



### HISTORICAL NOTES FROM THE 3<sup>RD</sup> ED. RULES

By now, such a great deal has been written about the Second World War that it seems superfluous to add anything more. Analysis of the conflict has itself become like a game, in which people compete at citing more esoteric points in support of their positions. When all is said and done, though, it may still be worthwhile to return to the storm. The defeat of the Third Reich does bear witness to a number of causal factors, which both maintain their relevance today, in thinking about conflicts between industrialized nations, and also retain interest in themselves. While this piece can in no sense claim to be definitive, it can present some of these points in the hope that the reader will be as intrigued as writers and that what is being conveyed herein can deepen an understanding of the dynamics of the war which the **Third Reich** simulation itself seeks to convey.

**THE PREWAR SITUATION:** In considering the genesis of the war, one endlessly stumbles over the events of Munich, and Austria and the Rhineland before it. Munich was supposed to have been the last appeasement, and was supposed to have occurred because the British and French were desperately seeking the time with which to arm and meet Germany. In truth, a pattern *had* developed by 1938 - periodically Hitler would make semi-threatening noises and then military moves, simultaneously protesting his good intentions. Hitler did gain from the political use of blackmail, but this is not the whole story.

In the first place, if the military balance at the time of Munich is examined, it does not show such a preponderance of German strength as the explainers of Munich would have us believe. The French had in 1938 practically all the divisions they would have in 1939, and so did the British. Their naval superiority was even more pronounced, before the German battlecruisers joined the fleet and while the big battleships were much further from completion. In the air, it is true that the Allied air forces were inferior, but the Germans had not reached their 1939 establishment either.

Nor did the Germans have more than three panzer divisions, and even the French possessed more tanks than they. Considering that many of these weapons were as yet untried, Allied thinking ought to be questioned more closely.

The point that should be made was that there were independent political reasons for Munich and for other German successes. The most important of these is that German claims in Europe were to a great extent legitimate. The Rhineland, Austria, the Sudetenland, and for that matter, the Polish Corridor (with Silesia) were undoubtedly German territory. Germany's national aims could be seen quite logically in her attempts to establish the national territory as it had existed before Versailles. For the British and French, going to war on such a pretext must have seemed politically naïve.

Nevertheless, it is also true that the repetition of such German actions brought Allied determination to fight. It is significant though that not until after the remainder of Czechoslovakia was occupied and turned into a German preserve, in March 1939 did the Allied nations demonstrate their determinations through the guarantees to Poland and Rumania. What may have in fact been most important were the *means* Hitler used, and not the ends he sought. In each case, the German leader resorted to military action, and not as a last resort, but in the immediate instance. This procedure of going to the brink each time must have gone a long way toward convincing the Allies that war was inevitable and steeling them for the conflict. Then again, the German move against the remainder of Czechoslovakia served notice that Hitler had no longer intended to confine himself to the purely national claims of his country. The idea of a German will to power was compelling and faced the West with a dilemma between the undesirability of war and its necessity.

The Germans had been afraid of war at the time of Czechoslovakia. Beck, at the General Staff level, argued against it. The Case Green plan (Czechoslovakia) recognized that 25 divisions would be tied down against Prague with its modern army, leaving the West with a great superiority in strength. Munich ended as a triumph for Hitler in his struggle with the generals, and the next year, the West Wall was given first priority in materials and effort, providing a modicum of security along the Rhine. But when the panzers rolled into Poland, Hitler did not see the West back off, and event to which he had become accustomed.

**THE WAR OF INDUSTRY:** One question that comes back when considering 1939 is why the war occurred at all that year. Germany was not prepared, her armaments minister said and rightly. The British were producing more aircraft than the Germans (though their units, like Bomber Command, were so far under establishment that they could not catch up). The French had more tanks. The Americans were likely to sell to the British and French, but not to Hitler. Mussolini made attempts at the last moment to remind Hitler of their agreement that the war must not be allowed to occur before 1942 (the Italians considered that there was an 80% chance of victory in 1942, but only a 60% chance in 1939), but Hitler would not budge, it was his unalterable intention to deal with the Polish question.

Having started from behind, the Germans made huge efforts to catch up. But their efforts were to no avail. The organization of the Fascist economy, essentially run on the principle of limited competition, introduced inefficiencies which would eventually destroy the Third Reich. Materials were wasted. The situation was compounded by Hitler's attempts to procure guns and butter simultaneously, in search of political popularity within Germany. Thus, in 1940 he backed off after issuing orders for 1,000 units per month construction of tanks. For the whole war, tank production averaged out at 620 a month, but most of this was achieved only after Germany had visibly lost. In the strictest sense, if the Wehrmacht could not win with its inventory on hand in 1939, it would

not win, and Hitler seems to have recognized this with his constant insistence that conditions would not again be so favorable for Germany.

**THE PERIOD OF GERMAN SUCCESS:** Germany's victories were mostly won in the first three years of the war. Afterwards, while there were still tactical successes, mostly in defensive battles, the Germans had little chance of winning the war. Historically, World War II has been known as the ultimate war of attrition, and it is commonly recognized that the enormous preponderance of military equipment possessed by the Allies submerged Germany. The interesting point, however, is that the factors of more numerous productions are precisely those which *cannot* be used to explain Germany's period of successes.

Germany was inferior in tanks to the French and in planes to the Anglo-French air forces, but France was overrun in six weeks. Germany was far inferior in naval strength to the British, yet she was able to pull off the amphibious invasion of Norway against the main strength of the British fleet. In North Africa, the Afrika Korps never achieved quantitative superiority over the 8th Army in any category, but Rommel launched successful offenses and defeated most of the British ones up until Alamein. If German success can't be explained by things like better tactics, morale, and generals, then there is *no* way to explain the war from 1939 to 1942.

On balance, one must conclude that the Wehrmacht's victories can be attributed to three main elements. The first was a lead in the development of tactics in the period immediately preceding the war, combined with practical experience gained by the Wehrmacht in Austria and Czechoslovakia, something which none of the Allies possessed. Uniformly in the early battles, even when caught at a disadvantage, (as by the British at Arras in May 1940) the German troops were able to react with such rapidity as to cancel advantages their enemy might possess in numbers or equipment. A second element in the German successes was superior staff work, which enabled the Germans to make the best possible use of the resources they did have. Time and again in the war and even after the German ascendancy was ended, staff work allowed the Germans to take their enemies by surprise, as at the Bulge. The third element in Wehrmacht achievements, which is related to the second to some extent, is the unitary nature of high command, responding to the wishes of Hitler. Because the high command responded to one man it was more difficult for the Allies, who utilized what amounted to a committee approach, to anticipate his actions. In addition, the German leader was, and remained, more disposed to take incredible risks in his operations than the Allies, a fact which gave him considerable advantages. The West Wall garrison during the entire *Barbarossa* undertaking represented such risks as would be incomprehensible to the Allies.

By contrast, Allied, and especially American, high command was equally incredibly conservative. Every Allied offensive operation, with the single exception of *Torch*, was characterized by overkill in conception and execution. Mountbatten, for example, was sent to Washington in early 1942 when thought was first being given to the invasion of France, to convince the Americans that the 28 German divisions then in that country was capable of defeating any invasion the Allies could mount. When risks were taken, as in Anzio-Nettuno, and operations undertaken which failed to reach their objectives by narrow margins, the Allied high commands were as likely as not to conclude that failure was the result of major faults in conception and strategy. Thus, after Anzio, the Combined Chiefs of Staff (CCS) determined that no further coastal flanking invasions would be carried out to support ground campaigns. Later, in France, such operations would have been of tremendous value but they were not considered. Even the organization of combat units, with their large ration of support to combat troops (indeed, the average US division could put only as many combat troops in the field for its 50,000-man division slice as in Vietnam much later), showed this trend to conservatism. Americans complained endlessly of the reconstituted French

army, which had a support to combat ratio higher than the German but too low for the Americans. So, the Allies waited years for their counteroffensive to regain the continent, occupying themselves with operations in the Mediterranean that were only marginally useful. When the invasion actually came, it could be seen that they waited too long – the Atlantic Wall was an egg broken by a sledgehammer. In this context, many of the complaints Stalin was making about the Anglo-American delay in instituting the second front were quite valid. Unlike the Germans, the Allies never tried to run their operations on a shoestring, capitalizing on the skill of their men (except perhaps in the Pacific, which was another case altogether).

**THE HIGH COMMAND:** From the reams of commentary which have issued forth on Hitler the war leader, there are some points which must be made. Hitler's great strengths were that he was a shrewd judge of men and an intelligent military technician. He was able to choose excellent field commanders and staff officers and to recognize good plans when he saw them. In this manner, he was able to pick up von Manstein's plan for France against OKH opposition. Similarly, he could often catch his officers in their omissions, as when Hitler himself discovered the Armaments Ministry failure to carry out his order to re-equip the PzKw-III tank with the long 50mm gun. Hitler's great decisions, in the 1938 war threats, the 1939-1940 invasions, and the 1941 refusal to withdraw before Moscow, were rooted in these strengths.

But Hitler's strengths amounted to shrewd leadership rather than military ability. Militarily, and these points can be made quite independently of the criticisms which the German generals leveled at him after the war was over and the man was dead, Hitler's ability can be questioned on a number of levels. Strategically, Hitler evinced several counterproductive fixations. First and ultimately most important was that on economics. Time and again through the war, Hitler insisted upon operations to capture important raw materials sources. Later in the defensive period of the war, he continuously insisted upon the diversion of scarce military resources to defend various sources, from nickel mines to oil heads. While on one level quite right, Hitler failed to make any connection between *sources* of raw materials and finished products proceeding into his armies' inventories. Thus, Hitler would insist upon the defense of Finnish nickel mines, for example, at which no workers were available to extract nickel. These operations merely used up military resources to defend positions from which Germany had derived no benefit.

Take the Ukraine. As early as *Mein Kampf*, Hitler had shown a preoccupation with German expansion into the Ukraine, claiming that domination of that area would have prevented German starvation in 1914-1918. In 1941, Hitler forced a major ground campaign in the Ukraine, and lost the big chance at Moscow. The following year it was the Ukraine again – Stalingrad and the Caucasus. In 1943, just when the Germans had succeeded in recovering some of their strength after the winter debacle, Hitler insisted on the Kursk offensive. In 1944, he similarly insisted upon the detachment of an entire army, plus further Rumanian forces, to defend the Crimea, signing a death sentence for these troops at a time when his front-line formations were critically short of strength. Hitler's strategy in Russia showed a clear Ukrainian fixation. What is true is that concern with the Ukraine tended to blur the lines of German ground force strategy in Russia.

Another Hitler miscalculation was that of the anti-comintern – the life and death struggle upon which he insisted between Fascism and Communism. For, if Hitler was pledged to a war against Stalin, and the German policy of expansion into the Balkans and Southeast Europe unavoidably brought the opposition of the Anglo-French powers, then there was no way for Germany to avoid a two-front war. As far back as 1924, again with *Mein Kampf*, Hitler himself had condemned Germany's leaders of 1914-1918 for the two-front war, claiming it inevitably brought defeat. Granted that Hitler hedged the Russian problem with his pact with Stalin in August 1939, both parties to that pact still knew that its effect could only be temporary (indeed, Germany lost much

face with Italy for making the deal against the anti-comintern interests), and the resulting German failure to convert the Soviets into full Allies weighed heavily in the scales of the eventual outcome of the war.

In addition to his strategic errors, Hitler was guilty of a second range of organizational mistakes that should have never been made given his own leadership talents. The most important of these was the logical consequence of Hitler's own methods and had been an advantage in the early years of the war. This might be called the Intuitive Method. By means of centralizing control of all military and other resources of the German state in his own person, Hitler was able to determine Wehrmacht operations himself at the highest levels. This was accomplished by means of restricting the scope of the army high command, OKH, and establishing his own armed forces high command, OKW, for control of theaters other than Russia. In the early days, this had been an advantage because information about upcoming operations had not easily leaked, and in addition, Hitler had made it extremely difficult for the Allies to anticipate his own moves.

The institution of the Fuehrer Directive increasingly lost value after 1942, however. Its inherent weaknesses were two, both of which were masked during the early period of German victory. First, when a directive was issued upon a specific subject it must necessarily continue in effect until Hitler's attention could again be brought to that subject. This meant that the original intuitive strategy for an area remained no matter how far outrun by events it had been. As the war continued, the sheer overload of one event coming on top of another swamped Hitler's OKW command system. Second, the Fuehrer Directive system failed to provide any mechanism for continuing review of strategy and systematic future planning. Among other things, this meant that there was no coherent body of written ideas on strategy that could be used as the base for forming interallied policy with the Italians, something the Allies consciously aimed for with their own command system.

The Fuehrer Directive system therefore broke down, with the intuitive approach, after Germany no longer had the initiative and could not dominate events. The whole tenor of the directives changed after 1942. They became general documents trying to establish systems of defensive tactics rather than orders naming priorities for objectives. Hitler finally stopped assigning numbers to these documents. The Kursk offensive of 1943, along with that of the Bulge in 1944 and the Budapest offensive of 1945 were all undertaken without any Fuehrer Directive at all. The fundamental problem was that Hitler's intuitive approach failed to leave him with any method of understanding how to react when he was on the receiving end of an opponent's offensive scenario. In the period of defeat, Hitler kept waiting for the Anglo-American-Soviet alliance to break up as a result of the conflicts of interests among its participants. He made attempts, as with the Bulge offensive, to hasten that process by German moves, and to the end he failed to understand why the demise of the alliance had failed to take place. Of course, Hitler was not far wrong – inter-allied differences, especially over postwar Eastern Europe, threatened the alliance increasingly by late 1944 and early 1945, but the mistakes already made by Germany meant that the Germans would not be around when the Allies' divorce finally came.

Then again, the Fuehrer was guilty of gross political miscalculations in his conduct of the war. It was commonly assumed that German industrial potential was inferior to that of the Allies, and indeed, one of the reasons for Allied strategic conservatism discussed above was precisely the understanding that they could win simply by sitting back until they had accumulated enough strength to shatter the Wehrmacht. Similarly, German manpower resources were also inferior, both against the Anglo-Americans and the Soviets alone. Given these facts, the only way for the Germans to have won the war was the creation of a broad front of political cooperation among the European have-nots and Germany against the Great Powers. This Hitler failed to do – he

refused cooperation with the various nationalisms, Ukrainian nationalism most importantly, with disastrous consequences. While he managed to raise four Croatian divisions, along with two Slovak and a Spanish and assorted battalions of Indians, Danes, Dutch, and French, there was never an attempt to cooperate with the nationalist groups until the Vlasov Army of disaffected Russians was formed, and that was not until 1945.

Similarly, the Hitler political method of inflicting military punishments for alleged slights was counterproductive and eliminated the desires of foreign nationalists to cooperate with Germany. The bombing of Rotterdam, and the handling of Czechoslovakia in 1938 and Rumania in 1940 clearly showed German intentions of subjugation to the small countries which were subjected to these demonstrations. This went on with the Vichy France operation in 1942 and that in Italy the following year, not to mention the German coup in Hungary in August 1944. Ultimately, the sequence never ended – Hitler's insistence on the Lake Balaton-Budapest offensive in early 1945, using up the last remaining German offensive potential. Was a last attempt to break the Balkans, retake some of the oil he had lost, and punish his perfidious Hungarian allies. Small wonder that the 60-odd divisions contributed to the German war effort by the minor allies never had much military potential.

**Table 1**  
**German Output of Selected Weapons with Comparisons**  
**1940-1944**

Year	Artillery	Armor	Other AFV	Aircraft
1940	6,300	1,600	500	10,200
1941	7,800	3,800	1,300	11,000
1942	13,600	6,300	3,100	14,200
1943	38,000	12,100	7,800	25,200
1944	62,300	19,000	9,900	39,600
<b>TOTALS</b>	128,000	42,800	22,600	100,200
UK	38,400	26,900	82,600	111,400
US	315,000	87,000	N/A	296,600
SU	370,000	86,000	15,000	120,000

**NOTES:**

- 1) Artillery figures refer to guns of 75mm caliber or better.
- 2) German and British aircraft production figures include combat types only. America and Soviet figures are crude, and include other aircraft types as well.
- 3) The German category of Other AFV includes principally armored cars and assault guns.

Finally, Hitler himself was also guilty of major operational errors which robbed Germany of needed victories, even assuming the strategies he chose intuitively were good ones. First there was the order to halt the panzers before Dunkirk in 1940, which has an adequate military explanation if considered in isolation, but looms more ominous when seen in conjunction with his other moves. Second was the lack of reality attaching itself to Hitler's plans to knock the British out of the war, and his failure to assign adequate forces to the Mediterranean to achieve this objective in 1940-41 when it was possible. Third was his wavering before Moscow in 1941, when he insisted on going for Kiev and wasted precious time. Fourth were his ridiculous ideas about the use of heavy tanks in the Silver Fox operation designed to capture Archangel in 1941. Fifth was his decision to attack on the wrong front in 1941 – the Ukraine – when his armies were poised a bare couple of hundred miles from Moscow again. Sixth was his poor handling of Fourth Panzer Army in the 1942 offensive – sending it south to help Kleist force the Mius where it was of no use and then back north to Stalingrad where it arrived too late. – an error on a par with Napoleon's handling of Ney and D'Erlon's 1 Corps in the Ligny-Quatre Bras action of the Waterloo campaign. Seventh was Hitler's lack of any conception of the real capabilities of the forces he commanded, the sheer

ridiculousness, for example, of the Archangel-Vologda-Astrakan objective line he assigned to the Russian offensive in the *Barbarossa* directive. Eighth and last was Hitler's refusal to fight a rational defensive campaign after the defeat of his forces had become apparent in 1942. This last error typifies the result of the intuitive strategy and is worth further comment.

**FRITTERING AWAY THE ARMY:** With the re-establishment of stasis on the Russian Front after Stalingrad and the Manstein 'miracle', Hitler recalled Guderian as inspector general of armored troops. The latter officer prepared plans to reconstruct the strength of the Wehrmacht mobile forces and to this end advocate a defensive strategy until such time, 1944 as he saw it, when the strength of the forces would be rebuilt and offensives could be resumed once again. In the end, Hitler insisted upon renewed attacks, and whatever armored formations had been reconstituted were committed to the great Kursk offensive of 1943. The 1,900 tanks there were largely destroyed, and Soviet offensives which followed closely on the German failure continued almost without interruption until January 1945.

By August 1944 the Soviets had reached the line of the Vistula, and by this time the Anglo-Americans had landed in and broken out of Normandy. Hitler had insisted upon an attack on the Americans with the forces of Panzer Group West, and these were caught in a massive pocket at Falaise losing their equipment and many troops. His combination of tactics, no withdrawals and constant counterattacks, along with the 'wave-front' idea of fortress defense in the east, meant the constant marooning of scarce troops and equipment in positions from which they could not escape. No matter how many enemy forces were tied down in these encirclement battles, and the enemy could frequently use second line forces while the Germans had to use good formations, the forces committed were totally lost to the Germans. Thus, by September 1944, First Army, defending an 87-mile front before Metz, possessed a total equipment of 112 guns, 116 heavy anti-tank guns, and 52 tanks; less than a corps. LXXXVII Corps, holding Aachen, had only 33 guns, 20 anti-tank guns, and 21 tanks. In fact, in that month the total strength of 30 infantry and 17 panzer or motorized divisions manning the Western Front amounted to only 1,800 guns, 800 armored vehicles, and 93,000 infantry.

The OKW method turned out to be one of ruthlessly depriving line units of replacements in order to build up reserve units to full strength. While this method reduced the Germans' ability to defend their fronts, they were provided with a breathing space as the Anglo-American and Soviet forces finally outran their supply systems and were forced to halt. The result was that in late 1944, for the first time since Kursk, the Germans were able to build up an offensive striking potential of full-strength armored units, 12 of which were re-equipped by 20 November, and four more by 10 December. In the end, however, most were thrown into the Bulge offensive, and additional five panzer and a parachute formation into the Colmar offensive, and the other available units into three offensives on the Eastern Front, two of which had Budapest as their objective. Whatever strength had been created was decimated, Panzer Lehr division, for example, limping back to the West Wall on 10 January 1945 with six assault guns, ten tanks, and a total of 400 troops. In fact, when the Soviet attack across the Oder against Berlin began, the entire Eastern Front (with 103 infantry and 37 panzer or mobile divisions) had some 750 guns and 600 anti-aircraft guns. The heaviest panzer formation had only 79 tanks.

Thus, German defensive efforts were always hampered by the aims of Hitler's high command, which worked at cross-purposes with the field commanders. The few decisions correctly made in time were prevented in their implementation by communication and coordination problems. Hitler himself played an obstructionist role. He intervened repeatedly on the tactical level, as with his wave-front theory of defense and in his obstruction of the different fortification plans, often with disastrous results. The repeated offensives he called in Hungary in 1945 bespoke lack of



economic understanding at least equal to that which he accused his generals – concentration on Hungary meant acquiescence in the loss of Silesia and the remaining German industrial base. The end of production left no tanks or planes to be fueled even if the oil at Budapest had been recaptured, and no transport system to move anything that could be extracted from the Hungarian capitol.

Hitler made great attempts later in the war to heighten the morale of his generals by speaking of his wonder weapons that would change the course of the war. There were the jet fighters, including the He-162 that could be mass produced without many strategic materials, and the V-weapons that could carry the war to the enemy. There were the Walthers U-Boats, using a revolutionary new system that enabled them to travel faster submerged than many of the Allied escorts on the surface combined with revolutionary new torpedoes that could be set to home in on different types of ships like destroyers. Perhaps most importantly the Germans were close to some type of a super bomb, for which confirmation has been had from three different sources, and at least one of which was exploded in a test on the Baltic coast witnessed by an Italian reporter. The bomb destroyed an area of three miles radius, burning all the trees to stumps, but it acted more like some behemoth incendiary than like an atomic bomb.

**Table 2**  
**Wehrmacht Strength and Deployments**  
**1939-1945**  
**(in divisions)**

Date	West	Med	East	Total
Sept 1939	23		44	67
June 1940	96		8(?)	104(+)
June 1941	47	7	154	208
June 1942	42	8	172	222
July 1943	61	22	194	277
Sept 1943	55	41	175	271
Jan 1944	69	48	179	296
June 1944	69	52	164	285
Feb 1945	77	33	140	250

**NOTES:**

- 1) East refers to Russia, Finland, Poland, and the Baltic States. Med refers to Italy, North Africa, and the Balkans. West refers to France, the Low Countries, Norway, and Denmark.
- 2) The information presented in this table was developed from a number of sources, the most useful of which was perhaps Albert Seaton's *The Russo-German War 1941-1945*.

One question on the Third Reich is what effect these new weapons would have had on the war, and although it is possible to argue the question, my own opinion is that the super weapons came too late for Germany. First, they came at a time when it was no longer possible to build enough of them. Second, by 1944 the Germans no longer had the trained and skilled manpower to operate them effectively, which was unfortunate considering that but for Hitler's own decisions it might have been possible to deploy jet fighters as early as 1942. Third, though the new weapons provided means of wreaking large destruction on Europe, they did not provide any means for the Germans to regain lost territory. Blowing up London or Antwerp or Warsaw made little difference to the war situation with the Russians less than a hundred miles from Berlin and the Western Allies on the Rhine. What was needed in 1945 was more conventional armaments, which Hitler threw away in his 1944-45 counter-offensives. The best the new weapons might have managed was a return to the sort of stasis that had existed before Kursk, but even that would have been only temporary. After all, what would have happened once the Americans had dropped atom bombs on Berlin, given Hitler's centralized control over the Wehrmacht?



**COMBAT ORGANIZATION:** One of the most interesting things about World War II is the ability of the Germans to hold out so long and to do so much in spite of all the disadvantages they labored under. Aside from their early superiority in tactics, which the Allies later matched, the single most valuable asset of the Germans appears to have been their organizational ability. When the Germans attacked, in Poland, France, and Russia, their enemies' forces lost cohesion, disintegrated, and became worthless. Even in the last days of the French campaign, for example, the French were *still* superior to the Wehrmacht, in numbers and quality of tanks. The reverse did not happen, however. In the period of Allied superiority, the German units held together time and again when by all measures they should have long since collapsed.

The most obvious example, of course, is the Russian Front. After Stalingrad was encircled, a hole of some hundreds of miles had been knocked through the German front. There were no organized German forces to prevent Soviet mobile troops from pressing on to the west as far as they wanted to go. Nevertheless, the Soviets were stopped; by a handful of under strength divisions, one full strength one, and a number of scratch forces which assembled around leaders of ability who insisted on continuing the fight. These scratch units were vital to the war effort, assembling out of remnants and rear-echelon forces and often reaching division or even corps strength. Similarly, the cadre of divisions continued to fight. Common Western practice has it that a unit becomes worthless at a point where it has lost 40% of its effective strength. But German divisions, with an establishment of 12,000 would go on fighting with 2,000 troops and less. When Panzer Lehr got back to the West Wall after the Bulge it had only 400 men but it was still a division.

German command practice capitalized on this ability of their formations. Divisions would be left in the line until they had been bled white, and then the entire division would be pulled back to Germany for reconstitution. The advantage was that the survivors would constitute a cadre who had been through everything that could be thrown at them – they enabled new recruits to participate in the formation's traditions and to be broken in by a set of veterans who were real hard core. Consequently, the German formations maintained their cohesion through long years of defeat and poor equipment right up until February 1945, when desertions finally rose from their formerly inconsequential level to a torrent. By contrast, the Allied practice of funneling replacements through centers up to the line units resulted in practically complete turnover in the personnel of divisions, and inferior method.

**AIRPOWER:** The really distinctive development of World War II has got to be airpower. Luftwaffe strikes played vital roles in paralyzing enemy maneuver capabilities during the early invasions. Later, with the shoe on the other foot, German panzer reinforcements arrived at Normandy only after taking devastating losses to Allied air. Strategic bombing was important during the war, but the dominant effect of airpower was on targets of intermediate category in relation to ground operations. Destruction of the French rail net, for example, was important in delaying German reinforcement of Normandy.

At the strictly tactical level, the Luftwaffe showed the way in the early days and the Allies themselves followed. With growing strength of the Allied air forces and the failing ability of the Luftwaffe (along with its diversion to home defense), the field was left to the Allied forces. This was especially important for the British battle for Caen, which might have taken much longer without naval and air support given the heavy concentration of panzer forces against Montgomery's front. However, it is difficult to find instances in which tactical air intervention proved decisive in ground combat situations. Individually speaking, we can see many such instances in small-unit actions, but there are few occasions in which application of such means can clearly be said to have made *the* difference in actions of divisional or larger formations.

Perhaps in reaction to this the Allies began to evolve new means of using air forces to support ground units. The most important new method was the use of heavy bombers to carpet bomb segments of German defenses as part of the preparation for Allied attacks. This method was the direct forerunner of the use of B-52 bombers in the ARC LIGHT strikes in Viet Nam, and like them the older heavy bombers seemed to have had mixed success. Some officers, notably Eisenhower, Bradley, and Montgomery, were convinced of the tremendous effectiveness of this weapon. Yet the occasions on which it was used, at Monte Cassino, Caen, the Cotentin Peninsula, and in the Arnhem offensive, were almost uniformly failures as ground attacks. On the other hand, teams covering the ground struck by the bombers frequently found that the planes had in fact caused great disruption of the German defenses. What can be said with some assurance is that carpet bombing techniques were too primitive to ensure ground success. For instance, at Caen the bombers did take out the German defenses but the destruction they caused was such as to prevent the British armored columns from maneuvering over the ground struck by the planes. Consequently, by the time the tanks had gotten over the cratered ground, a new German defensive crust, manned by the types of scratch battlegroups we discussed above, had already appeared to bar their way.

The major capability provided by airpower was the great flexibility it provided to the ground forces. Air supply gave new length to the supply lines of divisions, as the German forces discovered in Russia and the Allies in France (1944). Airborne firepower could be concentrated at widely separated points and suddenly appear to aid the attack of a ground formation which by itself did not appear to have sufficient power for an attack. Surprise thus achieved did much to throw enemy command elements off balance.

Consequently, tactical and intermediate airpower played a vital role in the course of the battles that brought down the Third Reich. And at the same time, the strategic bombing forces, by forcing the withdrawal of the Luftwaffe to the homeland, ensured that all the benefits of airpower would accrue to the Allies and not the Germans. And with their production and training decisions, the Germans themselves went some distance toward aiding this Allied objective.

**Table 3**  
**Luftwaffe Strength and Deployments of Aircraft**

Date	9/39	5/40	7/40	7/41	6/42	12/42	6/43	5/44	7/44	1/45
1st line a/c	3750	4500	4500	4800	4300	4000	6000	5600	5600	NA
West	1000	3530	2600	1500	800	800	800	500	640	1900
Reich Def.	1100	NA	NA	NA	NA	1045	1500	2400	1820	1500
Anti-Shpg	80	190	155	150	NA	130	200	190	190	119
Far North	-	100	130	150	200	210	NA	105	30	NA
East (total)	1580	600	1600	2770	2750	2000	2500	2085	1800	2000
AG North	NA	NA	NA	500	375	270	NA	360	400	245
AG Center	NA	NA	NA	1500	600	480	1000	775	1160	1060
AG South	NA	NA	NA	770	1800	1250	NA	950	250	670
Mediterr.				390	425	800	1020	300	300	NA

**NOTES:**

- 1) Some discrepancies in the figures have been produced by differences in Luftwaffe returns and inconsistencies in the RAF study, *The Rise and Fall of the Luftwaffe*, from which most of the figures were taken.
- 2) It should be noted that most of the increases in Luftwaffe inventory after the beginning of 1943 are almost totally caused by the growth of the single-engine fighter and night fighter arms.

**THE RUSSIAN FRONT:** In the long view, it is impossible to overemphasize the importance of the Russian Front in World War II. Some idea of the ferocity of the fighting there may be gained from

the sheer total of 21,000,000 casualties suffered by the Soviets. In fact, the Russian Front was responsible in large part for the defeat of Germany. At the very beginning, Russia helped to save England from a German invasion, even given the unreality of German plans for Sea Lion. For the next four years Russia consumed the major part of German forces and destroyed the best part of the Wehrmacht's elite units.

It was in Russia that the weaknesses of the Wehrmacht were first revealed to their opponents. Before then these had been masked by the continuous stream of German successes. The inadequacy of German strength, obsolescence of much equipment, and low cross-country ability of mobile forces became strikingly apparent when the Wehrmacht matched itself up against this country. Actually, these might have remained hidden somewhat longer had the Germans chosen realistic objectives in that country, but uniformly the OKW proved unable to define just what constituted German objectives in that eastern nation.

One point that is worth making about Russia is that strictly speaking, Germany was not defeated by the two-front war. Russia was not invaded until after the Western Front had been liquidated by the fall of France. Afterwards the Wehrmacht did not face a major Allied ground threat, other than Russian, until the start of the Italian campaign, more than two years later, but even Italy was stabilized with the commitment of relatively small German forces. In September, 1943 the West and the Mediterranean together held down only 35% of the available German divisions. This climbed to 39.5% by January 1944, and to 42% at the time of the Normandy invasion. But many of these units were second line formations (ranging, in the parlance of the Wehrmacht mobilization bureaus, down to formations of the 'sixth wave'), and thus represented somewhat less of the total German resources than their percentage might indicate.

The 'real' second front occurred with the invasion of Normandy. It was then that the Western Allies drew off considerable German strength from Russia. The absence of armored formations, particularly the II SS Panzer Corps, which the Germans had been holding in reserve behind their front, played an important role in the success of the Soviet offensives aimed at Army Group Center and Army Group South. But the important fact is that the turn in German fortunes occurred at Stalingrad, twenty months earlier. The new trend was confirmed at Kursk, eleven months earlier. Germany was on the run before any second front existed, even that in Italy. The Western Allies made a difference in terms of increasing German problems, and thus reduced the length of the war. But by themselves, the Soviets still would have won. While it is true that the Germans lost 400,000 men in France during the latter half of 1944, they had lost more than twice that in their initial, largely successful, *Barbarossa* offensive of 1941, and their losses had continued at an accelerating rate.

So, the Wehrmacht perished on the Russian steppes. Much of the fault for this, or at least for the operational mistakes which led to later defeats must be laid squarely at the door of the General Staff, the OKH, which prepared the plans for *Barbarossa*. Halder's diaries, for example, are replete with references to the Soviet forces which indicate the extent to which he downgraded their ability. OKH planning underestimated the strength of the Soviet forces. In fact, while planning was still going on the force estimates were increased by 30%, but this led to no corresponding increase of the German forces allotted to the offensive. Planning assumed the German forces could reach the vast, although undefined objectives which Hitler had assigned, in the course of a single campaign, which would have been difficult even if the Germans had had no Soviet resistance whatsoever with which to contend.

Perhaps the worst mistake was the Germans' failure to make adequate logistics plans. The armies which entered Russia had only a week's worth of reserve supplies, calculated at the textbook rate

which turned out to be far short of actual consumption. The divisions were assumed to be well-equipped for a campaign of fifteen weeks' duration and then this fact was ignored when successive decisions were taken which inevitably lengthened the campaign. As early as July supplies had already been moved to the forward spearheads by means of aerial drops. In Guderian's panzer group, which had a high supply priority, divisions were limited to defending only their most important positions for lack of ammunition. By August 1941 the panzer formations, which had started out with 3,500 tanks, were 40-60% understrength, but it was only at that time that the first tank replacements were granted, a mere 85 tanks of which only 15 were of the PzKw-IV class which were able to stand against all then-current Soviet AFV.

Inevitably the strength of German formations declined precipitously. By the end of 1941 the average division had fallen to the strength of a regiment before the invasion. Due to their low production, the Germans were never able to make up their losses. Some of these Wehrmacht problems might have been mitigated, at least to some extent. In the 1941 campaign alone, for example, the Germans captured several thousands of Soviet tanks. And not all of these were obsolescent ones – there were 1,475 Soviet tanks of the KV and T-34 varieties in the frontier military districts on 22 June 1941. But the Germans, so noted for their organizational abilities, had developed no organization to classify, repair, and make use of captured military equipment. In comments of the fighting of 1944, Mellinthin has remarked that his XLVIII<sup>th</sup> Panzer Corps alone captured hundreds of Soviet anti-tank guns, a category in which the Wehrmacht was critically short and which were easily convertible to German ammunition. Similarly, the Germans neglected to make use of intelligent military organizations developed by their enemies. It is Mellinthin again who complained, in one example, of the Wehrmacht refusal to create anti-tank divisions which could be committed to threatened sectors of the front. The effect of similar Soviet anti-tank units on the Kursk offensive gives some idea of what such forces might have accomplished, especially given the lesser tactical ability of the Soviet tank formations of 1943-1944. Again, looking at the Soviet success with the use of artillery divisions to enhance the firepower of sectors on which offensives were planned, the Germans neglected, except for a short period during 1943, to make use of equivalent units. It is true they formed some artillery 'corps' in 1944, but these were in no way comparable, being merely battalions with fancy titles.

The Soviet Union did not win because the Wehrmacht failed to achieve victory. Rather the Soviets won on their own ability and efforts, and, it can be argued, in spite of the 'second front' not because of it. In 1941, the Soviets forestalled German victory with hopelessly outmoded military forces. They managed to increase their armaments productions even though the Germans had captured vital Soviet production centers, a trend which continued throughout the war and which was made possible through their concentration on the production of only a handful of different types of equipment. By contrast Germany produced what often amounted to a bewildering array of weapons and consequently a lot fewer of them. Soviet armor production in 1944, 22,000 units, totaled half of Germany's tank production for the entire war. In 1942 the Soviets achieved strategic parity with Germany before the advent of the second front. The following year, again before any second front, they managed to soak up the entire Wehrmacht offensive at Kursk. And before the landings at Normandy they had already recaptured most of European Russia.

No simple set of historical notes can hope to deal adequately with the full panorama of events which constitute the Second World War. This piece has not even attempted to do so. I have instead chosen to discuss a set of points which are of interest to me in thinking about the war, hoping that they will be of interest to readers as well. The basic idea is that these notes should be seen as a part of a totality – one which includes the designer's comments, the strategy suggestions and the **Third Reich** simulation itself.

– *John Prados*