

proficient *Wehrmacht*, particularly in offensive operations. Nor were Stalin and the other *Stavka* members much more competent in this regard. In fact, Stalin and the *Stavka* would not fully appreciate the *Wehrmacht's* actual military capabilities until mid-1942. This fact alone, coupled with the massive and often embarrassingly catastrophic defeats the Red Army suffered during the summer of 1941, persuaded the Soviet government to conceal the very existence of many of these failed operations for decades after war's end.<sup>4</sup> In the end, however, the Red Army's record proved the adage that "while often harsh, experience is an effective teacher."

Furthermore, excessive command turbulence, in particular at army level; Stalin's persistent arbitrary interference in operations, coupled with his ruthless repression of senior officers who lost battles; and congenital Soviet recourse to unfounded and misleading propaganda designed to inspire its soldiers compounded these difficulties by causing frequent breakdowns in command, control, and communications and hurried, often tardy, and faulty decision-making. Illustrating this command turbulence, during the ten-week period from 22 June through 10 September 1941, the Central Front had two commanders (Generals F. I. Kuznetsov and Efremov), 13th Army had five commanders (Generals Filatov, Remezov, Gerasimenko, Golubev, and Gorodniansky), 20th Army had four commanders (Generals Remezov, Kurochkin, Lukin, and Ershakov), and 21st Army had five commanders (Generals Gerasimenko, F. I. Kuznetsov, Efremov, Gordov, and V. I. Kuznetsov).

Compounding the ill effects of command turbulence, frequent breakdowns in command, control, and communications, often caused by a lack of or poor use of operational and tactical radios, led to tardy and often poor command decisions, which, in turn, contributed to slow reaction to sudden German maneuvers and costly encirclements and massive losses of personnel, weapons, and other military equipment. Command turbulence and the constant threat of outright "repression," coupled with many unreasonable and uninformed directives from the *Stavka*, contributed to hasty and often mistaken decisions made by inexperienced commanders at all levels.

Complicating these command and control problems, Stalin relentlessly "turned the screws" on the Red Army's command cadre and troops during this period by demanding absolute obedience to often unreasonable orders and by categorically forbidding withdrawals of any sort for any reason without higher command authorization. Furthermore the liberal use of both acts and threats of censure, arrest, and even execution by Stalin and many of his senior commanders only exacerbated these problems. Finally, by September Stalin authorized the employment of blocking detachments, literally, battlefield firing squads, to enforce discipline by brute force. These measures, like the raw fear that kept the Red Army obedient to the Communist regime in the late 1930s, did little to improve the Red Army's combat performance during the first six months of the war. If Stalin was a master at such measures, some senior generals, in particular Zhukov and Eremenko, also employed them extensively. So, for the Red Army soldier, the choice was often a grim one – death at the hands of the Germans if they obeyed orders or death administered by their own superiors if they disobeyed. As usual, however, there were exceptions to the rule. Among the handful of generals who earned the plaudit of "un-bloody" was Rokossovsky, the hero of Iarisevo.

The Red Army's generally poor combat performance during the struggle for the Smolensk region was also the result of its faulty organization, which the *Stavka's* and

NKO's "extraordinary fascination with the quantity of formations" only exacerbated.<sup>5</sup> To its credit, the NKO quickly abolished the Red Army's mechanized corps and many of its rifle corps beginning in mid-July, although it did so primarily because the advancing *Wehrmacht* had already destroyed them. Thereafter, it repeatedly restructured its rifle and cavalry formations and units to make them "lighter" and easier to command and control in combat. While it dramatically increased the quantity of rifle and cavalry divisions and, later, rifle brigades, in the Red Army, virtually all of these new formations lacked adequate armor, artillery, and other means of combat and combat service support, in particular, radios and an effective logistical support structure. Likewise, the NKO replaced its cumbersome mechanized corps, first, with the 100-series of tank divisions, and, when even these too proved difficult to equip and control, with numerous smaller tank brigades and separate tank battalions. In short, when the NKO finally structured its forces to make them lighter and easier to command and control, it failed to provide the new units with adequate armor, artillery, and other means of combat and combat service support.

### Comparative Losses

#### Personnel

Although the actual strengths and losses of the German and Soviet forces participating in the Battle for Smolensk remain vexingly obscure even decades after these battles, official casualty figures published by both sides provide adequate, if frequently conflicting, starting points for such calculations. For example, a variety of official Soviet and Russian sources indicate the overall strength of the Red Army's Western Front at the beginning of the campaign. One particularly credible official study of Red Army losses throughout the entire war states that the Western Front's personnel strength on 10 July 1941, that is, on the first day of what it terms the Smolensk Defensive Operation, totaled 579,400 men. Ostensibly, this figure includes the Western Front's 13th, 16th, 19th, 20th, 21st, and 22nd Armies, plus the remnants of 4th Army, which was largely destroyed in the preceding border battles.<sup>6</sup> A second study shows the combat composition and strength of the Soviet Armed Forces as of 22 June 1941 in terms of personnel and tanks.

See Tables 20 and 21

Table 20. The Personnel Strength of the *Stavka's* Reserve Armies on 22 June 1941

Force	Home Station	En route	Forward	Total
16th Army	-	17,153	33,910	51,063
19th Army	14,574	-	95,765	110,339
20th Army	113,193	-	-	113,193
21st Army	44,773	61,339	-	106,112
22nd Army	-	44,356	38,806	83,162

Force	Home Station	En route	Forward	Total
24th Army	88,029	-	-	88,029
Sep. forces	33,637	-	33,210	66,847
<b>TOTAL</b>	<b>294,206</b>	<b>122,848</b>	<b>201,691</b>	<b>618,745</b>

**Source:** *Boevoi i chislennyi sostav vooruzhennykh sil SSSR v period Velikoi Otechestvennoi voiny (1941-1945 gg.): Statisticheskii sbornik No. 1 (22 iyunia 1941 g.)* [The combat and numerical composition of the Armed Forces of the USSR in the period of the Great Patriotic War (1941-1945): Statistical collection No. 1 (22 June 1941)] (Moscow: Institute of Military History of the Russian Federation, 1994), 21-22.

**Table 21. The Tank Strength of the Stavka's Reserve Armies on 22 June 1941**

Force	Home Station	En route	Forward	Total
16th Army	-	29	1,030	1,059
19th Army	99	-	41	140
20th Army	959	-	-	959
21st Army	79	68	-	147
22nd Army	-	10	9	19
24th Army	99	-	-	99
Sep. forces	54	-	683	737
<b>TOTAL</b>	<b>1,290</b>	<b>107</b>	<b>1,763</b>	<b>3,160</b>

**Source:** *Boevoi i chislennyi sostav vooruzhennykh sil SSSR v period Velikoi Otechestvennoi voiny (1941-1945 gg.): Statisticheskii sbornik No. 1 (22 iyunia 1941 g.)* [The combat and numerical composition of the Armed Forces of the USSR in the period of the Great Patriotic War (1941-1945): Statistical collection No. 1 (22 June 1941)] (Moscow: Institute of Military History of the Russian Federation, 1994), 21-22.

Since the Stavka assigned 19th, 20th, 21st, and 22nd Armies to the Western Front by 10 July, it is reasonable to assume roughly 450,000 of the 618,000 men in the Stavka's reserve armies joined the Western Front by 10 July. If so, adding the survivors of 4th, 13th, and other armies routed in the border battles to this figure validates the figure of 579,400 cited for the front's strength as of 10 July. Subsequently, the Stavka reinforced the Western Front with 16th Army's 60,000-men by 15 July, thereby increasing the front's total strength to about 639,000 men. Thereafter, 28th, 29th, and 30th Armies, each 50,000-60,000 strong, joined the Western Front by the end of July. Discounting casualties, this would have brought the front's strength to about 800,000 men. Conversely, the Stavka assigned the Western Front's 13th and 21st

Armies, plus the rump 4th Army, to the Central Front on 24 July, removing roughly 200,000 men from the front and decreasing its total strength to roughly 600,000 men.

In addition to these assignments and transfers, the Soviet People's Commissariat of Defense (NKO) embarked on a massive mobilization program after war began. Once it completed mobilizing the 805,000 men called for in its covert exercise of May and June of 1941, it allocated these replacements to its operating armies in late June and July as march-battalions and companies. It is likely that as many as half of these replacements were sent to the Western, Central, and Reserve Fronts. Based on official Soviet figures, at the end of this process, that is, by 30 September, the Western, Reserve, and Briansk Fronts numbered 1.25 million men, subdivided as follows:

✦ Western Front	558,000 men
✦ Reserve Front	448,000 men
✦ Briansk Front	244,000 men
<b>Total</b>	<b>1,250,000 men</b>

Based on all of these considerations, the estimated strength of the Western Front and its subordinate armies on 10 and 31 July were as follows: See Ta

**Table 22. The Estimated Personnel Strength of the Western Front and its Component Armies and Operational Groups on 10 and 31 July 1941**

Army	10 July	31 July
4th Army	25,000	-
13th Army	60,000	-
19th Army	100,000	(combined with 16th Army)
20th Army	113,000	25,000 (6 August)
21st Army	106,000	-
22nd Army	83,000	78,000
<b>Western Front total</b>	<b>579,400</b>	
16th Army (after 15 July)	60,000	15,000 (by 6 August)
Replacements (est. after 10 July)	230,000	-
<b>Grand total</b>	<b>868,400</b>	-
24th Army	85,000	-
Group Maslennikov (29th Army)	-	45,000
Group Kalinin (24th Army)	-	50,000
Group Khomenko (30th Army)	-	65,000
Group Iartsevo	-	50,000
Group Kachalov	-	50,000
Cavalry Group	-	10,000

Army	10 July	31 July
Western Front total		638,000

In summary, after adding the 60,000 men from 16th Army by 15 July, as well as roughly 230,000 individual replacements received after 10 July, the total number of personnel assigned to Western Front in late June and July totaled roughly 869,000 men. By subtracting the army's officially recognized unrecoverable losses suffered by the Western Front from 10 July to 10 September, which amounted to almost 310,000 men, the *front's* strength on 30 September would approximate the officially-published strength figure of 558,000 men.

Table 23

**Table 23. The Red Army's Losses during the Battle for Smolensk, 10 July-10 September 1941**

Front	Armies	Strength on 10 July	Unrecoverable (KIA, MIA, POW)	Wounded or sick	Total
Western	16th, 19th, 20th, 21st, 22nd, 28th, 29th, and 30th	579,400	309,959	159,627	469,584
Central (26.7-25.8)	3rd, 13th, and 21st		79,216	28,009	107,225
Reserve (30.7-10.9)	24th, 31st, 32nd, 33rd, 34th, 43rd, and 49th		45,774	57,373	103,147
Briansk (16.8-10.9)	3rd, 13th, 21st, and 50th		50,972	28,603	79,575
Pinsk Flotilla		2,200	250	193	443
<b>Total</b>		<b>581,600</b>	<b>486,171</b>	<b>273,803</b>	<b>759,974</b>

**Source:** G. F. Krivosheev, ed., *Velikaia Otechestvennaia bez grifa sekretnosti. Kniga poter* [The Great Patriotic [War] without the secret classification. A book of losses] (Moscow: "Veche," 2009), 91.

Since Red Army record keeping during this period of confused fighting was poor at best, the strength and loss figures indicated above remain problematic. In particular, during the initial German advance to Smolensk, many Red Army units were shattered, and their personnel were dispersed "to the winds." Postwar memoirs and other anecdotal materials indicate that, while many Red Army soldiers perished in utter obscurity, some "went to ground" by disappearing into the countryside, while others simply "went home" to appear as conscripts at later dates. As the records contained in this study show, while many commanders tried to keep track of the losses, others had no choice but to parrot the oft used phrase, "losses being verified." All of this notwithstanding, what is clear is that all Soviet formations suffered heavy if incalculable losses.

As for German casualties, because of the sudden and rapid nature of Army Group Center's spasmodic advances, which were always spearheaded by panzer and motorized divisions, the army group's loss rates during offensive operations were far lower than Soviet losses. This applies also to German defensive operations since the losses of attackers are generally much higher than defenders, particularly if the latter are manning prepared defenses. However, this rule breaks down once the attacker penetrates the defender's defenses and forces him to withdraw. In these cases, the defender's losses depend directly on the nature of the withdrawal, specifically, whether it was well-organized or simply a rout.

Thus, the Germans suffered their heaviest losses in two circumstances; first, while reducing encirclements, when their infantry had no choice but to conduct essentially frontal attacks against the encircled forces and, second, when the troops were manning static defenses for prolonged periods of time, such as Third and Second Panzer Groups' panzer and motorized divisions, which defended along the army group's outer encirclement line east of Smolensk in late July. It also applied to Ninth and Fourth Armies' infantry divisions, which were defending the former's "eastern front," northeast and east of Smolensk and the El'nia salient in August and early September, respectively.

This being said, surprisingly, data on German casualty remains more obscure than Soviet losses. The most recent Russian assessment of Army Group Center's personnel losses during the Battle of Smolensk appears in the first volume of a statistical analysis of wartime operations and carries an archival citation.

See Table 24

**Table 24. Army Group Center's Losses during the Battle for Smolensk, 10 July-10 September 1941 (A Soviet Perspective)**

Force	Killed		Wounded		Missing in Action		Total	
	Officers	NCOs & Enlisted Men	Officers	NCOs & Enlisted Men	Officers	NCOs & Enlisted Men	Officers	NCOs & Enlisted Man
2nd Army	345	7529	793	22,982	20	1,572	1,158	32,083
4th Army	-	-	-	-	-	-	-	-
9th Army	252	572	693	17,186	10	1,121	955	18,879
2nd Panzer Group	490	4,689	687	15,577	16	517	1,193	20,783
3rd Panzer Group	155	2,390	387	7,224	4	246	546	9,860
Reserve	50	967	106	3,237	1	232	157	4,436
Other	103	2,344	290	7,671	4	470	397	10,485
<b>Total</b>	<b>1,395</b>	<b>18,491</b>	<b>2,956</b>	<b>73,877</b>	<b>55</b>	<b>4,158</b>	<b>4,406</b>	<b>96,526</b>

Source: *TsAMO RFF*, 100. Op. 1245, D. 165 (255), L. 15.

While this table's credibility is based on its archival citation, the source makes no mention of its provenance, thus leaving its credibility in some doubt. In addition, the table contains some omissions which indicate that these figures may be understated. Specifically, the table does not include any entry for German Fourth Army, whose forces defended the El'nia bridgehead after 22 August 1941. The inclusion of this army on the table would likely add another 20,000 casualties to these figures. A comparison of the losses incurred by Army Group Center's armies also seems to undercount German Ninth Army's casualties, including at least 7,000 dead soldiers.

A more reliable method for calculating the army group's likely overall losses involves exploiting the fairly firm and reliable figures cited in existing German documents, studies, and war diaries, for example, such as those of General Halder and Bock. First, the records of the OKH provide reliable casualty figures for every period of roughly 10 days from 22 June through 31 December 1941. Second, Franz Halder provides loss figures in his diary for specific periods, for example, a total of 54,000 men by 3 July and 389,924 by 13 August. Halder also states that Army Group Center suffered 74,500 casualties by 3 August. When compared with the overall losses of roughly 230,000 men by that date, Army Group Center's percentage of losses compared with the total would amount to roughly 31 percent. Although Army Group Center's losses as a percentage of the whole likely varied over time, this percentage provides the following estimated losses for the army group. Given the intense fighting in the army group's sector, these figures are also likely minimums, subject to some increase.

See Table 25

**Table 25. The Estimated Personnel Losses of the German Army and Army Group Center, 10 July-10 September 1941**

Period	Comparative Sources		
	OKH	Halder	Army Group Center (est.)
22-30 June	41,087		12,737
1-10 July	36,226	3 July -	11,230
11-20 July	52,906	54,000 (2.5%)	16,400
21-31 July	77,686		24,082
<b>Total</b>	<b>207,905</b>		<b>64,450</b>
1-10 August	75,387		23,370
11-20 August	66,383	13 August -	20,579
21-31 August	53,955	389,924 (11.4%)	16,729
<b>Total</b>	<b>195,725</b>		<b>60,675</b>
1-10 September	49,513		15,349
<b>Total to 20 November</b>	<b>721,270</b>	<b>743,112 -</b>	<b>223,594</b>
<b>Total to 31 December</b>	<b>753,295</b>	<b>830,903 (25.9%)</b>	<b>233,521</b>

Sources: S. N. Mikhalev, *Liudskie poteri v Velikoi Otechestvennoi voine 1941-1945 gg.: Statisticheskoe issledovanie* [Personnel losses in the Great Patriotic War 1941-1945: A statistical study] (Krasnoiar'sk: Krasnoiar'sk State Pedagogical University, 2000), Attachment 8. This is a translation of an OKH document in The Federal Archives, The Military Archives of the FRG [Federal Republic of Germany], III 805/5-7, in Schüsterreit N. Vabanque (Herford and Bonn, 1988), 70; and Charles Burdick and Hans-Adolf Jacobsen, eds., *The Halder War Diary 1939-1942* (Novato, CA: Presidio, 1986), 453, 493, 521, 571, and 599.

After stripping out the period prior to 10 July, Army Group Center suffered roughly 40,500 losses during July and about 75,000 during August and early September, which accords with the heavy infantry losses the army group suffered while on the defense during the *Stavka's* second and third offensives. This would also accord with Halder's assertion that the army group was short 54,000 men by 3 August.<sup>8</sup>

In summary, in terms of personnel losses, these calculations indicate that Army Group Center's forces, which numbered about 1 million men on 22 June and over 900,000 men on 16 July, suffered about 115,500 casualties during the period from 10 July through 10 September, compared with the 760,000 losses the Western, Reserve, and Briansk Fronts incurred during the same period. In turn, these stark numbers underscore the intensity and ferocity of the fighting during this vital period.

Viewed from another perspective, the OKH's records also break German casualties down by army and panzer group during the period from 22 June through 20 November 1941.

See Table

**Table 26. The Casualties Suffered by Army Group Center's Armies and Panzer Groups from 22 June-20 November 1941**

Force	Losses	Percentage of the Total
Second Army	52,331	19.2%
Fourth Army (from 24.8)	43,182	15.9%
Ninth Army	89,528	33.0%
Second Panzer Group	39,790	14.7%
<i>Armeegruppe</i> Guderian (to 23.8)	14,953	5.5%
Third Panzer Group	31,390	11.6%
<b>Total</b>	<b>271,174</b>	

Note: These losses of 271,174 differ from the army group total of 271,270 because of losses by units directly subordinate to the army group.

Source: S. N. Mikhalev, *Liudskie poteri v Velikoi Otechestvennoi voine 1941-1945 gg.: Statisticheskoe issledovanie* [Personnel losses in the Great Patriotic War 1941-1945: A statistical study] (Krasnoiar'sk: Krasnoiar'sk State Pedagogical University, 2000), Attachment 9. This is a translation of "Combat Losses in the Campaign against the USSR from 22 June through 20 November 1941," prepared by the Chief of the Medical Services of the High Command of the Ground Forces, Headquarters, OKH, 23 November 1941.

Assuming these percentages apply even roughly to the entire period and the period of the Battle for Smolensk, Ninth Army's losses were inordinately higher than any other major component of Army Group Center. This, in turn, highlights the damage done to Ninth Army during two periods: first and foremost, during its defense of the army group's "eastern front" during August and early September and, to a lesser extent, its role in liquidating the Smolensk pocket. Like its counterparts, Army Groups North and South, which were defeated in the Leningrad and Rostov regions in November 1941, Army Group Center would taste defeat at the gates of Moscow at the end of the first week in December. To a significant degree, its defeat and the failure of Barbarossa which it signified resulted from the losses it suffered in the Battles for Smolensk. No wonder! According to Halder in the OKH, by 31 December 1941, the German Eastern Army had lost 830,903 men, and the average strength of its infantry companies was 50-60 men.

**Armor**

If calculating the personnel losses of the opposing sides is a daunting task, doing the same for armored (tank) losses is difficult, if not impossible. From the Soviet perspective, in comparison with the Western Front's tank strength on 22 June 1941, the offensive actions the Red Army's Western, Reserve, and Briansk Fronts conducted from 10 July through 10 September were indeed, "tank starved." This was the case primarily because of the carnage German forces wrought on the Red Army's mechanized corps during the border battles and engagements such as 5th and 7th Mechanized Corps' dramatic but suicidal counterstroke in the Lepel' region. Thus, after beginning the war with roughly 3,000 tanks, receiving well over 6,000 replacement tanks during the operation, and losing 4,799 tanks in combat during the same period, by 10 July the Western Front fielded 939 tanks of various types. Ultimately, the number of tanks the Red Army fielded as part of the *fronts* it deployed along the western axis totaled 1,375. Of course, this did not include the hundreds of new tanks dispatched to the various *fronts* during the course of the fighting.

See Table 27

**Table 27. The Initial Tank Strength of the Red Army's Fronts Operating along the Western (Moscow) Axis, 10 July-10 September 1941**

Front (date)	Types of Tanks			Total
	Heavy	Medium	Light	
Western (10 July)	29	27	883	939
Reserve (1 August)	41	-	226	267
Central (1 August)	39	-	89	128
Briansk (20 August)	7	34	-	41
Total	116	61	1,198	1,375

**Source:** Velikaia Otechestvennaia voina 1941-1945 gg.: Kampanii, strategicheskie operatsii i srazheniia: Statisticheskii analiz, Kniga I: Letne-osenniia kampaniia 1941 g. [The Great Patriotic War 1941-1945: Campaigns, strategic operations, and battles. A statistical analysis, Book I: The

Summer-Fall campaign of 1941] (Moscow: The Institute of Military History of the Ministry of Defense of the Russian Federation, 2004), 186, citing *TsAMO* RF, F. 144, Op. 396, D. 8, L. 11; D. 18, L. 35; D. 19, L. 9; and D. 20, Ll. 13-14.

Once the struggle in the Smolensk region began, Timoshenko's armies and operational groups had to make do with either the remnants of the former mechanized corps, which seldom counted more than 70 tanks each, or the new 100-series tank divisions, whose actual strength seldom reached 100 tanks at any given moment. Thus, on average, Soviet armies and operational groups fought with well under 100 tanks and, frequently, with none at all. The only exceptions to this rule were 19th and 16th Armies' 101st and 1st Tank Divisions and 127th Tank Brigade during the August and early September struggle along the Vop' River and in the Iartsevo region and 3rd and 50th Armies' 108th Tank Division and 121st and 141st Tank Brigades in the Briansk Front's fight in the Trubchevsk and Zhukovka regions in late August and early September. In these cases, the divisions and separate brigades were able to muster from 50-100 tanks, but only for brief periods. According to Russian archival records, of the more than 1,500 tanks armies of the Western, Reserve, and Briansk Fronts employed during the fighting in the Smolensk region, the three *fronts* lost a total of 1,348 tanks.<sup>9</sup> Thus, throughout the operations in the Smolensk region, German armor maintained a distinct "edge," first, in sheer numbers, but, even more important, in terms of employment skill.

Providing context for this matter, at the beginning of Operation Typhoon on 30 September 1941, initially, at least, the three *fronts* operating along the Moscow axis were able to field only 1,223 tanks, a bit more than one third of the Red Army's tank strength along the Western axis on 22 June and about 75 percent of what it fielded along the same axis on 10 July. Notably, this table also indicates precisely where the tanks were situated in terms of armies.

See Table

**Table 28. The Initial Tank Strength of the Red Army's Fronts Operating along the Western (Moscow) Axis on 30 September 1941**

Front / Army	Tanks
Western	
16th Army	71
19th Army	24
20th Army	-
22nd Army	9
29th Army	2
30th Army	8
Front subordinate	372
<b>Total</b>	<b>486</b>

Front / Army	Tanks
<b>Reserve</b>	
24th Army	90
31st Army	13
32nd Army	88
33rd Army	15
43rd Army	88
49th Army	7
Front subordinate	-
<b>Total</b>	<b>301</b>
<b>Briansk</b>	
3rd Army	-
13th Army	169
50th Army	7
Op.Gp. Ermakov	158
Front subordinate	102
<b>Total</b>	<b>436</b>
<b>Grand Total</b>	<b>1,223</b>

**Source:** *Velikaia Otechestvennaia voina 1941-1945 gg.: Kampanii, strategicheskie operatsii i srazheniia: Statisticheskii analiz, Kniga I: Letne-osenniia kampaniia 1941 g.* [The Great Patriotic War 1941-1945: Campaigns, strategic operations, and battles. A statistical analysis, Book I: The Summer-Fall campaign of 1941] (Moscow: The Institute of Military History of the Ministry of Defense of the Russian Federation, 2004), 317, citing, F. 8, Op. 11627, D. 205, Ll. 52-58, 108-116; F. 35, Op. 11285, D. 236, Ll. 268288; F. 208, Op. 2511, D. 166, L. 47.

These figures do indeed accord with which armies fielded the most armor during the fighting in late August and early September.

From the German perspective, however, the battles in the Smolensk region "dulled the edge" of Blitzkrieg's shock force. In short, the *Wehrmacht's* once proud panzer divisions of 100-120 tanks suffered the effects of both Red Army resistance, the wear and tear of the Eastern Theater, and logistical constraints imposed by both terrain and Barbarossa's poorly conceived logistical plan. This resulted in a sharp decrease in the combat power of Army Group Center's panzer and motorized divisions, which was only exacerbated by their employment in regions unsuited for high-speed armored operations (such as the forested swampy regions near Velikie Luki and Toropets) and by their defensive operations on the army group's "eastern front," in roles for which they were totally unsuited.

As indicated by Halder's assessment of the attrition rate suffered by the army group's panzer forces in July and August, by August and September, the panzer divisions were fortunate indeed to be able to field 40-70 operational tanks each on any given day.<sup>10</sup>

**Table 29. The Relative Strength of Army Group Center's Panzer Groups and Panzer and Motorized Divisions as of mid-August 1941 (from a report dated 28 August)**

Force	Percentage of Tanks Operational
<b>Second Panzer Group</b>	
10th Panzer Division	83%
18th Panzer Division	57%
Other panzer divisions (3rd, 4th, and 17th Panzer and 10th and 29th Motorized)	45%
<b>Third Panzer Group</b>	
7th Panzer Division	24%
Other panzer divisions (12th, 19th, and 20th Panzer and 18th and 20th Motorized)	45%

**Source:** Charles Burdick and Hans-Adolf Jacobsen, eds., *The Halder War Diary 1939-1942* (Novato, CA: Presidio, 1986), 519.

When these general percentages are translated into specific division strengths, the wear and tear of active combat operations on these armored forces becomes readily apparent. See Tab

**Table 30. The Tank Strength of Selected Panzer Division Subordinate to Army Group Center, 22 June-10 September 1941**

Force	Tank Strength (total and by tank model)
<b>Second Panzer Group:</b>	
3rd Panzer Division	22 June - 229 (13 Pz. I, 59 Pz. II, 110 Pz. III, 32 Pz. IV, 15 Cmd.)
	4 September - Operational - 54 (5 Pz. I, 30 Pz. II, 6 Pz. III, 5 Pz. IV, 8 Cmd)
	Repairable - 107 (5 Pz. I, 13 Pz. II, 69 Pz. III, 17 Pz. IV, 3 Cmd)
	Total loss - 70 (3 Pz. I, 16 Pz. II, 35 Pz. III, 12 Pz. IV, 4 Cmd)
4th Panzer Division	22 June - 212 (10 Pz. I, 51 Pz. II, 105 Pz. III, 20 Pz. IV, 26 Cmd)
	4 September - Operational - 83 (8 Pz. I, 21 Pz. II, 24 Pz. III, 11 Pz. IV, 19 Cmd)
	Repairable - 79 (13 Pz. II, 59 Pz. III, 5 Pz. IV, 2 Cmd)
	Total Loss - 50 (2 Pz. I, 17 Pz. II, 22 Pz. III, 4 Pz. IV, 5 Cmd)
10th Panzer Division	22 June - 200 (11 Pz. I, 47 Pz. II, 105 Pz. III, 20 Pz. IV, 17 Cmd)
	4 September - Operational - 153 (9 Pz. I, 38 Pz. II, 75 Pz. III, 18 Pz. IV, 13 Cmd)
	Repairable - 22 (2 Pz. I, 6 Pz. II, 11 Pz. III, 1 Pz. IV, 2 Cmd)
	Total loss - 25 (3 Pz. II, 19 Pz. III, 1 Pz. IV, 2 Cmd)

Force	Tank Strength (total and by tank model)
17th Panzer Division	22 June – 216 (22 Pz. I, 45 Pz. II, 106 Pz. III, 30 Pz. IV, 13 Cmd)
	10 September – Operational – 52 (4 Pz. I, 19 Pz. II, 20 Pz. III, 4 Pz. IV, 5 Cmd)
	Repairable – 76 (12 Pz. II, 47 Pz. III, 15 Pz. IV, 2 Cmd) Total loss – 72 (2 Pz. I, 14 Pz. II, 39 Pz. III, 11 Pz. IV, 6 Cmd)
18th Panzer Division	22 June – 229 (17 Pz. I, 50 Pz. II, 114 Pz. III, 36 Pz. IV, 12 Cmd)
	9 September – Replacements – 25 (20 Pz. III, 5 Pz. IV)
	Operational – 93 (12 Pz. I, 27 Pz. II, 30 Pz. III, 16 Pz. IV, 8 Cmd)
	Repairable – 114 (2 Pz. I, 12 Pz. II, 83 Pz. III, 15 Pz. IV, 2 Cmd) Total loss – 47 (3 Pz. I, 11 Pz. II, 21 Pz. III, 10 Pz. IV, 2 Cmd)
<b>Third Panzer Group:</b>	
7th Panzer Division	22 June – 278 (11 Pz. I, 55 Pz. II, 167 Pz. 38t, 30 Pz. IV, 15 Cmd)
	6 September – Replacements – 21 (21 T-38t)
	Operational – 130 (9 Pz. I, 37 Pz. II, 62 Pz. 38t, 14 Pz. IV, 8 Cmd)
	Repairable – 87 (1 Pz. I, 7 Pz. II, 67 Pz. 38t, 7 Pz. IV, 5 Cmd) Total loss – 82 (1 Pz. I, 11 Pz. II, 59 Pz. 38t, 9 Pz. IV, 2 Cmd)
12th Panzer Division	22 June – 232 (51 Pz. I, 34 Pz. II, 109 Pz. 38t, 30 Pz. IV, 8 Cmd)
	26 August – Operational – 96 (7 Pz. I, 25 Pz. II, 42 Pz. 38t, 14 Pz. IV, 8 Cmd)
	Repairable – 35 (2 Pz. I, 5 Pz. II, 20 Pz. 38t, 8 Pz. IV) Total loss – 102 (42 Pz. I, 4 Pz. II, 47 Pz. 38t, 8 Pz. IV)
19th Panzer Division	22 June – 239 (53 Pz. I, 35 Pz. II, 110 Pz. 38t, 30 Pz. IV, 21 Cmd)
	25 August – Operational – 102 (6 Pz. I, 20 Pz. II, 57 Pz. 38t, 9 Pz. IV, 11 Cmd)
	Repairable – 47 (4 Pz. II, 32 Pz. 38t, 11 Pz. IV) Total loss – 90 (47 Pz. I, 11 Pz. II, 21 Pz. 38t, 10 Pz. IV, 1 Cmd)
20th Panzer Division	22 June – 240 (55 Pz. I, 31 Pz. II, 121 Pz. 38t, 31 Pz. IV, 2 Cmd)
	25 August – Replacements – 14 (14 Pz. 38t)
	Operational – 88 (4 Pz. I, 19 Pz. II, 52 Pz. 38t, 11 Pz. IV, 2 Cmd) Repairable – 62 (4 Pz. II, 46 Pz. 38t, 11 Pz. IV, 2 Cmd) Total loss – 104 (51 Pz. I, 8 Pz. II, 37 Pz. 38t, 8 Pz. IV)

Source: Thomas L. Jentz, ed., *Panzertruppen: The Complete Guide to the Creation and Combat Employment of Germany's Tank Forces, 1933-1942*, Volume 1 (Atglen, PA: Schiffer Military History, 1996), 206.

Since several models of German tanks were so weakly armed and lightly armored that they constituted little more than armored reconnaissance vehicles or armored cars, and others were command (*befehl*) machines, with radios rather than main guns, these should not be counted in the divisions' tank strength. Specifically, Pz. I tanks, which were equipped with two 7.92mm machine guns, Pz. II tanks, with 20mm main guns and a 7.92mm machine gun, and Pz. *Befehls*, which often mounted dummy guns, were thoroughly outgunned by most new Soviet KV and T-34 tanks, which were armed

with 76mm guns, and, to a lesser extent, BT tanks, with their 50mm guns. Even the Czech-built Pz. 38t, with its 37mm guns, also had difficulty when encountering the Soviet T-34 and KV tanks. Thus, the primary striking power of a panzer division rested with its Pz. III, Pz. IV, and Pz. 38t model tanks. Most relevant to this study were the numbers of these tanks available to Second and Third Panzer Groups' panzer divisions in late August and early September:

See Table

Table 31. Pz. III and Pz. IV Tanks Available to Second and Third Panzer Groups in Late August and Early September 1941

Force	22 June	Late August and Early September		
		Operable	In Repair	Total
<b>Second Panzer Group</b>				
3rd Panzer Division	142	11	86	97
4th Panzer Division	125	35	64	99
10th Panzer Division	125	93	12	105
17th Panzer Division	136	24	62	86
18th Panzer Division	150	46	98	144
<b>Total</b>	<b>678</b>	<b>209</b>	<b>322</b>	<b>531</b>
<b>Third Panzer Group</b>				
7th Panzer Division	197	76	74	150
12th Panzer Division	139	56	28	84
19th Panzer Division	140	66	43	109
20th Panzer Division	152	63	57	120
<b>Total</b>	<b>628</b>	<b>261</b>	<b>202</b>	<b>463</b>

Source: Thomas L. Jentz, ed., *Panzertruppen: The Complete Guide to the Creation and Combat Employment of Germany's Tank Forces, 1933-1942*, Volume 1 (Atglen, PA: Schiffer Military History, 1996), 206.

Finally, although very fragmentary, the archival records of Army Group Center's panzer groups, motorized corps, and panzer and motorized divisions periodically contain information on their tank strengths, usually in terms of operational and repairable tanks, tank losses, and replacement tanks received. Table 32 includes a variety of tank strength figures for Army Group Center's subordinate panzer groups and panzer divisions during July, August, and September 1941.

**Table 32. The Tank Strength of Selected German Panzer Divisions Subordinate to Army Group Center, 22 June-10 September 1941**

Force	Period (date in parenthesis)			
	22 June	July	August	September
<b>Second Panzer Group</b>				
<b>XXIV Motorized Corps</b>				
3rd PzD	229	(26) 85 operational 63 in repair		(4) 54 operational 107 in repair (27) 45 operational
4th PzD	212	(26) 44 operational 83 in repair		(4) 83 operational 79 in repair
<b>XXXXVI Motorized Corps</b>				
10th PzD	200	(1) 152 operational (11) 147 operational (21) 81 operational, 61 tanks lost.	(1) 88 operational (11) 125 operational (21) 150 operational	(1) 143 operational (4) 153 operational 22 in repair 25 lost (since 22 June) (11) 150 operational
<b>XXXXVII Motorized Corps</b>				
17th PzD	216		(31) short "many" tanks.	(9) 45 operational 81 in repair (10) 52 operational 76 in repair
18th PzD	229	Received 20 Pz. III and 5 Pz. IV tanks	(1) 80 operational (10) 45 operational (lost 61 tanks since 1 August)	(9) 25 operational 114 in repair (15) 28 operational
<b>Third Panzer Group</b>				
<b>XXXIX Motorized Corps</b>				
7th PzD	278	(21) 118 operational, 113 in repair	(20-21) lost 80 in combat, but evacuated 40.	(6) 130 operational 87 in repair
12th PzD	232	(11) 141 operational (21) 109 operational	(1) 95 operational (11) 98 operational (21) 94 operational (26) 96 operational 35 in repair	(1) 79 operational (11) 66 operational (21) 56 operational

Force	Period (date in parenthesis)			
	22 June	July	August	September
<b>LVII Motorized Corps</b>				
19th PzD	239		(25) 102 operational 47 in repair	
20th PzD	240		(25) 88 operational 62 in repair	
<b>Total</b>	<b>2,075</b>			

**Sources:** Thomas L. Jentz, ed., *Panzertruppen: The Complete Guide to the Creation and Combat Employment of Germany's Tank Forces, 1933-1942*, Volume 1 (Atglen, PA: Schiffer Military History, 1996), 206 and 210; "Anlagen zum Kriegstagebuch Nr. 3. 3. Panzer-Divisionbefehle vom 15.9.41 bis 29.12.41," in *la 3. Panzer-Division 000285*, NAM (National Archives Microfilm), series T-315, Roll 116; "Anlageband Nr. 8 zum K.T.B. Pz. A.O.K. 2 - vom 22.V.41 bis 31.1.42," in *PzAOK 2, 734843*, NAM T-313, Roll 103; "Gefechts und Verpf. Stärken. LVII Pz. A. K.," 22.6.1941-2.1.1942," in *la LVII Pz.A.K. 666*, Nam T-314, roll 1474; and "Kriegstagebuch Nr. 3 der 7. Panzer-Division (Führungsabteilung) einsatz Sowjetrußland. 1.6.41-9.5.42," in *la 7. Panzer-Division 24797*, NAM T-315, Roll 406.

Table 32 vividly underscores the serious rate of attrition in Army Group Center's panzer forces during this three-month period in several respects. First, overall, the army group's strength in operational tanks decreased sharply from 2,075 tanks on 22 June to 746 operational tanks during the period from 25 August through 9 September, a decrease of well over 64 percent. Second, the most serious degradation in armor took place in the "sharp combat tips" of the army group, specifically, in Second Panzer Group's XXIV and XXXXVII Motorized Corps. For example, the armored strength of XXIV Motorized Corps' 3rd and 4th Panzer Divisions decreased from 441 tanks on 22 June to 129 operational tanks on 26 July and 137 tanks on 4 September, a decrease of almost 70 percent. Likewise, the spearhead division of XXIV Motorized Corps, Model's 3rd Panzer Division, decreased in strength from 229 tanks on 22 June to 85 operational on 26 July and 54 operational on 4 September, a decrease in armored strength of roughly 78 percent. Similarly, Second Panzer Group's XXXXVII Motorized Corps, which was caught up in the intense fighting west of Briansk and Trubchevsk, decreased in tank strength from 445 tanks on 22 June to 70 tanks on 4 September, a decrease of roughly 85 percent.

Although Third Panzer Group suffered far less attrition during its operations on the army group's left wing and flank, its tank strength fell from 989 tanks on 22 June to 399 tanks in late August and early September, for a decrease in strength of about 60 percent. Although Group Stumme's 19th and 20th Panzer Divisions recorded signal victories in the Velikie Luki and Toropets region in August, still, the tank strength of these divisions decreased from 479 on 22 June to 190 on 25 August, also a decrease of roughly 60 percent, their strength increased slightly by early September.

Of course, the Germans' excellent repair and reconstruction system permitted most of these divisions to remain at least marginally combat ready. For example,



XXXIX Motorized Corps' 7th Panzer Division, which counted 278 tanks on 22 June, decreased in strength to 118 operational tanks on 21 July and roughly 110 tanks on 17 August, lost about 80 tanks during the fighting along the Vop' River on 20-21 August but, nevertheless, still managed to field 130 operational tanks by 6 September.

Yet, when all was said and done, Army Group Center's panzer forces emerged from the struggle for Smolensk with roughly 40 percent of the armored force they were able to field at the beginning of Operation Barbarossa on 22 June. As a result, despite the German Army's impressive repair capability, even after its augmentation with Fourth Panzer Group, Army Group Center began Operation Typhoon, its climatic march on Moscow on 31 September and 1 October, with an armored force of roughly 1,000 tanks, less than half of the tank force it fielded at the beginning of Operation Barbarossa.<sup>11</sup> More telling still, fully half of these tanks were weak Pz. I and II models or unarmed command tanks.

### The Soldiers and their Commanders

No investigation of the prolonged struggle in the Smolensk region would be complete without some recognition of the German and Red Army soldiers who participated in the fighting and the commanders who planned, directed, and supervised them in battle. In fact, although peripheral to this study, these topics alone are worthy of separate books of their own. This is so because it was the combat performance of the soldiers of the contending sides, individually and collectively, that shaped the course and outcome of the struggle. And as this book indicates, many of these soldiers paid the ultimate price for victory or defeat.

During the summer of 1941, the German soldier, be he a grenadier, panzer trooper, panzer grenadier, sapper, scout, or simple *landser*, was a thoroughly professional soldier. Exquisitely trained, individually and as part of a company, battalion, or regiment, he was frequently a proud veteran of the wars in Poland, the Low Countries, and France. In turn, this pride in performance made him both supremely confident of German victory and generally dismissive of the fighting, if not human, qualities of his Russian foe. If he was a full-fledged Nazi, he also tended to be arrogant and more ruthless in combat than his counterpart in other national armies. Thus, in the words of one veteran, while he found war in the West or North Africa merely "sport," the war in the East was not. In fact, ideological, and often racial, rancor lent a far more brutal face to combat in the East, which gradually assumed the characteristics of a genuine cultural conflict (*Kulturkampf*).

Since most German soldiers were raised locally, from this region or that, the soldier also entered the army with strong feelings of local fealty, as a team member of a Bavarian, Swabian, Württemberger, Silesian, or another division from a specific region. This, combined with the long weeks he and his units spent at places like Höhenfels, Grafenwehr, or tens of other German training areas, accorded his unit, be it panzer, panzer-grenadier, or simple infantry, an extremely high degree of cohesion. While he fought well as a German, he also took pride fighting as a Bavarian or Swabian and as a member of this or that division and regiment. This cohesion gave his units "staying power" well beyond its numerical strength. Additionally, the long hours spent on "battle drills" allowed the soldier and his units to react rapidly to changing situations and perform efficiently in all types of combat. In short, all of these qualities gave

German regiments and battalions the ability to engage and defeat Red Army divisions and regiments.

However, all of these admirable warrior qualities of the German soldier and his unit also had a negative side. In short, the German soldier's confidence in victory, combined with a tendency to arrogance, conditioned him to under-estimate his Red Army opponent, almost congenitally. Therefore, while his attitudes and keen training prepared him to accomplish spectacular achievements of the battlefield, these same traits tended to produce fatalism and depression in defeat. Although the morale of the German soldier remained high throughout Operation Barbarossa, unquestionably, doubts began surfacing during the height of summer, when combat did not develop as anticipated at and around Smolensk. Clearly, since the seemingly endless and underdeveloped Russian terrain and harsh climate began vexing the German soldier at mid-summer, the increasing and unanticipated casualties must have also had a sobering effect on him. However, the question of precisely when soldierly morale in the German Army began to falter requires further study. Specifically, although this problem became a documented fact by December 1941, the question is, "To what degree did the intense fighting in the high summer of 1941 affect the German Army's combat performance?"

If most German soldiers in July and August 1941 were highly-trained professionals, many, if not most, of his Red Army counterparts were not. The sad fact for the Red Army and, specifically, its Western Front was that most of its trained soldiers fell victim to Army Group Center during the first two weeks of the war. Specifically, during the border battles in Belorussia, almost half a million men were rudely ripped from the Western Front's ranks. By official Russian count, this amounted to roughly 420,000 of its initial 627,000 troops, and by German count, about 600,000 men. Although casual observers of these battles are most shocked or impressed by the three Soviet armies and six mechanized corps Army Group Center's forces destroyed along this axis, it was the human cost that was most catastrophic to the Western Front. This was because most of the soldiers killed, wounded, or captured were among most professional soldiers in the prewar Red Army.

The 450,000 men assigned to the Western Front's 19th, 20th, 21st, and 22nd Armies, plus the 60,000 men of 16th Army, which greeted Army Group Center's forces when they reached and crossed the Western Dvina and Dnepr Rivers, were a mixture of trained professionals, trained or partially trained conscripts, and poorly trained recruits. Although no studies exist to document precisely how many fell into each category, it is reasonable to assume long-term professionals were in a distinct minority. The bulk of these soldiers were likely conscripts with limited service or reservists with some, but not much, individual and small-unit training. In any case, this training, whether individual or small unit, was certainly not as extensive as that experienced by the average German soldier. Given the length of service of Red Army conscripts, nor were there many soldiers with combat experience.

The situation was even worse in regard to the 200-240,000 troops assigned to 28th, 29th, and 30th Armies, as well as the estimated 230,000 replacements dispatched to the Western Front in July and August. These forces consisted largely of reservists with some individual and small-unit training and untrained conscripts with little training whatsoever. Furthermore, the divisions to which these soldiers were assigned, for