 3d Guards Cavalry Corps would wheel southeast to encircle the German defenders at Stalingrad, while 5th Tank Army's 8th Cavalry Corps provided a thin outer encirclement to delay German relief columns. On the German southern flank, A. I. Eremenko, commander of the Stalingrad Front, would launch 51st and 57th Armies, spearheaded by



9. Winter Campaign, November 1942–March 1943

13th Tank and 4th Mechanized Corps, to push through the Fourth Rumanian Army and link up with 5th Tank Army near Kalach on the Don. The 4th Cavalry Corps would cover Stalingrad Front's left flank. Because 5th Tank Army had to cover 120 kilometers, as opposed to the 90 kilometers expected of the 4th Mechanized Corps, the Southwestern Front would begin its attack one day before the Stalingrad Front.⁵

This plan had inevitable weaknesses, of which the most obvious was the weak outer encirclement of cavalry forces that would have to parry the initial German relief efforts. More significantly, Soviet tank and mechanized forces still suffered from a lack of maintenance, motor transportation, and general logistical support. Once committed to the exploitation, tanks and other vehicles broke down at an alarming rate.

The Red Air Force also intended to use new equipment and new doctrine to wrest local air superiority from the Luftwaffe. In April 1942, Colonel General A. A. Novikov had become Air Force Commander, a post he held for the remainder of the war. Novikov assigned 10 regiments of the latest-model Yak-9 and La-5 aircraft to 8th Air Army at Stalingrad. Recognizing the limited experience of his new pilots, he instituted a strict system of ground control and experimented on the Don Front with the first Soviet system of radar-directed fighter interception. Novikov's chief of staff, F. Falaleev, instructed all air commanders to focus their assets to support the main ground operations, rather than trying to be strong everywhere.⁶

GERMAN PERCEPTIONS AND FAILURES AT STALINGRAD

From Hitler on down, German commanders were aware of the weakness of their flanks at Stalingrad but generally failed to anticipate a Soviet offensive on the massive scale conceived by the *Stavka*. On 15 August, the *Fremde Heere Ost* Division of OKH had estimated, with considerable accuracy, that the Red Army still had 73 rifle divisions, 86 tank brigades, and a host of other reserve units available for commitment to battle. By 6 November, the same office inexplicably asserted that the Soviets lacked sufficient forces for a major offensive in the south.⁷

One reason for this German error was the Soviet disinformation that no major offensive was planned in the Stalingrad region. Throughout late summer and fall, a series of Soviet offensive actions against Army Groups Center and North and the continued presence of strategic reserves near Moscow contributed to this fiction.⁸ In mid-October, the *Stavka* intentionally used unencrypted radios to transmit a long directive on defensive

preparations for the coming winter, hoping that German monitors would intercept it. These and other measures were so effective that, as late as 12 November, OKH intelligence suggested that the troop concentrations opposite Third Rumanian Army were only intended for a shallow attack to sever the railroad leading to Stalingrad.⁹

Faced with such comforting estimates, it is no wonder that Hitler and his subordinates underestimated the threat. His solution was to use the newly formed, lightly equipped Luftwaffe "field divisions" to relieve a few veteran panzer units, especially 22d Panzer Division, that were stationed behind the allied armies while they received replacement troops and equipment. These small reserves were no match for the 660 tanks of the four Soviet spearhead corps. Overall, the ratio of Soviet to German forces in the Stalingrad region was significant, especially in light of the large proportion of Rumanian forces that absorbed the real shock of the Soviet blow. While official Soviet sources have long argued that strength ratios were little more than 1:1 in manpower, 1.4:1 in artillery, and 1.3:1 in armor in the Soviet's favor, the actual ratios were closer to 2:1 in all combat categories. In main penetration sectors, Soviet superiority was absolute. In addition to numerical superiority, the Soviets also benefited from surprise and were able to mass huge forces on the weak German flanks.¹⁰ (See Table 9.1.)

The Stalingrad counteroffensive occurred in three phases. First, between 19 and 30 November, the Soviets penetrated Axis defenses and encircled German and Rumanian forces in Stalingrad. Next, between 1 December 1942 and 9 January 1943, they attempted to exploit and develop this success but were hampered by German efforts to relieve the beleaguered Stalingrad force. Finally, between 10 January and 18 March 1943, the *Stavka* supervised the liquidation of the Stalingrad pocket (Operation Ring [*Kol'tso*]) while attempting to expand their success to the entire central and southern regions of the front. This larger effort was stymied by their own errors and by skillful German counterblows.

Initial successes exceeded Soviet expectations (see Map 10). On 19 November, the Southwestern Front began the offensive, with supporting attacks by the neighboring Don Front. The Rumanian defenders had no effective antitank guns and were easily crushed. The 26th and 1st Tank Corps of Romanenko's 5th Tank Army passed through the attacking rifle divisions to enter the battle by noon on the first day. In coordination with Lieutenant General I. M. Chistiakov's 21st Army, 5th Tank Army captured the bulk of three Rumanian divisions (27,000 prisoners) and continued its exploitation. The two tank corps and Major General A. G. Kravchenko's 4th Tank Corps from 21st Army advanced as much as 70 kilometers each day, bypassing any centers of resistance. On 22 November, 26th Tank Corps, commanded by Major General A. G. Rodin, approached Kalach

perhaps code-named Operation Jupiter or Neptune, was to involve large forces attacking westward toward Viaz'ma to link up with the victorious Soviet Rzhev force and destroy the bulk of Army Group Center. The Viaz'ma thrust was to be conducted by the Western Front's center and included the heavily reinforced 5th and 33d Armies, backed up by two tank corps (9th and 10th) and, perhaps, General Rybalko's refitted and expanded 3d Tank Army from *Stavka* reserve. In the end, the German defeat of Operation Mars aborted the ambitious Soviet strategic offensive against Army Group Center, frustrated Zhukov's plan, and prompted Soviet historians to cover up this powerful, but disastrous, companion piece to the Stalingrad offensive.¹⁶

The operation began on 25 November, once initial success at Stalingrad had been assured. Purkaev's 22d and 41st Armies struck hard at German defenses north and south of Belyi and the same day Konev's 20th and 31st Armies attacked northeast of Sychevka. Almost simultaneously, 39th Army launched supporting attacks west of Rzhev, and 3d Shock Army, supported by the 215 tanks of Major General I. P. Korchagin's 2d Mechanized Corps, attacked German positions east of Velikie Luki.¹⁷ Major General G. F. Tarasov's 41st Army burst through German defenses both north and south of Belyi. North of that town, Major General M. E. Katukov's 3d Mechanized Corps, equipped with about 200 tanks, immediately rushed forward along the Luchesa River to exploit the success and link up with 41st Army's mobile units east of Belyi. Meanwhile, south of Belyi, Major General S. I. Povetkin's elite 6th "Stalin" Rifle Corps began the exploitation, followed soon by Major General M. D. Solomatin's 1st Mechanized Corps, which had been reinforced to a strength of over 300 tanks (including 50 KV heavy tanks) by the attachment of two extra mechanized brigades. Solomatin's corps made spectacular progress as it advanced to link up with Katukov's armor to encircle Belyi and to meet Konev's lead elements at the base of the Rzhev salient.

Konev's two armies, however, were unable to match Purkaev's success. The 20th and 31st Armies, directed by Zhukov and supported by 6th and 8th Tank Corps and by Major General V. V. Kriukov's 2d Guards Cavalry Corps, repeatedly assaulted the German positions southeast of Rzhev. All of the attacks were repulsed after heavy fighting and appalling Soviet losses. Konev's only success was the insertion of Kriukov's 20th Cavalry Division into the German rear. This division was immediately cut off and spent almost a month in the German rear until a raid by Katukov's mechanized corps rescued the remnants in early January.

Unlike Stalingrad, where few German reserves were available to halt the Soviet attack, at Rzhev the Germans initially were able to commit their 1st and 9th Panzer Divisions, *Grossdeutschland* Division, and 14th Panzer

Grenadier Division, and later sent 12th, 19th, and 20th Panzer Divisions to seal off the Soviet penetrations near Belyi. By mid-December, the Soviet offensive had faltered. In the west, German counterattacks contained 3d Mechanized Corps' thrust in the Luchesa Valley north of Belyi and surrounded 6th Rifle Corps and 1st Mechanized Corps south of the town. Zhukov's attempts on 11 and 13 December to resume the offensive south of Rzhev failed with heavy losses, and in further heavy fighting the two corps south of Belyi were largely destroyed.¹⁸ This costly failure was only partially offset when Colonel General K. N. Galitsky's 3d Shock Army destroyed a German force in Velikie Luki and held off German efforts to relieve that town.

Clearly, Operation Mars failed to meet Soviet expectations. Zhukov's "greatest failure" in the Mars Operation was soon eclipsed, however, by the success of Uranus in the south, where the *Stavka* now focused its attention.

SATURN AND LITTLE SATURN

Once Operation Uranus had succeeded, the *Stavka* commenced planning for the second phase of the campaign in the south. Operation Saturn involved the use of Southwestern Front's left wing and Lieutenant General R. Ia. Malinovsky's powerful 2d Guards Army to penetrate Italian defenses along the middle Don and advance deep to seize Rostov.

At the same time, the Germans sought means by which to relieve their Stalingrad force. In order to break into the Stalingrad encirclement, von Manstein began to assemble two forces. At the confluence of the Chir and Don Rivers, XXXXVIII Panzer Corps received a variety of divisions shipped from elsewhere in the east, while the LVII Panzer Corps formed up near Kotel'nikovskii. Quite naturally, the German and Soviet plans unfolded simultaneously and affected each another. First, the Soviets had to divert 2d Guards Army from Operation Saturn to deal with the task of reducing the Stalingrad encirclement (but without altering the form of Operation Saturn). Then, when von Manstein's LVII Panzer Corps began its advance on Stalingrad from Kotel'nikovskii, 2d Guards Army was shifted to that axis and Operation Saturn was modified into Little Saturn, a shallower envelopment of Italian Eighth Army and Army Detachment Hollidt defending along the south banks of the Don and Chir Rivers.

Soviet action began on 7 December, when 5th Tank Army's 1st Tank Corps, commanded by Major General V. V. Butkov, began spoiling attacks across the Chir to disrupt XXXXVIII and LVII Panzer Corps relief plans.

Then on 10 December, 5th Tank Army's 5th Mechanized Corps, led by Major General M. V. Volkov, joined the attack further west.¹⁹ Although 11th Panzer Division performed herculean feats to parry these attacks, the Chir front barely held. By 10 December, XXXXVIII Panzer Corps had been sufficiently distracted, and LVII Corps' 17th Panzer Division had moved to back it up, thus negating the Chir-Stalingrad relief thrust and severely weakening the Kotel'nikovskii thrust, which nevertheless began on 12 December.

While LVII Panzer Corps pressed Soviet 51st Army northward from Kotel'nikovskii, Southwestern Front, supported by Voronezh Front's 6th Army, launched operation Little Saturn on 16 December against Eighth Italian and Third Rumanian Armies of Army Detachment Hollidt along the Don and Chir northwest of Stalingrad. An unprecedented collection of Soviet mobile corps virtually destroyed the Italian forces. Once these mobile corps had penetrated deep into the German rear, three of them—24th and 25th Tank Corps and 1st Guards Mechanized Corps—drove straight for German Stalingrad resupply airfields at Tatsinskaia and Morozovsk. Major General V. M. Badanov's 24th Corps was ordered to seize the key airfield and logistical complex of Tatsinskaia. He accomplished his mission but at great cost. The 24th Tank Corps, already reduced to less than 40 percent of its initial strength (200 tanks) and beyond the range of any resupply column, penetrated to Tatsinskaia on Christmas Eve, destroying 56 German transport aircraft and the airfield itself.

Badanov held his position for four days and then escaped a German trap with only the remnants of his force. Late in the operation, at Stalin's personal urging, Badanov was given temporary control over the remnants of the three corps. By this time, however, the three corps had been reduced to less than 20 tanks each and thus were too weak to conduct any further concerted action.²⁰ This raid did, however, adversely affect German capabilities to resupply their encircled Stalingrad garrison and forced von Manstein to use XXXXVIII Panzer Corps in a defensive role, rather than to relieve Stalingrad. Not coincidentally, the experience led the *Stavka* to order the formation of new tank armies whose multiple corps could successfully conduct joint operations to great depths.

On 12 December, the remaining German relief had begun a vain effort to link up with Sixth Army. The German LVII Panzer Corps' advance was constantly hampered by Hitler's reluctance to concentrate operational reserves on this crucial attack. Despite such obstacles, the panzer corps struggled forward 50 kilometers in 12 days. Then on 24 December, Malinovsky's massive 2d Guards Army counterattacked, driving the Germans back as much as 100 kilometers. For once, the Soviet mobile corps were used with great skill, especially in a flank attack by Major General

P. A. Rotmistrov's 7th Tank Corps. For all practical purposes, the German effort to relieve Stalingrad had failed.

OPERATION RING AND THE DONETS BASIN

At this point, the *Stavka* focused its attention on two equally important and mutually related tasks: reducing the Stalingrad pocket in Operation Ring; and expanding the Winter Campaign to its fullest extent. Colonel General N. N. Voronev, the *Stavka* representative in charge of executing Operation Ring, used a steady artillery bombardment to wear down the German defenses. Sixth Army was so short on supplies that the defenders were soon reduced to living on horsemeat and huddling in the snow. On 24 January, the last major German airfield in the pocket, Pitomnik, was captured. Two days later, the Soviets attacked on a narrow frontage and split the German pocket in half from east to west. By 2 February, the entire force had been liquidated, despite Hitler's last-minute promotion of Paulus to field marshal.

Germany had lost more than its reputation of invincibility at Stalingrad. Because of Hitler's insistence on standing fast and the difficulties of escaping through a wide Soviet encirclement under extreme weather conditions, few Germans were able to escape from the pocket. Only a few thousand seriously wounded soldiers were flown out on empty transport aircraft. This contrasted markedly with the Soviet encirclements during previous battles, when the defenders often exfiltrated enough commanders and key personnel to rebuild their units and fight again. Sixth Army was completely gone, suffering 147,000 dead and 91,000 prisoners of war at a Soviet cost of nearly one half million casualties.²¹ (See Table 9-2.)

The encirclement and destruction of German forces at Stalingrad had tied down a large number of Soviet troops for two months, and this materially affected the fate of the Soviet Winter Campaign. As a result, Stalin ended 1942 as he had ended 1941, overoptimistically attempting to conduct a strategic offensive on a shoestring and becoming overextended in the process. West of Stalingrad, the Southwestern and Southern Fronts, spearheaded by 1st, 3d, and 2d Guards and 51st Armies, with attached cavalry and tank corps, continued to press Army Group Don back toward Voroshilovgrad and Rostov in the hope of destroying that army group and cutting off Army Group A, then withdrawing from the Caucasus region.

Von Manstein was hamstrung by Hitler's refusal to release strategic reserves and by the need to protect the rear of Army Group A. The German dictator wanted to keep that army group in the Kuban region south of the Don, even if it were only in a bridgehead along the Sea of Azov, in the hope

Table 9-2. Soviet Casualties at Stalingrad, 19 November–2 February

Front	Unreturned	Sanitary	Total
Southwestern	64,649	148,043	212,692
Don	46,365	123,560	169,925
Stalingrad	43,552	58,078	101,630
Voronezh (6th Army)	304	1,184	1,488
<i>Total</i>	154,870	330,865	485,735

Source: G. F. Krivosheev, *Grif sekretnosti sniat: Poteri vooruzhennykh sil SSSR v votnakh, boevykh deistritakh, i voennykh konfliktakh* (Moscow: Voenizdat, 1993) 181–182.

of again threatening the Caucasus oil fields later in 1943. Army Group A had already gone into winter quarters when the November counteroffensive began and was very slow to redeploy its forces in the face of the new threat. Von Manstein therefore had to hold Rostov, the key to all the railroad lines and supplies for Army Group A. To accomplish this, two ad hoc German-Axis formations, Army Detachments Fretter-Pico and Hollidt, tried to defend the Chir River line. Both detachments had wide-open flanks. On the northern flank, 1st Guards, 3d Guards, 5th Tank, and 5th Shock Armies pressed in, while in the south, 2d Guards, 51st and 28th Armies continued toward Rostov with the counteroffensive, which had begun on 24 December. By 3 January, both German detachments were forced to begin withdrawing to the Donets River despite Hitler's demands that they stand fast. Meanwhile 51st Army's 3d Guards Mechanized Corps, the renamed 4th Mechanized Corps, now commanded by Major General V. T. Vol'sky, thrust straight down the Don River valley toward Rostov. It was stopped only by the premature commitment of a new "wonder weapon," the first half-trained battalion of German Mark VI Tiger tanks. A short, savage engagement at Zimovniki on 7 January left 18 T-34s and 20 Tigers out of action.²²

Both sides were hampered by a typical Russian winter. On 24 January, a brief thaw produced puddles on the roads, which became a sheet of ice when the temperature dropped to -15° Fahrenheit on 26 January. The next day, a three-day snowstorm began.

Hitler now took action to resolve the precarious situation in the Donets basin. Von Manstein had repeatedly urged him to move First Panzer Army north, but the actual decision was far less bold. On 27 January 1943, Hitler decided to move the army and corps headquarters of First Panzer Army north through Rostov, but he sent only one panzer, one infantry, and two security divisions along. The remaining divisions of First Panzer Army were temporarily left with Seventeenth Army, which went into a defensive bridgehead. Eventually all these forces were evacuated to the Crimea, but for the moment they were unavailable to von Manstein.

WIDENING THE BREACH

Military historians have long credited von Manstein with staving off disaster in the winter of 1943. Between January and March, he managed to overcome both Hitler's obstinate opposition to a maneuver defense and a Red Army flushed with the victory of Stalingrad. He achieved a stunning setback on the advancing Soviets that restored stability to the southern wing of the Eastern Front at a time when collapse was imminent. Despite von Manstein's exertions, however, the Germans and their allies suffered staggering losses in the Winter Campaign.

Von Manstein's victories in the Donets Basin (or Donbas) and at the Third Battle of Khar'kov were far more significant than even this tribute suggests. Unknown to the Germans, Soviet strategic aims had expanded far beyond the simple defeat of German forces in southern Russia; the *Stavka* sought to collapse enemy defenses along virtually the entire Eastern Front.

In December 1942, the Soviet High Command had already formulated Plan Saturn to smash large elements of Army Group B, seize Rostov, and isolate or destroy Army Group A. Although this plan was later modified into Little Saturn, the *Stavka* continued to undertake operations that were beyond its resources. Soviet miscalculation of the defensive strength of Sixth Army, as well as a series of other Soviet misjudgments, were preconditions to von Manstein's ultimate victories in February and March.

Building upon the success of Little Saturn, the *Stavka* continued the process in January 1943, gradually expanding the offensive to include Army Group Center as well as Army Groups Don and A. This new series of offensives began with attacks aimed at the Hungarian and German forces defending along the middle Don and at the German-Rumanian forces trying desperately to hold Rostov for Army Group A. Between 13 and 27 January, Voronezh Front's 40th, 6th, and 3d Tank Armies conducted the Ostrogozhsk-Rossosh operation, severely damaging Second Hungarian Army and paving the way for further efforts.²³ On 24 January, the Briansk Front's 13th Army joined the Voronezh Front's 38th, 60th, and 40th Armies and attacked Second German Army, defending the Voronezh salient along the upper Don River. Despite snows so deep that only tracked vehicles could operate, in a matter of days the mobile corps attached to Soviet 13th and 40th Armies encircled two of the three corps in Second German Army.²⁴ Meanwhile, in Operations Gallop and Star, Voronezh Front's 40th, 69th, and 3d Tank Armies and Southwestern Front's 6th, 1st Guards, and 3d Guards Armies, spearheaded by Mobile Group Popov, burst through the ad hoc German formations that had replaced Germany's allies northwest of Rostov. Von Manstein found himself redeploying larger and larger elements of First and Fourth Panzer Armies to protect his lengthening northern flank.²⁵

In mid-February, the greatest threat came from Soviet tank forces spearheading the Southwestern Front offensive, including four understrength tank corps formed into a mobile group under the command of Lieutenant General M. M. Popov as well as the full-strength 25th and 1st Guards Tank Corps in the Southwestern Front's reserve. Popov's Mobile Group, the forerunner of a modern tank army, crossed the Donets River in early February and pressed forward into the German rear, reaching Krasnoarmeiskaia by 12 February. Three days later, Vatutin committed his two fresh tank corps on a drive through Pavlograd to Zaporozhe on the Dnepr River, an obvious node that controlled the last major road and rail lines to Rostov. Zaporozhe was also the headquarters of Army Group Don (renamed Army Group South), Fourth German Air Fleet, and a number of other major formations.

Despite this threat, Hitler was determined to conduct a counteroffensive. He assembled the SS Panzer Divisions *Das Reich* and *Leibstandarte Adolf Hitler* under a new SS corps headquarters, and ordered them to hold Khar'kov against advancing Voronezh Front forces, while simultaneously counterattacking against the Southwestern Front. The new SS headquarters lacked the experience to perform either mission and retreated on 14 February at the same time that First Panzer Army retreated from the Donets to the Mius River. Instead of punishing the SS for disobedience, Hitler relieved General Hubert Lanz, the army officer who had tried to make the SS Panzer Corps obey orders.

By this time, von Manstein was verging on open insubordination, to the point of suggesting that he should be placed in command of the entire Eastern Front. Knowing that Group Popov had been temporarily checked at Krasnoarmeiskaia, but unaware of the rapid advance of fresh armored forces on Zaporozhe, Hitler flew there on the afternoon of 17 February to berate von Manstein.²⁶

Fortunately for Hitler and Army Group South, von Manstein was in the process of shifting Fourth Panzer Army headquarters to that area to assume control of SS Panzer Corps (now joined by SS Panzer Division *Totenkopf*) and other threadbare panzer divisions for a counteroffensive against Soviet forces, which themselves were reaching the end of their logistical tether. Hitler finally released seven understrength panzer and motorized divisions to von Manstein. The Fourth Air Fleet, under von Richtofen, had also regrouped and improved its maintenance status, producing an average of 1,000 sorties per day after 20 February, as compared to 350 sorties per day in January. For the last time in Russia, the Luftwaffe was able to provide clear air superiority for a major German counterthrust.

At the time, however, Stalin and his subordinates continued to believe that they were on the verge of a great victory. German defenses throughout

southern Russia appeared to be crumbling, and the *Stavka* sought to expand that victory to include Army Group Center. Once Stalingrad fell on 2 February, Stalin and Zhukov immediately redirected the forces used in the encirclement to a new location farther north. Rokossovsky's Don Front headquarters and two of his rifle armies (65th and 21st), together with the newly formed 2d Tank and 70th Rifle Armies, received orders to move to the Voronezh-Livny area and form a new Central Front. The veteran 16th Air Army and 2d Guards Cavalry Corps were also redeployed to this area. Three other Don Front armies (24th, 64th, and 66th) refitted in the Stalingrad area and awaited orders to join either Rokossovsky's or Vatutin's fronts.

The overall concept for this culminating stage of the Soviet Winter Campaign envisaged three successive operations against Army Group Center. First, beginning on 12 February 1943, the combined forces of the Western and Briansk Fronts were to encircle and destroy German units in the Orel salient. Then, between 17 and 25 February, the two fronts, joined by the new Central Front, were to clear the Briansk region of German forces and secure bridgeheads across the Desna River. During the final phase, between 25 February and mid-March, the Kalinin and Western Fronts would join in to seize Smolensk and, in concert with their sister fronts to the south, destroy Army Group Center in the Rzhev-Viaz'ma salient. The entire offensive was timed to coincide with the anticipated successes of the Voronezh and Southwestern Fronts, so that by mid-March the strategic offensive would carry Soviet forces westward to the Dnepr River.²⁷

To plan such an operation was one thing; to carry it out was another. Rokossovsky's shock force received only six days to redeploy and an additional five days to prepare for an offensive in an entirely new region. Although 2d Tank Army and 2d Guards Cavalry Corps were already concentrated in the Livny region, 70th Army's forces had to move over 200 kilometers on Russian winter roads, and 21st and 65th Armies had to complete arduous rail and road movements from Stalingrad. Heavy spring snows hampered movement, the spring thaw was due any day, and the roads from the assembly areas to the front were already in poor condition. Only one single-track rail line was available from Stalingrad northward, and movement schedules became a fiction.

Rokossovsky objected to the stringent time schedule imposed by the *Stavka* but dutifully attempted to achieve the impossible. Ultimately, he was unable to attack until 25 February and, even then, had to march elements of 2d Tank and 65th Armies directly from the railheads to their assault positions.

Rokossovsky began his offensive on 25 February with Rodin's 2d Tank Army and Lieutenant General P. I. Batov's 65th Army in the vanguard of

his assault.²⁸ Lieutenant General G. F. Tarasov's 70th Army, an elite force made up of NKVD border guards from the Trans-Baikal and Far Eastern regions, and Chistiakov's 21st Army were to join the attack as soon as they arrived but before they were fully concentrated. Both armies were still on the march through the muddy, congested roads. Meanwhile, on 22 February, as Briansk Front's 13th and 48th Armies pounded the weakened right flank of Second Panzer Army, Lieutenant General I. Kh. Bagramian's 16th Army of the Western Front struck Second Panzer's other flank north of Zhidzhra. Rain and a skillful German defense hindered Bagramian's advance, and by 24 February, he had made only insignificant gains, a situation that subsequent attacks could not remedy.²⁹

The Central Front made greater progress. With 13th Army covering his right flank, Batov's 65th Army advanced deep into the German rear area against only light resistance. Rodin's 2d Tank Army and a Cavalry-Rifle Group (the latter commanded by Major General Kriukov and consisting of 2d Guards Cavalry Corps and cooperating rifle and ski units) exploited rapidly westward through Sevsk toward Novgorod-Severskii.³⁰ By 1 March 1943, Rokossovsky had achieved considerable success, enveloping the flanks of Second Panzer Army to the north and Second Army to the south. By this time, 70th Army's divisions had filtered forward and joined battle on Batov's right flank to threaten a further advance on Orel and Briansk deep in the German rear.

German resistance stiffened as their forces conducted a skillful withdrawal and new units from other front sectors were brought into combat on the shoulders of Rokossovsky's penetration. At this juncture, Rokossovsky needed the additional strength of 21st, 62d, and 64th Armies, but they were still en route and unavailable. By 7 March, Kriukov's Cavalry-Rifle Group reached the outskirts of Novgorod-Severskii, marking the deepest Soviet advance during the winter campaign. The tide, however, was already shifting in favor of the Germans. Unreinforced, Rokossovsky's advance ground to a halt in the face of increasing resistance southwest of Orel. His attempts to restore momentum by shifting Rodin's tank army from the Briansk to the Orel axis only weakened his left flank and center, which were soon counterattacked by a multidivision force assembled by German Second Army. As Rokossovsky's offensive faltered, catastrophe in the south sounded the death knell for his ambitious offensive.

The entire plan for attacking Army Group Center was predicated on the assumption of continued offensive success further south, an assumption that collapsed during late February. By this time, the increasingly threadbare mobile forces of the Southwestern Front were operating well beyond their logistical umbilicals and were advancing into a trap set by von Manstein.

What followed is known by the Germans as the Donetz Campaign and by the Russians as the Donbas and Khar'kov operations. Both were classics of mobile warfare.³¹ Beginning on 20 February, Fourth Panzer Army's XXXX Panzer Corps (7th and 11th Panzer Divisions and SS Motorized Division *Viking*) surrounded and destroyed the remnants of Group Popov in what became a running fight from Krasnoarmeiskaia to the Northern Donets River. On 23 February, General Eberhard von Mackensen's First Panzer Army was able to join the panzer corps in a thrust to the northeast. The day before, SS Panzer Corps (SS Panzer Divisions *Das Reich* and *Totenkopf*) and XXXXVIII Panzer Corps (6th and 17th Panzer Divisions) struck the flanks of Southwestern Front's exploiting 6th Army and 1st Guards Army, cutting the supply lines of 25th Tank Corps, which was then approaching Zaporozh'e, and virtually encircling the entire force. Deprived of fuel, the crews of 25th Tank Corps abandoned their equipment and joined the swelling mob of fugitives trying to escape to the north. As so often before, however, German forces were too weak to seal off the encircled Soviet forces and captured only 9,000 prisoners.³²

Von Manstein followed up with an advance on Khar'kov. Between 1 and 5 March 1943, in a vicious battle south of the city, Fourth Panzer Army mauled Lieutenant General P. S. Rybalko's 3d Tank Army, which had been dispatched to assist beleaguered Southwestern Front forces and had continued its advance to Khar'kov and beyond. The SS Panzer Corps commander, Lieutenant General Paul Hauser, ignored a direct order, as well as common sense, and entangled both SS Panzer Division *Das Reich* and *Leibstandarte* in three days of house-to-house fighting before capturing Khar'kov on 14 March.

The Donets River campaign effectively halted the Soviet Stalingrad offensive in the south, and by early March the *Stavka* had to divert 62d and 64th Armies, en route from Stalingrad to Rokossovsky, to restore the front north of Khar'kov. Even then, the Soviet High Command sought to continue the offensive against Army Group Center. On 7 March, Rokossovsky received orders to scale down his offensive but to continue to attack northward toward Orel. His 21st Army was to join his attack within days. The same day, however, the Second German Army concentrated its 4th Panzer Division and several Hungarian infantry units in a counterattack against Rokossovsky's western flank. Kriukov's 2d Guards Cavalry Corps was spread too thinly to contain this threat. This counterattack, in conjunction with von Manstein's renewed advance north of Khar'kov on 17 March, forced the Red Army to halt its Winter Campaign and finally assume the defensive. The legacy of Rokossovsky's failed offensive was the Kursk bulge, a large Soviet salient that became the natural focus of both German and Soviet plans for the summer of 1943.³³

Voronezh Front		43,687	32,442	76,129
Azov Flotilla	8,900	27	25	52
<i>Total</i>	1,310,800	370,522	197,825	568,347

16. For German strategic debates, see V. E. Tarrant, *Stalingrad* (New York: Hippocrone, 1992), 37-38.

17. The Southwestern Strategic Direction headquarters was abolished on 21 June 1942, in part because of its and Timoshenko's dismal performance. Henceforth the *Stavka* worked through the General Staff and individual *front* headquarters, often using *Stavka* representatives to coordinate major strategic operations.

18. Ziemke and Bauer, *Moscow to Stalingrad*, 357-358; Shtemenko, *The Soviet General Staff at War*, Vol. 2, 87-90. For details on the operations of 62d, 64th, 1st Tank, and 4th Tank Armies, see A. Vasilevsky, "Nezabyvaemye dni" [Unforgettable days], *VIZh* 10 (October 1965): 13-25, who places the tank armies' respective strengths at 160 and 80; and F. Utenkov, "Nekotorye voprosy oboronitel'nogo srazheniia na dal'nikh podstupakh k Stalingradu" [Some questions concerning the battles on the distant approaches to Stalingrad], *VIZh* 9 (September 1962): 34-48. For a classified account, see "Srazheniia za Stalingrad" [The Battle for Stalingrad], *SMPIOV* No. 6 (Moscow: Voenizdat, 1943), 22-37. Classified secret.

19. The 4th Tank Army was later renumbered as 65th Army. Its new commander, General Batov, relates that when he assumed command, the army was referred to derisively as the "4-tank army," reflecting its parlous state at the time.

20. Volkogonov, *Stalin: Triumph and Tragedy*, 458-460. Order No. 227 is reproduced in full in "Dokumenty i materialy" [Documents and materials], *VIZh* 8 (August 1988): 73-75.

21. On the Stalingrad Battle, see V. I. Chuikov, *Srazheniia veka* [Battle of the century] (Moscow: Voenizdat, 1875); K. K. Rokossovsky, ed., *Velikaya pobeda na volga* [Great victory on the Volga] (Moscow: Voenizdat, 1965); and A. M. Samsonov, *Stalingradskaya bitva* [The Battle of Stalingrad] (Moscow: Voenizdat, 1982). Archival materials closely match the details in these books. From the German viewpoint, Edwin P. Hoyt, *199 Days: The Battle of Stalingrad* (New York, 1993), provides fascinating details.

22. Selected casualty figures for the Stalingrad defense were as follows: 95th Rifle Division arrived in late September 1942 with approximately 7,000 men; strength on 8 October, 3,075 men; evacuated on 14 October with approximately 500 men. The 193d Rifle Division arrived on the night of 27-28 September with 5,000 men; strength on 8 October, 350 men. The 112th Rifle Division was present from the beginning of battle (September) with a strength of approximately 7,000 men; strength on 29 September, 250 men organized into a composite battalion; evacuated on 14 October. The 37th Guards Rifle Division arrived on the night of 2-3 October with 7,000 men; fought at Tractor Factory; evacuated on 15 October with 250 men. The 13th Guards Rifle Division (187th Rifle Division), commanded by Major General Rodimtsev, arrived on the night of 15-16 September with over

10,000 men, fought at Mamaev Kurgon and Tractor Factory; strength of several hundred on 15 October.

23. Blau, *German Campaign in Russia*, 168-175. According to Krivosheev, *Grif sekretnosti*, 197, Soviet casualties during the Stalingrad Strategic Defensive Operation (17 July-18 November) were 643,842 (323,856 irrevocable and 319,986 sanitary). Initial Soviet strength was 547,000 troops.

9. Operation Uranus

1. For a clear picture of how the *Stavka* and General Staff functioned, see the two volumes by S. M. Shtemenko, *The Soviet General Staff at War*, 2 vols. (Moscow: Progress Publishers, 1985).

2. For a complete description of the operations of the *Stavka* and its representatives, see V. D. Danilov, *Stavka VGK, 1941-1945* [*Stavka* of the Supreme High Command, 1941-1945] (Moscow: "Znanie," 1991).

3. Dimitri Volkogonov, *Stalin: Triumph and Tragedy*, trans. and ed., Harold Shuhman (Rocklin, Calif.: Prima Publishing, 1992), 461-463. See also S. Mikhaliev, "O razrabotke zamysla i planirovanii kontranastupleniia pod Stalingradom" [About the concept and planning of the counteroffensive at Stalingrad], *Vestnik voennoi informatcii* [Herald of military information] 8 (August 1992): 1-5, which discusses offensive variants developed by the *Stavka* between July and October 1942.

4. N. F. Vatutin, described as the ultimate staff planner, had served on the staff of the Special Kiev Military District as chief of staff of the Northwestern Front and as troubleshooter for the *Stavka* and A. M. Vasilevsky. All the while he hankered for *front* command, which he finally received during the perilous days before Stalingrad. Thereafter, he earned a reputation as one of the most audacious *front* commanders, before he perished at the hands of Ukrainian partisans in April 1944.

5. For details, see K. K. Rokossovsky, ed., *Velikaya pobeda na Volga*, [Great Victory on the Volga] (Moscow: Voenizdat, 1965) and the formerly classified archival accounts "Flangovye udary Krasnoi Armii v Stalingradskom srazhenii" [Flank strikes in the Stalingrad battle], and "Deistviia podvizhnoi gruppy 5 tankovoi armii v proryve" [Actions of 5th Tank Army in the penetration], *SMPIOV* 6 (April-May 1943): 37-62.

6. Van Hardesty, *Red Phoenix: The Rise of Soviet Air Power, 1941-1945* (Washington, D.C.: Smithsonian Institution Press, 1982), 83-85, 94-95, 104.

7. George E. Blau, *The German Campaign in Russia: Planning and Operations, 1940-1942* (Washington, D.C.: OCMH, 1955), 161, 171-172.

8. For example, from 31 July-23 August, the Kalinin and Western Fronts conducted the Rzhev-Sychevka operation against Army Group Center but recorded only limited gains. In the Leningrad region, the Volkhov and Leningrad Fronts launched the Siniavinsk operation from 20 August to early September but failed to relieve the siege of the city.

9. M. Kozlov, "Razvitie strategii i operativnogo iskusstva" [Development of strategy and operational art], *VIZh* 11 (November 1982): 12; Blau, *German*

Campaign in Russia, 173. For a full account of Soviet deception planning, see David M. Glantz, *Soviet Military Deception in the Second World War* (London: Frank Cass, 1989), 105-119.

10. According to G. F. Krivosheev, *Grif sekretosti sniat: Poteri vooruzhennykh sil SSSR v voynakh, boevykh deistviakh, i voennykh konfliktakh* [Losses of the armed forces of the USSR in war, combat actions, and military conflicts] (Moscow: Voenizdat, 1965), 181-182, and Rokossovsky, *Velikaia pobeda*, 254-258, German (and allied) forces in the Stalingrad region numbered about 600,000 men, 500 tanks, and 400 aircraft. These included Sixth Army force of about 300,000; Third and Fourth Rumanian Armies, with about 200,000; and elements of Fourth Panzer Army, with about 100,000. The Eighth Italian Army, with 100,000 troops, was not subjected to attack in November. About 100,000 troops of the Soviet Southwestern Front were also not directly involved in the November operation.

11. Fortuitously for the Soviets, near Kalach was a German training area where Soviet vehicles were used in tactical exercises. Apparently, the German sentries presumed that Filippov's tanks were associated with this training area. The Germans did retake the town for a time, but the Soviets held the key bridges until the main body of 26th Tank Corps had arrived.

12. O. Losik, "Boevoe primeneniye bronetankovykh i mekhanizirovannykh voisk" [Combat employment of armored and mechanized forces [at Stalingrad], *VIZH* 11 (November 1982): 45-47.

13. These reserves included Lieutenant General R. Ia. Malinovsky's powerful 2d Guards Army, which the Germans did not know existed and which would soon make its presence known.

14. Hardesty, *Red Phoenix*, 107-119.

15. For a limited view of the *Stavka* plan, see G. K. Zhukov, *Reminiscences and Reflections*, Vol. 2 (Moscow: Progress Publishers, 1989), 129-131. M. D. Solomatin, *Krasnogradtsy* [The Krasnograds] (Moscow: Voenizdat, 1963), 5-44, confirms Zhukov's description and provides considerable detail on the role of 1st Mechanized Corps and 6th Rifle Corps in the operation. M. E. Katukov, *Na ostrii glavnogo udara* [At the point of the main attack] (Moscow: Voenizdat, 1976), 182-184, refers to the operation as the Rzhev-Sychevka operation and emphasizes its importance. All these studies were written in the early 1960s, when Soviet historiography was briefly noted for its candor. Before and since that time, Soviet sources have said virtually nothing about this operation, except to claim that it was a diversion for Stalingrad.

16. For confirmation of the importance the Germans accord to the operation, see David Kahn, "An Intelligence Case History: The Defense of Osuga, 1942," *Aerospace Historian* 28:4 (Winter 1981): 243-254. Kahn's judgments regarding the operation's intended significance are likely correct. Soviet force concentrations during late November 1942 underscore the seriousness of Operation Mars. The three Soviet fronts (Southwestern, Don, and Stalingrad) participating in Operation Uranus at Stalingrad contained 1,103,000 men; 15,501 guns and mortars; 1,463 tanks; and 928 combat aircraft. At the same time, the Kalinin and Western Fronts and Moscow Defense Zone numbered 1,890,000 men; 24,682 guns and

mortars; 3,375 tanks; and 1,170 aircraft. Main attack armies in the sector from Belyi to Viaz'ma (41st, 20th, 33d, 5th, and perhaps 3d Tank) were as strong as or stronger than their counterparts in the Stalingrad region (63d, 5th Tank, 21th, and 57th), and mobile forces were just as imposing. Forces concentrated for Operation Mars constituted 31 percent of the personnel, 32 percent of the artillery, 45 percent of the tanks, and almost 39 percent of the aircraft of the entire Red Army, while commensurate percentages for Operation Uranus were 18 percent personnel, 20 percent artillery, 20 percent tanks, and 30 percent aircraft. See G. F. Krivosheev, *Grif sekretnosti sniat: poteri vooruzhennykh sil SSSR v voynakh, boevykh deistviakh, i voennykh konfliktakh* [Classification secret removed: Losses of the armed forces of the USSR in wars, combat actions, and military conflicts] (Moscow: Voenizdat, 1993), 181-182, and A. A. Grechko, ed., *Istoriia vtoroi mirovoi voiny 1939-1945, T. 6* [A history of the Second World War, Vol. 6] (Moscow: Voenizdat, 1976), 35. For complete Soviet order of battle, and in particular the combat composition and strength of all armies in Operations Uranus and Mars, see *Boevoi sostav Sovetskoi armii, chast' 2* [The combat composition of the Soviet Army, Part 2] (Moscow: Voenizdat, 1966). Prepared by the Military-Scientific Directorate of the Soviet Army General Staff, this classified study leaves no doubt about the power and intent of Operation Mars and its aborted follow-on operation.

17. The most thorough German account of the operation, together with a complete Soviet order of battle, is found in "Feindnachrichtenblatt" Nrs. 138, 139, 140, and 141, *Armeeoberkommando 9 Ic/A.O., 3134/12 geh.*, A.H.Qu., 30.11.42, 3 March 1942, and 15 December 1942, with appendices and daily maps in NAM T-312. According to these documents, Solomatin's and Povetkin's corps were destroyed, Katukov's corps suffered 75 to 85 percent losses, and Konev's two armies and several mobile corps were also decimated in the November-December battles. The Germans counted 195 tanks destroyed in the initial three days of combat on Konev's front, as the Soviets committed their armor prematurely and in piecemeal fashion. By German estimates, between 24 November and 14 December, the Soviets lost a total of 1,655 tanks and more than 15,000 dead. Krivosheev, *Grif sekretnosti*, 225, is silent about Soviet losses in this operation, although he shows a figure of 104,022 lost at Velikie Luki and 86,700 men initially engaged. On the other hand, the Germans lost almost the entire 7,000-man garrison at Velikie Luki after rescue attempts failed. The Soviet defeat, particularly in 20th Army's sector, resulted in part from the premature commitment of massive armored forces into a confined penetration sector. The crush of forces and resulting confusion were so great that supporting artillery could not be brought up. Deprived of artillery support and immobilized on crowded roads, Soviet mobile forces and infantry perished in staggering numbers. Interestingly enough, Zhukov would repeat this pattern in April 1945 when his forces assaulted the Seelow Heights east of Berlin, but with less disastrous consequences.

18. According to I. I. Kuznetsov and A. A. Maslov, "The Soviet General Officer Corps, 1941-1942: Losses in Combat," *JSMS* 7:4 (September 1994), casualties among Soviet general officers in Operation Mars included the 39th Army's assistant commander (wounded in air attacks), the army's chief of staff (killed in

encirclement), the commander of 31st Army's tank and mechanized forces (died of wounds), and the commander of 30th Army's 18th Cavalry Division. According to these authors, fewer Soviet generals perished in Operation Uranus.

19. For details, see M. Shaposhnikov, "Boevye deistviia 5-go mekhanizirovanogo korpusa zapadnee Surovokino v dekabre 1942 goda" [Combat operations of 5th Mechanized Corps west of Surovokino in December 1942], *VIZh* 10 (October 1982): 32-37. Interestingly, 5th Mechanized Corps was equipped with 193 tanks, the bulk of which were Matilda and Valentine lend-lease tanks with 40-mm guns, which had weak armor-piercing capability. See also H. Schneider, "Breakthrough Attack by the V Russian Mechanized Corps on the Chir River from 10-16 December 1942," *Small Unit Tactics, Tactics of Individual Arms: Project No. 48, MS # P-060 f, Part II* (Historical Division, U.S. Army European Command: Foreign Military Studies Branch, undated), Appendix 3.

20. For details on the Tatsinskaia raid, see David M. Glantz, *From the Don to the Dnepr: Soviet Offensive Operations, December 1942-August 1943* (London: Frank Cass, 1991), 65-69.

21. Earl F. Ziemke and Magna E. Bauer, *Moscow to Stalingrad: Decision in the East* (Washington, D.C.: U.S. Army Center of Military History, 1987), 501. According to V.E. Tarrant, *Stalingrad* (New York: Hippocrene Books, 1992), 230, German and Rumanian forces surrounded at Stalingrad numbered 267,000, of which 36,000 were evacuated by air, 140,000 were killed, and 91,000 surrendered. Another 15,000 Germans in Sixth Army were killed in the counteroffensive (19-23 November) for a total of 241,000 dead in Sixth Army. In addition, some 300,000 Rumanian, Italian, and Hungarian forces were lost at Stalingrad and in associated operations.

22. See Ziemke and Bauer, *Moscow to Stalingrad*, 74. The new Tiger tanks went into action in support of SS Viking Motorized Division.

23. For details on this operation, see "Ostrogozhsko-Rossoshanskaia nastupatel'naia operatsiia voisk voronezhskogo fronta" [The Ostrogozhsk-Rossosh' offensive operation of Voronezh Front forces], *SVIMVOV*, Issue 9 (Moscow: Voenizdat, 1953), 1-121; classified secret.

24. For an account of the Voronezh-Kastornoe operation, see "Voronezhskokastornenskaia nastupatel'naia operatsiia voisk voronezhskogo i levogo kryla brianskogo frontov" [The Voronezh-Kastornoe offensive operation of forces of the Voronezh and left wing of the Briansk Fronts], *SVIMVOV*, Issue 13 (Moscow: Voenizdat, 1954); classified secret.

25. For details on operations Star and Gallop, see Glantz, *From the Don to the Dnepr*, 82-215. No formerly classified accounts of these two operations have been released by the Russians.

26. Erich von Manstein, *Lost Victories* (Chicago: Henry Regnery Co., 1958), 422-423.

27. The original concept of operation is in A. M. Vasilevsky, *Delo vsei zhtzni* [A lifelong cause] (Minsk: "Belarus," 1984), 278-279. Other details are offered in David M. Glantz, "Prelude to Kursk: Soviet Strategic Operations, February-March 1943," to be published in a forthcoming volume by the German Military History Office, Freiburg, Germany.

28. For details on Central Front Operations, see K. Rokossovsky, *A Soldier's Duty* (Moscow: Progress Publishers, 1985), 174-178. Other memoirs, including those of P. I. Batov (65th Army) and I. M. Chistiakov (21st Army), and unit histories such as 21st Army's, contain fragmentary materials on the operation.

29. For details of Lieutenant General Bagramian's failure, see I. Kh. Bagramian, *Tak shli my k pobeda* [As we went on to victory] (Moscow: Voenizdat, 1988), 371-378.

30. A particularly good account of 2d Tank Army's role is found in F. E. Vysotsky, et al., *Gvardeiskaia tankovaiia* [Guards tank] (Moscow: Voenizdat, 1963), 15-23.

31. These operations are especially impressive in light of the relative weakness of forces involved. For example, Popov's mobile group numbered only 212 tanks initially and 25 tanks on 20 February. On 6 February 7th and 11th Panzer Divisions possessed only 35 tanks and 16 tanks, respectively. During von Manstein's counterstroke 17th Panzer Division of XXXXVIII Panzer Corps numbered only 8 tanks and 11 self-propelled guns. On the other hand, Soviet 25th and 1st Guards Tank Corps totaled 300 tanks, as did the two SS panzer divisions.

32. von Manstein, *Lost Victories*, 431-433. German records show Soviet losses as 23,200 dead, 9,071 captured, and 615 tanks destroyed. Krivosheev, *Grif sekretnosti*, is silent on Soviet losses in this operation and in Rokossovsky's operation.

33. Russian archival sources released to date generally say nothing about the Khar'kov defensive operation and the Central Front offensive in February and March, nor does Krivosheev, *Grif sekretnosti*, provide casualties. In fact, no reference is made to the Central Front during the entire period.

10. Rasputitsa and Operational Pause

1. George E. Blau, *The German Campaign in Russia: Planning and Operations, 1940-1942* (Washington, D.C.: OCMH, 1955), 153, 156, 162. Heinz Guderian, *Panzer Leader* (Washington, D.C.: Zenger Publishing Co., 1979), 310.

2. Blau, *German Campaign in Russia*, 169.

3. Williamson Murray, *Luftwaffe* (Baltimore, Md.: Nautical and Aviation Publishing Co. of America, 1985), 158.

4. *Ibid.* 144 (Table 31).

5. Brian Moynahan, *Claws of the Bear* (Boston: Houghton Mifflin, 1989), 129. Moynahan provides a good brief summary of Lend-Lease aid on pp. 127-129. For the uranium oxide incident, see Steven J. Zaloga, *Target America: The Soviet Union and the Strategic Arms Race, 1945-1965* (Novato, Calif.: Presidio Press, 1993), 18-19. For the first candid Russian appreciation of the scope and impact of Allied Lend-Lease, see B. V. Sokolov, "The Role of Lend-Lease in Soviet Military Efforts, 1941-1945," *JSMS* 7:3 (September 1994): 567-586.

6. On P-39s in the Kuban, see Van Hardesty, *Red Phoenix: The Rise of Soviet Air Power, 1941-1945* (Washington, D.C.: Smithsonian Institution Press, 1982), 139-142.

7. German strength from "Kraftegegenubersrellung Stand: 1.4.43" *Anlage 4b zu Abt. Fr.H. Ost(I), No. 80/43 g. Kdos vom 17.10.43* NAM T-78, Roll 552. The