

# ***BATTLEBOOK***

UNITED STATES ARMY, EUROPE  
(USAREUR)  
COMMAND SERGEANT MAJOR'S  
NCO STAFF RIDE  
2014

## ***The Siegfried Line***

USAREUR  
MILITARY HISTORY OFFICE  
- ANALYZE THE PAST  
- CONNECT THE PRESENT  
- INFORM THE FUTURE

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## ***A Time for Healing***

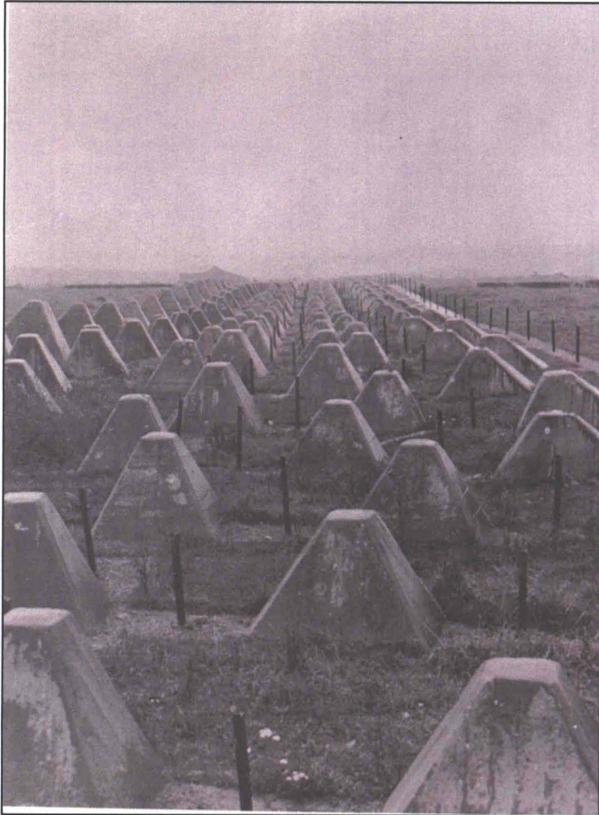
*by*

**Robert M. Nisley**

***"In November 1944, the US 28th Infantry Division and German 89th Division halted their savage and costly Huertgen Forest fighting in the Kall Gorge in a humanitarian truce to treat and evacuate their casualties."***

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*The West Wall - 1944*



*The West Wall - 2000*

# CSM's Welcome

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## Welcome to United States Army Europe's "Siegfried Line" Staff Ride.

This Staff Ride follows the First U.S. Army as it fought during the fall of 1944 – first into the West Wall and Aachen, and then into the Hürtgen Forest. The challenges faced by those Soldiers and leaders provide us a starting point for our discussions. I look forward to your observations and insights as we walk the battlefields of yesterday and make connections with the battles we fight today.

### Background

After the D-Day landings and breaking out of the hedgerows of Normandy, the Allied Armies raced across France. By August 1944, the Wehrmacht (German Army) had been pushed back to the German frontier. Many Allied senior leaders and soldiers felt that collapse of the German Army in the West was at hand. The question no longer seemed to be "...who would win [the war] , but how [quickly] the Allies might wrap up the victory."



Then the Soldiers of U.S. 12<sup>th</sup> Army Group outran their supplies, slamming into the "Siegfried Line" along the German border without the fuel, food or ammunition to carry the attack forward. This created an operational pause that provided an opportunity to refit and regroup while other Allied armies tried to close up to the German frontier on each flank. Across much of the Western Front, Allied offensive action simply came to a halt.

Flushed with success from the stunning victories in Normandy in July and the August race across France and Belgium in pursuit of the retreating German Army, this pause seemed a minor hindrance on the way to ultimate victory.

But the German Army was a long way from surrender or collapse and the terrain upon which these armies would conduct a desperate battle of attrition over the coming three months – The Hürtgen Forest – became a synonym for brutal battle, a 'muddy boot' soldier's fight.

Looking through the lens of history, we see the problems and questions faced by Soldier and leaders on the ground as they began the push into Germany:

- What was the best way in?
- How could the Allies maintain the initiative and continue their momentum?
- How did the Allied generals 'read' the tactical and operational situation?
- The Allied (and German) Operational Objectives were clear, but what were the best tactics to secure them?
- How were the tactical and operational opportunities constrained by logistic realities?
- When the first attempt to simply 'bull' through failed, how did leaders - at all levels - adjust?
- Did leaders make best use of the strengths of their men and equipment?

These were some of the questions of the moment in September-November 1944; they bear a striking resemblance to questions faced by leaders today. This is where we begin as we walk the battlefields of the Siegfried Line Campaign.

### **The Staff Ride.**

Staff Rides have been a form of military training for over a century; they are professional battlefield studies and learning opportunities that suggest some fundamental premises:

- We want to get the history right, but it is only useful as a vehicle that demonstrates practical lessons and moves us to a discussion of current concerns that help us shape our present understanding and future capabilities as Army leaders.
- Staff Rides consist of preliminary study, a nightly 'seminar' where everyone shares their views on a broad range of ideas and issues from their professional perspectives. There are absolutely no wrong answers; this is not a place to be shy!
- The team-building and networking resulting from an intellectual adventure such as this may be as important as content of what is discussed. Build your contacts, seek mentorship, and enjoy your time!

This Staff Ride provides a unique opportunity to explore the challenges of leadership:

- Planning, organizing, and integrating complex operations.
- Training and equipping individuals and units.
- Building, leading and rebuilding effective teams.
- The meshing of ideas and technology.
- The inculcation of qualities essential to 'fighting through'.

## Thoughts for Discussion

Over the next few days, we will examine historical battlefield actions and connect their lessons to a number of contemporary issues. I ask you to also focus your thoughts on the following:

- Developing critical thinking skills.
- The importance of intelligence and information sharing.
- Flexible, creative leadership at every level of the Chain of Command.
- Innovation on the battlefield – or the lack thereof.
- Building and strengthening 'teams' at all levels; creating and maintaining unit cohesion and morale under severe stress.
- The value of thoughtful, focused, rigorous training.
- Integrating and training new soldiers under combat conditions.
- The “Iron hand of logistics”; adjusting to real logistic hardship.
- The importance of physical and mental toughness.
- Mission First, People Always! – Taking care of soldiers; enforcing standards and discipline.

## The After Action Review.

Training ends with an After Action Review. Relevant questions include:

- What was expected to happen?
- What really happened? Why?
- How did they adjust?
- Was it sufficient?
- What can we learn/apply the lessons of these experiences today?
- How can this help us in the future?

Think about the recurring ‘themes’ of these and other battlefields you know that help inform us about leading effectively through the ‘fog and friction’ of modern military operations. We will talk about these at the AAR.

I look forward to walking the battlefields of the Siegfried Line with you and discussing the challenges we face.



David S Davenport, Sr.

CSM, USA

Command Sergeant Major

***"It is not the critic who counts, nor the man who points out how the strong man stumbled, or where the doer of deeds could have done better. The credit belongs to the man who is actually in the arena; whose face is marred by dust and sweat and blood; who strives valiantly; who errs and comes short again and again; who knows great enthusiasms, great devotions, who spends himself in a worthy cause; who, at the best, knows in the end the triumph of high achievement; and who, at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who know neither victory nor defeat."***

**Theodore Roosevelt**

# Planning Directive to Eisenhower

## *DIRECTIVE*

### TO SUPREME COMMANDER ALLIED EXPEDITIONARY FORCE

*(Issued 12 February 1944)*

1. You are hereby designated as Supreme Allied Commander of the forces placed under your orders for operations for liberation of Europe from Germans. Your title will be Supreme Commander Allied Expeditionary Force.

2. **Task.** You will enter the continent of Europe and, in conjunction with the other United Nations, undertake operations aimed at the heart of Germany and the destruction of her armed forces. The date for entering the Continent is the month of May, 1944. After adequate Channel ports have been secured, exploitation will be directed towards securing an area that will facilitate both ground and air operations against the enemy.

3. Notwithstanding the target date above you will be prepared at any time to take immediate advantage of favorable circumstances, such as withdrawal by the enemy on your front, to effect a reentry into the Continent with such forces as you have available at the time; a general plan for this operation when approved will be furnished for your assistance.

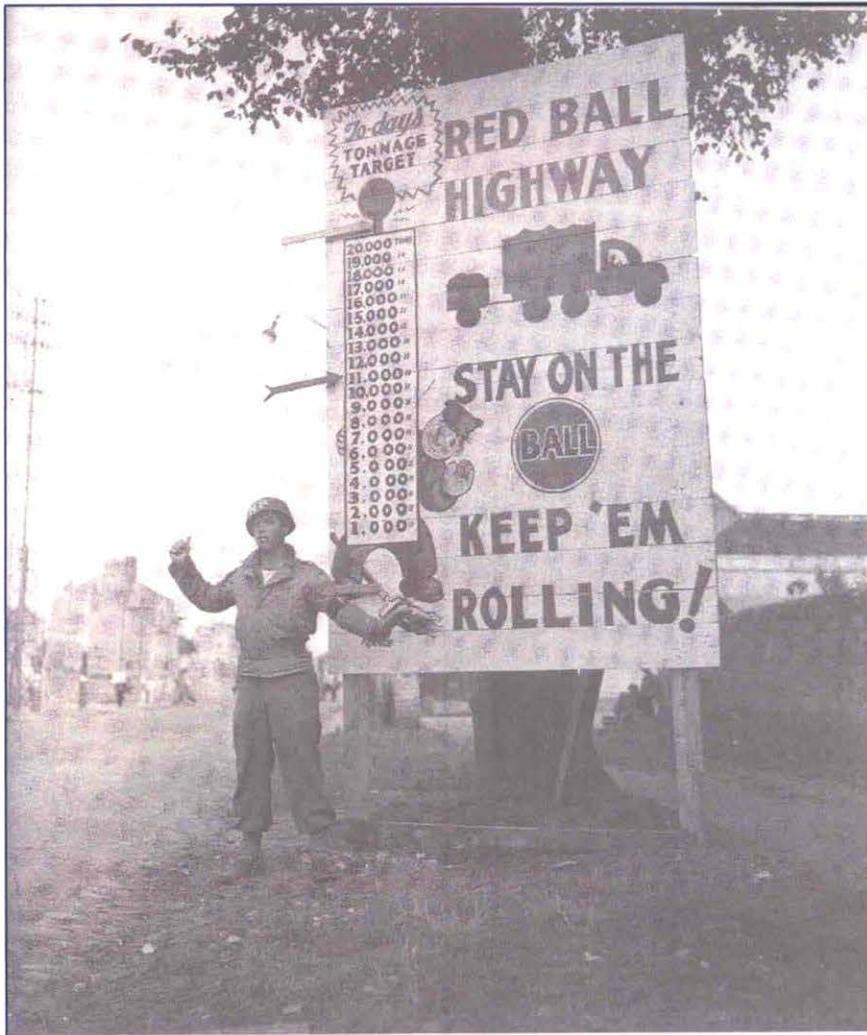
4. **Command.** You are responsible to the Combined Chiefs of Staff and will exercise command generally in accordance with the diagram at Appendix [TAB G]. Direct communication with the United States and British Chiefs of Staff is authorized in the interest of facilitating your operations and for arranging necessary logistic support.

5. **Logistics.** In the United Kingdom the responsibility for logistics organization, concentration, movement, and supply of forces to meet the requirements of your plan will rest with British Service Ministries so far as British Forces are concerned. So far as United States Forces are concerned, this responsibility will rest with the United States War and Navy Departments. You will be responsible for the coordination of logistical arrangements on the continent. You will also be responsible for coordinating the requirements of British and United States forces under your command.

6. **Coordination of operations of other Forces and Agencies.** In preparation for your assault on enemy occupied Europe, Sea and Air Forces, agencies of sabotage, subversion, and propaganda, acting under a variety of authorities, are now in action. You may recommend any variation in these activities which may seem to you desirable.

7. **Relationship to United Nations Forces in other areas.** Responsibility will rest with the Combined Chiefs of Staff for supplying information relating to operations of the Forces of the U. S. S. R. for your guidance in timing your operations. It is understood that the Soviet Forces will launch an offensive at about the same time as OVERLORD with the object of preventing the German forces from transferring from the Eastern to the Western front. The Allied Commander in Chief, Mediterranean Theater, will conduct operations designed to assist your operation, including the launching of an attack against the south of France at about the same time as OVERLORD. The scope and timing of his operations will be decided by the Combined Chiefs of Staff. You will establish contact with him and submit to the Combined Chiefs of Staff your views and recommendations regarding operations from the Mediterranean in support of your attack from the United Kingdom. The Combined Chiefs of Staff will place under your command the forces operating in Southern France as soon as you are in a position to assume such command. You will submit timely recommendations compatible with this regard.

8. **Relationship with Allied Governments -- the re-establishment of Civil Government and Liberated Allied Territories and the administration of enemy territories.** Further instructions will be issued to you on these subjects at a later date.



***The "Red Ball Highway" was the US response to keeping the rapidly advancing Allied armies sufficiently supplied with the "sinews of war" as ever-lengthening lines of communication put increasing strains on the over-burdened logistics system. Truck convoys rolled over this highway day and night, moving supplies from the beachheads to the fighting front.***

***(from Morelock, *Generals of the Ardennes*, NDU Press, 1994)***



## World War II Chronology of Major Global Events

Date	Global Events	Western Front	Mediterranean	Eastern Front	Southwest Pacific	Central Pacific	China/Burma/ India
<b>1939</b>							↑
Sep	UK & FR declare war on GE			GE & USSR invade, divide Poland			Sino-Japanese War (1937-1945)
	British Army deploys to France			Russo-Finish War begins			↓
<b>1940</b>							
Apr	Churchill becomes Prime Minister	GE occupies Denmark, invades Norway					
May		GE invades NL, BE, FR		USSR occupies disputed Romanian territory			
Jun		FR falls; British Army evacuated from Dunkerque	Italy declares war on UK, FR				
Jul		GE begins air attacks against UK	British Fleet attacks IT Fleet				
Aug		Battle of Britain	Italy invades Egypt from Libya				
Sep		↓			JA invades Indo-China		
Oct	GE, IT, JA form Axis Pact		IT invades Greece	GE troops enter Romania to protect oil fields			
Nov	HU, RO join Axis Pact		UK attacks IT fleet at Trianto				
Dec			GE reinforces IT in Greece				
			British open drive in North Africa				

Date	Global Events	Western Front	Mediterranean	Eastern Front	Southwest Pacific	Central Pacific	China/Burma/India
<b>1941</b>							
Mar	US passes Lend-Lease						
Apr	Russo-JA non-aggression pact		GE invades Yugoslavia				
			BEF withdrawn from GR				
			GE reinf IT in North Africa; Rommel's 1 <sup>st</sup> Offensive				
May			GE attacks Crete				
Jun				GE invades USSR			
Jul	US declares oil embargo vs JA						
Sep		GE torpedo atk on USS Green opens undeclared war in North Atlantic					
Oct	Lend-Lease extended to USSR						
Dec	GE, IT declare war on US			German offensive stopped before Moscow	JA Atks Philippines	JA Atks Pearl Harbor	JA alliance with Thailand
	Anglo-Amer Conf (Arcadia)		British drive for Tobruk	Leningrad besieged			
<b>1942</b>							
Jan	UN declaration signed by 26 nations		Rommel's 2d Offensive begins	Soviet Winter Offensive makes limited gains	US & Filipino defenders withdraw to Bataan		
	Combined Chiefs of Staff activated				JA captures Br N. Borneo, Invades Solomons		
Feb					Singapore surrenders		JA occupies Burma
					Gen MacArthur reaches Australia		
Mar					Surrender of Bataan		
Apr						Doolittle Raid (on Tokyo)	
May					US surrender in Philippines		
					Battle of Coral Sea		

Date (1942)	Global Events	Western Front	Mediterranean	Eastern Front	Southwest Pacific	Central Pacific	China/Burma/India
Jun			Rommel opens drive into Egypt	GE Summer Offensive in southwest USSR		Battle of Midway	
			Tobruk falls to Axis				
Jul	BR-US decision to invade N. Africa			GE captures Sevastopol	JA invades New Guinea		
Aug		Allies raid Dieppe, France			US landings on Guadalcanal		
Sep				Battle of Stalingrad begins			
Oct			BR attack at El Alamein		US Naval victory in Solomon Islands		
Nov			Allied landings at Casablanca, Oran, Algiers		Buna-Gona		
		GE moves into unoccupied FR	French resistance in N. Africa ends				
<b>1943</b>							
Jan	Allied Conference at Casablanca	US Air Force joins bombardment of GE		Russian Leningrad Offensive			
Feb			Rommel breaks through Kasserine Pass, Tunisia	Battle of Stalingrad ends Russian Campaign in Ukraine	JA resistance ends on Guadalcanal		
				Siege of Leningrad lifted			
Mar			Allied counteroffensive	GE counteroffensive			
May	Trident Conference in Washington		Axis forces in N Africa surrender		Allies attack New Guinea		
Jul			Allies invade Sicily				
Aug	Quadrant Conference in Quebec			GE abandon Kharkov			
	Fall of Mussolini		Allied victory in Sicily				
Sep			GE reinforces IT				
Oct	IT declares war on GE		Allied landings in Salerno		Australian victory at Finschhafen, New Guinea		Stillwell's Burma Campaign begins

Date (1943)	Global Events	Western Front	Mediterranean	Eastern Front	Southwest Pacific	Central Pacific	China/Burma/India
Nov	Cairo-Teheran Conferences. UN Relief and Rehabilitation Administration established		Winter Line Campaign		Allies invade Bougainville & Tarawa		
Dec				Soviets begin Winter Offensive			
<b>1944</b>							
Jan			Landings at Anzio	Soviet offensive enters Estonia			
			Unsuccessful Allied attack at Rapido River (IT)				
Feb		Allied bombing focuses on GE aircraft production				Invasion of Marshall Islands (Kwajalein)	
Mar			Attack on Cassino	Soviets drive into Ukraine	Rabaul falls	Attacks on Truk in Caroline Islands	Merrill's Marauders advance into Hukwang Valley
					Invasion of Admiralty Islands		Japanese Imphal-Kohima Offensive
Apr	UN Organization for Educational and Cultural Reconstruction formed	Strategic bombing priorities shift to support Normandy Invasion	Allies attack Gustav line in IT	Odessa retaken by Soviets	Allied landings in New Guinea		Myitkina airfield captured by Allies
Jun		Normandy Invaded	Rome liberated	Major Soviet offensive in Central Region and in Finland	JA fleet loses heavily in Battle of Philippine Sea	Strategic bombing campaign against Japan begins	
		GE launches first V weapons against UK					
Jul	UN Monetary and Financial Conference (Bretton Woods); creates IMF and World Bank	Breakout from Beachhead	Florence liberated	Warsaw uprising		Marianas invaded	Slim's Burma Offensive begins

Date (1944)	Global Events	Western Front	Mediterranean	Eastern Front	Southwest Pacific	Central Pacific	China/Burma/India
Aug		Allies rush for Seine River Crossings	Allies land in Southern France	Romania surrenders		Guam liberated	JA invaders driven back from Indian frontier
				Soviets reach East Prussia			
Sep	UNRRA allocated \$50m to IT -- first commitment to former enemy	Brussels liberated Market Garden		Soviets declare war on Bulgaria		Landings in Caroline Islands	
	OCTAGON Conference (Quebec)	German defense of German soil begins					
Oct	Dumbarton Oaks lays permanent UN groundwork	Forces from Southern France link up with Forces from Normandy		Soviets reach Yugoslavia, Czechoslovakia, and Poland	Leyte Invasion; JA Fleet suffers major losses		Begin final major offensive
		Allied Offensives bog down					
Nov						Saipan airfields open for Allied bombing campaign	
Dec		GE counteroffensive Battle of the Bulge					

Date	Global Events	Western Front	Mediterranean	Eastern Front	Southwest Pacific	Central Pacific	China/Burma/India
<b>1945</b>							
Jan				Soviet Winter Offensive liberates Warsaw	US landings on Luzon		
Feb	Yalta Conference	Allies defeat Colmar pocket; end Battle of the Bulge	5th Army offensive in northern IT	Budapest liberated	Battle for Manila begins	Landings on Iwo Jima	
Mar		US 9th Army drives to Rhine; 9 <sup>th</sup> Arm Div crosses at Remagen		Soviets capture Danzig	Manila liberated		
		Köln falls		Soviets advance in Czech, Hungary, Austria	Landings on Mindanao		
Apr	Roosevelt dies; Truman US President	US, UK forces cross Rhine in force	5th Army crosses Po River	GE resistance in East Prussia ends			
	San Francisco conference drafts UN Charter	US units reach Elbe River		Vienna falls			
May	V-E Day	War ends	War ends	Soviets capture Berlin; war ends	Resistance ends on Mindanao	Resistance ends on Okinawa	British capture Rangoon
Jul	Potsdam Conference					Carrier based planes join attack against Japan	
	Clement Atlee replaces Churchill						
Aug	Atomic bombing of Japan						
Sep	Japanese surrender accepted				war ends	war ends	war ends

***"Midway upon the journey of our life  
I found myself within a forest dark,  
for the straightforward pathway had been lost.  
Ah me! How hard a thing it is to say  
What was this forest savage, rough, and stern,  
Which in the very thought renews the fear.  
So bitter is it, death is little more."***

**Dante Alighieri  
*Inferno*, Canto I  
(Longfellow translation)**

***"...Passchendaele with tree bursts."***

**Ernest Hemingway,  
on the Huertgen Forest**



**F**

# ***Siegfried Line Overview***

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## **General Conditions for the Fall Campaign**

- **France cleared of the Germans by the end of September.** Allied armies were closing on the Rhein all along the front. Both Bradley and Eisenhower thought that the Germans would offer a token defense along the West Wall fortifications for the sake of prestige, and then fall back across the Rhein.
- **The last major tactical action** was Operation MARKET GARDEN, the failed offensive through the Netherlands, attempting to cross the Rhein at Arnhem.
- **Logistics remained a problem.** British forces had taken the city of Antwerp, but had still not cleared the estuary of the Scheldt River between the port and the sea, so Antwerp was not usable as a port. Therefore, all logistical support continued to be delivered from Normandy. The consequence was that the Allies were relatively “impoverished”, logistically. The first ship unloaded supplies at Antwerp on 28 November 1944.
- **Pause in operations set up positional warfare again.** Failure of MARKET GARDEN and the stalling of other offensives on the west side of the Rhein because of lack of supplies set up the conditions for another battle of buildup and attrition that shared a lot of characteristics with the battles of the hedgerows in Normandy in July.
- **Allied forces.** Eisenhower had two million soldiers and 54 divisions on the continent. However, eight of those divisions were immobilized either in Normandy or in southern France because there was not enough transport to keep them supplied at the front.
- **Divisional frontage.** The 46 active Allied divisions covered a frontage of just over 600 miles from the North Sea to Switzerland—an average of more than twelve miles per division, not counting the twistings and turnings caused by terrain.
- **Risk Eisenhower had to accept.** Thus it was not only very hard for Eisenhower to concentrate forces for a powerful offensive, but “downright risky.” Around the last week of September, Eisenhower commented that “Bradley’s forces are getting fearfully stretched [in the Ardennes] and may get a nasty little ‘Kasserine’ if the enemy chooses the right place to concentrate his strength.”
- **German strength.** The Germans under Field Marshal Gerd von Rundstedt had about the same number of divisions and a number of the new Panzer brigades, but virtually none of the German units was at full strength—mainly as a result of the fighting from Normandy back to the German frontier. The German commander estimated that he had about half the forces available that Eisenhower could assemble.

- **Allied materiel superiority.** Allied superiority in artillery was 2½ to 1. In tanks, Eisenhower enjoyed a superiority of 20 to 1. His advantage in aircraft was overwhelming.
- **German advantages.** The Germans had far shorter lines of communications, the fervor that defense of the homeland instilled in the troops, and an overextended foe who lacked adequate port facilities for long overseas supply routes.
- **High level Allied optimism.** Allies were generally optimistic because of the swift advance from Normandy to the Rhein, despite Montgomery's failure to take Antwerp quickly and the growing supply problem. Meeting in Quebec in September, Roosevelt and Churchill focused on the war in the Pacific, acting as if victory in Europe was already assured. They drew postwar zones of occupation and shifted control of strategic air forces from Eisenhower back to the air force commanders.
- **Combined Chiefs urged Eisenhower to attack.** Meeting in Washington in October, the Anglo-American Combined Chiefs of Staff urged Eisenhower to deliver an extraordinary attack before 1944 was over to finish the war; to use the super-secret proximity fuse against ground troops; to employ all troops and stockpiles without regard for reserves; and to shift the air offensive from all but the most immediately remunerative targets.
- **Eisenhower's general objective for the fall offensive.** Eisenhower knew that, without Antwerp, he could not sustain that kind of attack, but did believe he could mount a major offensive before winter came. His objective was not yet to take the Ruhr industrial area, but to establish bridgeheads over the Rhein. Lt. Gen. Jake Devers and his 6<sup>th</sup> Army Group were to close on the upper Rhein, clearing the west bank of the river from Switzerland to Strasbourg. Patton and his Third Army were to take Metz and close on the Rhein in central Europe, through the Saarland.
- **Advantages of continuing to attack.** In mid-October, the days were short and dark, and the nights were long and wet. Moreover, temperatures were falling. Yet, despite persistent problems in supply and transportation, Eisenhower decided not to let up. His armies were, on average, inflicting 4,000 casualties on the Germans every day. He saw no good reason to quit pressing them. On the contrary, delays might only give the defenders heart, allow them to strengthen defenses, and field jet fighters and other new weapons.
- **Main effort: First U.S. Army.** The main effort was with Hodges' First Army. Attacking early in November, First Army was to cross the Rhein south of Cologne. The new Ninth Army, under Lt. Gen. William H. Simpson, entered the line on First Army's north flank, linking 12<sup>th</sup> Army Group to the British, and assisting First Army in crossing the Rhein and then encircling the Ruhr.

## The Situation in First Army

- **First Army concentrated on Aachen.** Lt. Gen. Courtney Hodges concentrated First Army in the vicinity of Aachen, beginning attacks on the city in the first week of October and finally taking it on 21 October. German resistance was unexpectedly stubborn. Aachen was the legendary town of Charlemagne, and represented a heritage precious to Nazi ideology. As the first major German city threatened with capture, Hitler insisted there be a fanatical, house by house, unyielding defense.
- **Establishing Civil Affairs Operations on Enemy Soil.** Before 1940, Aachen had 165,000 inhabitants, but in October 1944 it lay in ruins, and less than 20,000 Germans still lived there. In Aachen and the surrounding towns, Civil Affairs units established military government, and began the process of organizing post-conflict administration. Detachments of 1<sup>st</sup> European Civil Affairs Regiment, although reasonably well-organized, trained, and experienced by their operations in France and Belgium, faced numerous new challenges by their first missions in occupied Germany.
- **First attack on Schmidt, 2 November 1944.** The attack started on 2 November when 28<sup>th</sup> Infantry Division entered a dense forest of fir trees southeast of Aachen. The division mission was to take the high ground near the town of Schmidt, which would then be the anchor of the First Army's right flank. After ten days of fighting, the 28<sup>th</sup> Infantry Division had made no progress attacking through the Huertgen Forest. In fact, they had taken part in what proved to be one of the war's most costly divisional attacks. The division suffered over 6,000 casualties.
- **Flaws in U.S. operational analysis.** Commanders at every level from 12<sup>th</sup> Army Group through First Army, through V Corps, and 28<sup>th</sup> Infantry Division all failed to recognize the importance of two big dams on the upper reaches of the Roer River, dams that the high ground at Schmidt commanded. Downstream, where First and Ninth Armies would have to cross the Roer on the way to the Rhein, the river flows through a low-lying plain. The Germans had the ability to release water in a calculated flow to flood that valley, wash out tactical bridges, and trap any American force that crossed the Roer.
- **German recognition of the significance of the dams.** The Germans would not give up such a tactical advantage without a fight. To oppose the First Army attack, they committed a Panzer division and two infantry divisions.
- **Terrain and Defenses.** Thousands of West Wall pill boxes and bunkers were sited several hundred yards behind a belt of antitank obstacles. Given the hilly, forested and stream-cut terrain through which it ran, the wall was a lot stronger than it looked to the casual observer.
- **Terrain and Defenses.** They were plunging into an area that was the shape of a battered box, roughly 20 miles to a side. Most of the box contained a forest that was gloomy and damp even in summer. In the top left-hand corner was Aachen, in the top right-hand corner was Dueren. Between them ran the corridor. At the bottom left corner, 20 miles south of Aachen, was the town of Monschau. Twenty miles east of

Monschau, the forest gives way to open countryside. The Roer River flows north through here to Dueren, winding for much of the way through the eastern edge of the forest. In the bottom right-hand corner of the box are seven dams, which control the flow of water into the river from the Roer's tributaries. Almost in the center of the box is the town of Schmidt, set on a hill overlooking the forest. Three miles north of Schmidt is the village of Huertgen. The key to dominating the forest and capturing the Roer dams was Schmidt. No one among the Allies, however, seemed to realize the importance of Schmidt or the dams in the early stages of this struggle.

## Some Comments on the Attacks on Schmidt

- **Tactical Choices.** After MARKET GARDEN, Montgomery was stuck in a blind alley without enough troops to do the various jobs he had taken on. Antwerp was still not available. Bradley hoped to push the First and Ninth armies to the Rhine and break into the Ruhr from the south. Simpson and the Ninth Army would have the advantage of advancing into the Aachen Gap, where the land was comparatively open. The First Army, on the other hand, was strapped in a topographical straightjacket. Hodges was holding a 60-mile front—but had no maneuver room. You have to go a long way in Western Europe to find a situation like that. If the First Army was going to reach the Rhine as Bradley intended it would have to attack straight ahead, from Aachen to the southern Ardennes.
- **First Army Commander's Worries.** The Huertgen Forest preyed on Hodges's mind. He was anxious that the Germans might use it to mass thousands of troops and hundreds of tanks to make a surprise attack against his right flank when VII Corps advanced into the Stolberg corridor and attacked toward Dueren. Hodges remembered well, perhaps too well, the advantage the Germans had made of the Argonne Forest, where he'd fought as a lieutenant in World War I.
- **9<sup>th</sup> Division Attack.** Begun while the fight for Aachen was still under way. The 9<sup>th</sup> Infantry Division attacked from Monschau toward Huertgen. The advancing troops were butchered. The Germans filled the misty forest air with shells armed with instantaneous fuses. Hit a twig, and they'd explode, raining down shrapnel and tree fragments and killing and crippling anyone in the open. The enemy, in pillboxes and bunkers, was safe; even, most of the time, from U.S. artillery, which was short of ammo, couldn't use its light planes and had a tough time getting adequate coordinates. Nor, under dripping skies, was tactical air able to do much. The 9<sup>th</sup> Division took 4,500 casualties in the space of two weeks and didn't even reach Huertgen.
- **The 28<sup>th</sup> Division Attack.** Despite this failure, Hodges still thought he needed to clear at least the northern half of the forest before he launched his main attack through the Stolberg Corridor to Dueren. He ordered V Corps, currently holding positions around Monschau, to clear the forest. The unit Gerow selected for this miserable chore was Norman Cota's 28<sup>th</sup> Division, the Pennsylvania National Guard

outfit that Bradley had trained two years earlier. Cota had been given the division recently in recognition of his brilliant and heroic D Day performance.

- **V Corps Preparations for the Attack.** Gerow weighted the attack with extra engineers, Tank Destroyers and artillery—a total force of more than 20,000. Even so, Cota wasn't happy with this assignment. The basic argument is that Corps over-controlled the division. Gerow ordered him to spread his division all over the forest, instead of concentrating it to take Schmidt. Two regiments were to take a ridge and some threadlike roads that would be useful if Schmidt was captured, and useless if it wasn't. That left just one regiment for attacking the objective that mattered most. It was a deeply flawed plan, one that reflected a high-level failure to appreciate how strongly the Germans had rebounded after their catastrophic defeat in France two months before.
- **The Only Attack in Progress at the Time.** The First Army attack was delayed because of bad weather that grounded supporting tactical air power. Despite this, the 28<sup>th</sup> was ordered to advance into the forest. For two weeks in November, it was the only division attacking on First Army's front. That left the Germans free to concentrate their reserves against it.
- **Initial Success; then Stalemate.** Schmidt fell to US infantry, but they couldn't hold it. Gerow tried to recover the initiative by sending a regiment from the 4<sup>th</sup> Division into the forest. Despite this, Cota lost control of the battle. The 28<sup>th</sup> Division was mercilessly broken to bits. The scale of losses in some units defied belief; one battalion suffered 95 percent casualties in little more than a week.
- **Criticisms of Cota as a Division Commander.** Cota never went into the forest to check the situation for himself. Yet from as far back as Versailles it was obvious something was wrong. On November 8 Eisenhower went to see Cota. So did Bradley. He assured them everything was okay and condemned his division to another week of unmitigated hell. By then, more than 6,000 men had been killed, wounded, captured or evacuated with trench foot. The rifle companies had been virtually annihilated.
- **Progress of the Attack up to the time of the Battle of the Bulge.** Hodges kept trying, sending the 8<sup>th</sup> Division to attack from the south and relieve the shattered 28<sup>th</sup>, and the 4<sup>th</sup> ID from the north. The day the 28<sup>th</sup> was relieved, 16 November, Operation QUEEN was launched, supporting the VII Corps attack. On 28 November, Ninth Army reached the Roer River but could go no further. To revive his flagging offensive, Hodges ordered Gerow's V Corps to drive along the southern edge of the Huertgen Forest. Gerow's troops reached the Roer on December 7. Twenty miles to the north, Collins was still battling through the Stolberg Corridor. He finally reached the Roer, across from Dueren, on December 16.
- **Consequences.** Getting to the Roer had cost Hodges 47,000 casualties and Simpson 10,000. Three months after crossing the Our River, American troops had advanced 22 miles into Germany. The Rhine was more than 30 miles away and the enemy still held Schmidt, still controlled the dams and was still gutting U.S. regiments in the Huertgen Forest. Bradley's winter offensive had failed.

## **Selected Chronology of the Siegfried Line Campaign**

- 11-16 September 1944** Elements of the VII Corps to include the 1<sup>st</sup> Infantry Division penetrate the Siegfried Line in a "Recon in Force" movement.
- 16 September 1944** German 12<sup>th</sup> Infantry Division arrives in sector.
- 19 September 1944** 9<sup>th</sup> Infantry Division attempts to cut through Huertgen Forest to village of Huertgen.
- 20 September 1944** The attacks of the 9<sup>th</sup> Infantry Division meet stiffer resistance at the Schill Line, the attack stalls and the true Battle of Huertgen Forest begins.
- 20-26 September 1944** 9<sup>th</sup> Infantry Division continues the attack with mounting casualties and little or no gain. The Germans continue to collect reinforcing units which are railed into the sector.
- 6-8 October 1944** 9<sup>th</sup> Infantry Division continues the attack with two regiments. One regiment continues to hold the deepest penetration at Schevenhuetten.
- 7 October 1944** US XIX Corps units of the 30<sup>th</sup> Infantry Division enter Alsdorf, about 6 miles north of Aachen. From here the units pressed southward towards Wuerselen.
- 8 October 1944** US VII Corps units of the 1<sup>st</sup> Infantry Division begin their attack as the southern arm of the encirclement of Aachen.
- 10 October 1944** 1<sup>st</sup> Infantry Division delivers an unconditional surrender ultimatum to the German garrison in Aachen.
- 11 October 1944** Receiving no reply to its surrender demand, VII Corps begins air and artillery bombardment, and orders 1<sup>st</sup> Infantry Division to attack into the city.
- 12-14 October 1944** 9<sup>th</sup> Infantry Division reaches its final objective, the road junction at the head of the Weisser Weh.
- 21 October 1944** Aachen falls to the 1<sup>st</sup> Infantry Division. 28<sup>th</sup> Infantry Division given the mission to secure Schmidt with attack to commence NLT 2 November 1944.
- 1 November 1944** VII Corps attack which was to coincide with 28<sup>th</sup> Division attack postponed until 16 November. (28<sup>th</sup> Division attack was to pin down German Reserves).

- 2 November 1944** 28<sup>th</sup> Division attacks.
- 3 November 1944** 28<sup>th</sup> Division attack on left and right runs into stiff resistance, but in the center the lead battalion of the 112<sup>th</sup> Infantry Regiment captures Schmidt at nightfall. The Kall River trail becomes the only viable MSR in the center. Germans dispatch the 116<sup>th</sup> Panzer Division to Schmidt. Elements of German 89<sup>th</sup> Division, being relieved from Monschau, are halted outside of Schmidt.
- 4 November 1944** 28<sup>th</sup> Division continues to move tanks along Kall River trail to reinforce Schmidt, three tanks make it. German 116<sup>th</sup> Panzer Division mounts a successful attack against Schmidt with Infantry and Armor. U.S. air cover arrives 1200 hours; Schmidt had fallen.
- 6 November 1944** 2d Battalion, 112<sup>th</sup> Infantry panic at Vossenack and abandon the position. V Corps commander diverts a regiment from 4<sup>th</sup> Infantry Division to relieve the 109<sup>th</sup> Infantry Regiment at the woods southwest of Huertgen. This regiment almost ceases to exist by 16 November.
- 7 November 1944** 146<sup>th</sup> Engineer Battalion retakes Vossenack from a Panzer Grenadier Regiment of the 116<sup>th</sup> Panzer Grenadier Division.
- 8 November 1944** 28<sup>th</sup> Division attack ends. Casualties for the Division: 6,184.
- 16 November 1944** First U.S. Army launches its attack. Largest air attack (QUEEN) in support of ground operations in the war is executed but with little effect due to over-cautious safety distances (remember COBRA).
- 16-18 November 1944** Elements of the 1<sup>st</sup> Infantry Division secure Hill 232 and Hamich. 4<sup>th</sup> Infantry Division attacks to support main effort by 1<sup>st</sup> Infantry Division.
- 19 November 1944** German counterattack for Hill 232 fails. The lieutenant leading half the counterattack force gets lost and twice blunders into the 16<sup>th</sup> Infantry at Hamich. 26<sup>th</sup> Infantry secures approaches to Zaufenburg.
- 19 November 1944** Less than two miles have been made on the entire 1<sup>st</sup> Army front, hope for a breakthrough fades.
- 19 November 1944** 4<sup>th</sup> Infantry Division, after three days of hard fighting, does not push on, and misses a chance to penetrate the remainder of the Huertgen Forest. Start of attack on 20 November is too late. German 344<sup>th</sup> Infantry Division occupies positions in front of 4<sup>th</sup> Infantry Division, night of 19 November.

**21-24 November 1944** 8<sup>th</sup> Infantry Division attacks with one regiment to take the woods south of Huertgen. After four days, only several yards are gained. 1<sup>st</sup> Infantry Division continues to push towards Langerwehe.

**24 November 1944** (Thanksgiving Day) 4<sup>th</sup> Infantry Division bypasses the main line of resistance through feint attacks and is under a mile from the edge of the forest by nightfall. Elements of the 18<sup>th</sup> Infantry take Hill 203.

**25 November 1944** CCR, 5<sup>th</sup> Armored Division, attempts to punch through on the Germeter-Huertgen highway in 8<sup>th</sup> Infantry Division sector. Attack fails, CCR withdrawn from the fight.

**26 November 1944** Elements of the 121<sup>st</sup> Infantry Regiment (8<sup>th</sup> Infantry Division) secure woods southwest of Huertgen from the flank after 14 days of trying to secure it head on. German 275<sup>th</sup> Division pulls back after being flanked by elements of 4<sup>th</sup> Infantry Division. German 47<sup>th</sup> Division, which is decimated by constant fighting, is reinforced by German 3d Parachute Division. This reinforcement once again takes place at a critical moment – just when V Corps is preparing to break out into the Roer Plain.

**27 November 1944** One company from 8<sup>th</sup> Infantry Division establishes a foothold in Huertgen. They remain cut off and unable to move forward or backward through the night.

**28 November 1944** Two companies supported by tanks advance on Huertgen, are joined by the cut off company, and literally storm the town. By nightfall, Huertgen, after two months, has fallen. 18<sup>th</sup> Infantry Division captures the rest of Hill 203 and Langerwehe.

**29 November 1944** Two companies from the 26<sup>th</sup> Infantry Regiment, 1<sup>st</sup> Infantry Division, enter Merode and are cut off. Both companies were counterattacked by German Armor and Infantry and ceased to exist. Radio failure and the road being blocked directly contributed to the loss. This marked the end of the 1<sup>st</sup> Infantry Division's participation in the Battle of Huertgen Forest. The Division gained four miles in the Forest, but suffered 4,000 battle casualties.

**29 November 1944** The 22d Infantry Regiment of the 4<sup>th</sup> Infantry Division secures Grosshau at dusk. Supported by Armor, it is still a tough fight because the Germans have once again brought in a new (although understrength) Division, the 353d Infantry Division.

**30 November 1944** The 22d Infantry Regiment breaks clear of the Huertgen Forest, but are too weak to continue the attack. The Regimental Commander forms a reserve from his Anti-Tank, Headquarters, and Service Companies. This reserve is all that stops the counterattack on 2 December from Gey.

**1 December 1944** The 4<sup>th</sup> Infantry Division is given permission to halt its attacks. The Division has sustained 4,053 battle casualties and will be relieved by the 83d Infantry Division. The Division has gained 3 miles.

**3 December 1944** Elements of the 8<sup>th</sup> Infantry Division and CCR of 5<sup>th</sup> Armored Division secure Brandenburg. Bergstein cannot be taken due to depleted forces.

**5 December 1944** Bergstein is taken by CCR of 5<sup>th</sup> Armored Division which had just finished the final mop up of Vossenack that morning. The U.S. attack beat German reinforcements in the form of two regiments from the 272d Volksgrenadier Division by half a day. CCR does not have strength remaining to take Castle Hill (Burgberg), at the east end of Bergstein.

**6 December 1944** Before dawn, German counterattacks attempt to retake the Brandenburg-Bergstein heights. CCR and remaining elements of 8<sup>th</sup> Infantry Division barely contain the attacks.

**7 December 1944** 2d Ranger Battalion takes Castle Hill and holds until relieved on 8 December. Rangers take 75% losses.

**8 December 1944** 8<sup>th</sup> Infantry Division and CCR have sustained 4,000 casualties, and cease further offensive operations.

**10-12 December 1944** After a slow start, the 83d Infantry Division succeeds in finally clearing the forest to capture Gey with its main highway. This was the first and last action the 83d fought in the Huertgen Forest, but it cost them 1,000 casualties in three days.

**13 December 1944** V Corps attacks with the 2d and 78<sup>th</sup> Infantry Divisions to seize Schmidt and the Roer Dams. Initial progress looks good and 16 December promises more gains.

**16 December 1944** The German counteroffensive called the Battle of the Bulge starts and effectively ends the Battle of the Huertgen Forest.

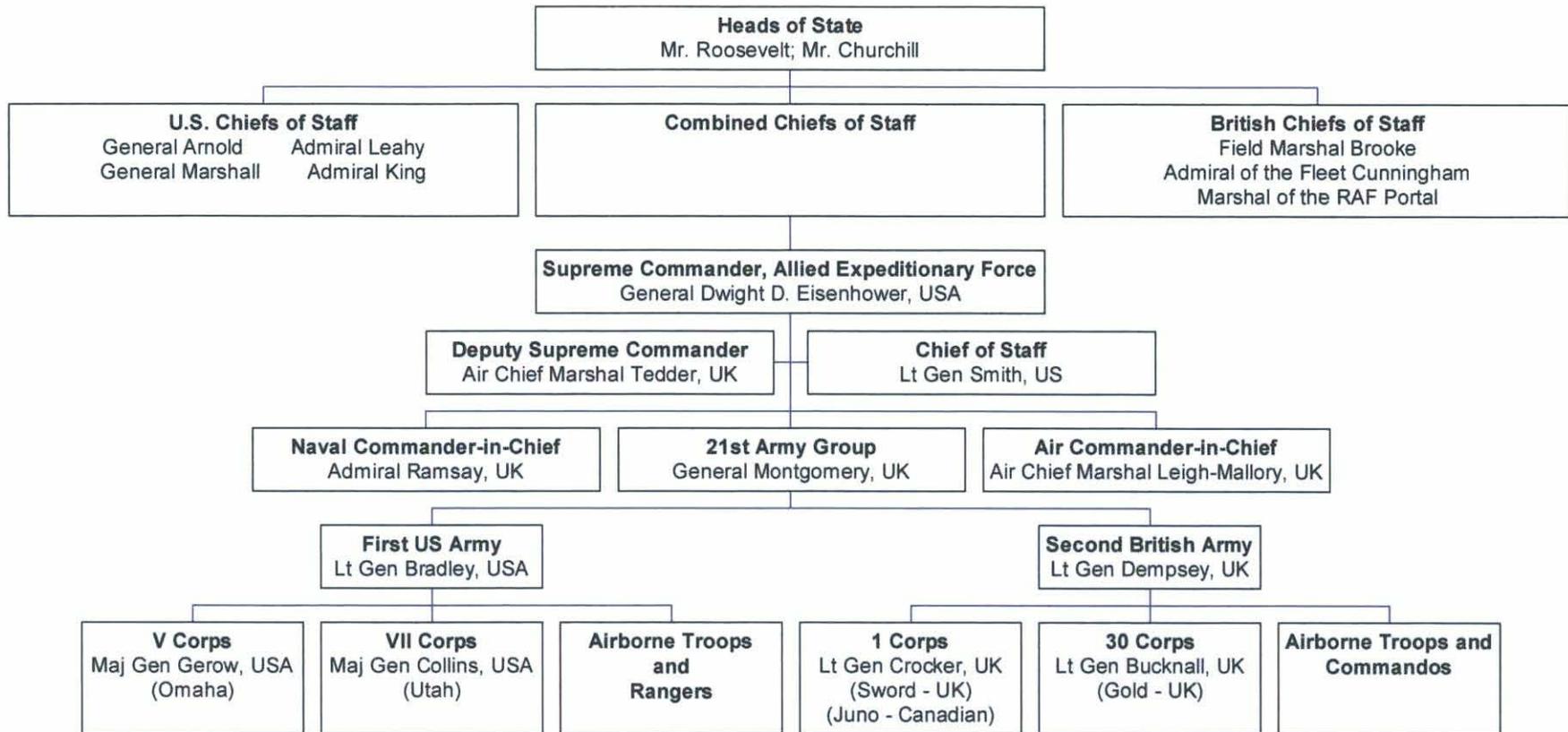
**Epilogue:** The critical Roer Dams were not captured until 10 February 1945. The Schwammenauel Dam had in effect been jammed open, and flooding of the Roer delayed the Allied advance for two more weeks. If the initial capture of Schmidt had been aggressively reinforced, thereby causing a withdrawal of German forces east of the Roer, the German counterattack of December 1944 probably could not have occurred. American insistence on clearing the Huertgen Forest as opposed to shutting it off as a counterattack route extended the war in Europe by some three to six months. The Huertgen Forest Campaign cost 33,000 casualties out of 120,000 engaged.

***"The pious Greek, when he had set up altars to all the great gods by name, added one more altar, 'To the Unknown God'.***

***So whenever we speak and think of the great captains and set up our military altars to Hannibal and Napoleon and Marlborough and such-like, let us add one more altar, 'To the Unknown Leader', that is, to the good company, platoon, or section leader who carries forward his men or holds his post, and often falls unknown. It is these who in the end do most to win wars. The British have been a free people and are still a comparatively free people; and though we are not, thank Heaven, a military nation, this tradition of freedom gives to our junior leaders in war a priceless gift of initiative. So long as this initiative is not cramped by too many regulations, by too much formalism, we shall, I trust, continue to win our battles - sometimes in spite of our higher commanders."***

**Field Marshal Lord Wavell**

# Allied Command Architecture



The command architecture was created to be fairly straight forward and “clean,” while sharing control between the two principal (national) partners in a reasonable way. This was, however, an interim arrangement -- the command architecture to invade Normandy but not to win the war. Once ashore, Eisenhower was to take Montgomery’s place as the ground commander. 1st US Army would subordinate to a new 12th (US) Army Group, commanded by Bradley and both Bradley and Montgomery would become co-equal subordinates of Eisenhower. This created an ambiguity in authority which hindered teamwork throughout the campaign.

# ORDER OF BATTLE

## **12th Army Group** (Lt. Gen. Omar N. Bradley)

*Assignment of divisions to corps and corps to armies varied throughout the war and frequently changed, even in the midst of battles. The alignment of divisions and corps shown here depicts the 12th Army Group organization as of September 1944.*

## **First U.S. Army** (Lt. Gen. Courtney H. Hodges)

### **V Corps** (Maj. Gen. Leonard T. Gerow)

**4th Infantry Division (Ivy).** Maj. Gen. Raymond O. Barton. D-Day; Normandy, Siegfried Line, and Huertgen Forest.

**28th Infantry Division (Keystone).** Maj. Gen. Norman D. Cota. D-Day; Normandy; Siegfried Line; heavy combat in Huertgen Forest. Made the disastrous attack on Schmidt. One division commander relieved and another killed.

**5th Armored Division.** Maj. Gen. Lunsford E. Oliver.

### **VII Corps** (Maj. Gen. Joseph Lawton Collins)

**1st Infantry Division (The Big Red One).** Maj. Gen. Clarence Huebner. The most experienced American infantry division. North Africa, Sicily, D-Day, Normandy, Aachen, and the Huertgen Forest.

**9th Infantry Division (Octofoil).** Maj. Gen. Louis A. Craig. North Africa, Sicily, Normandy, and the Huertgen Forest.

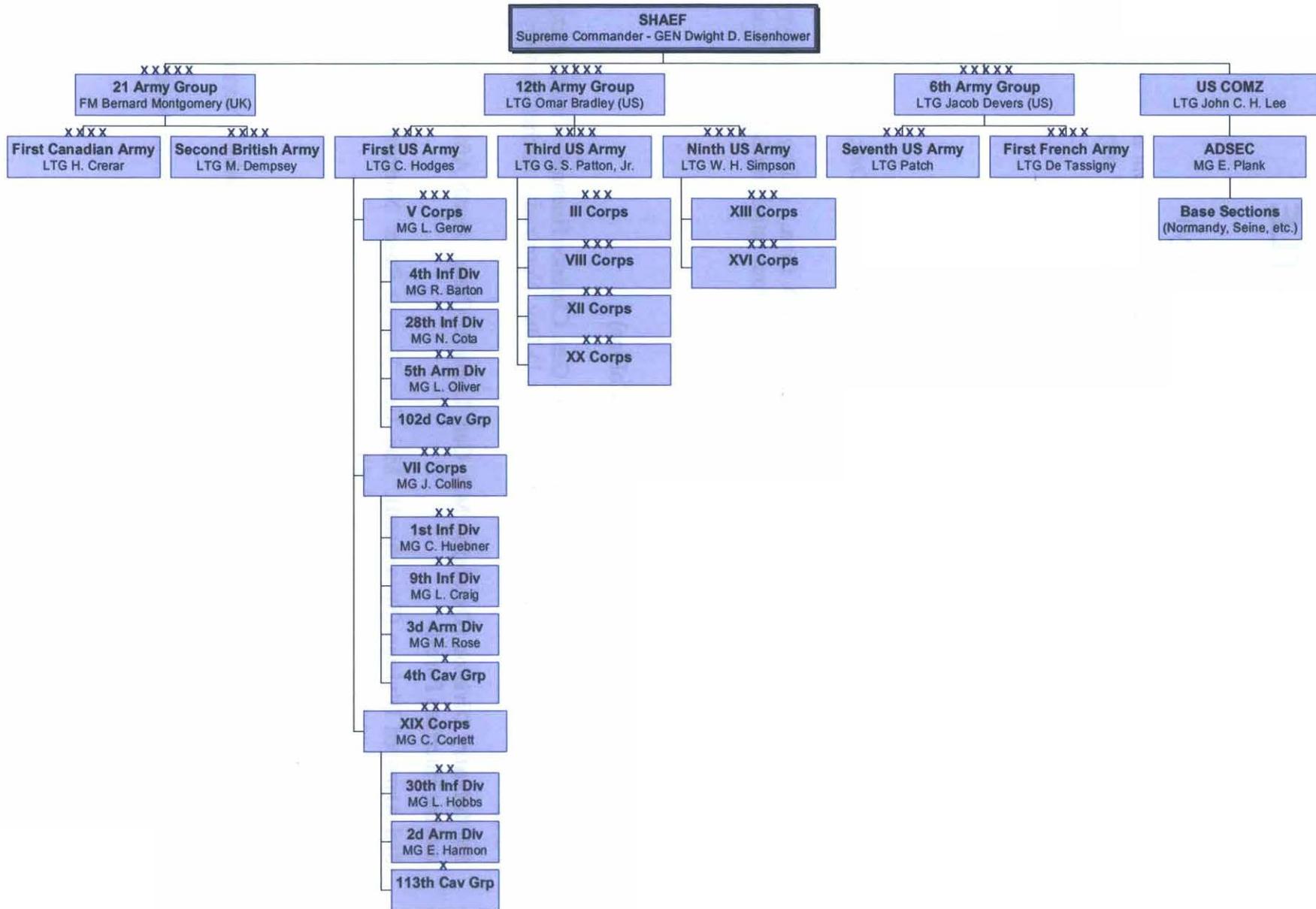
**3rd Armored Division (Spearhead).** Maj. Gen. Maurice Rose. Normandy, the pursuit across France, and costly fall battles around Aachen.

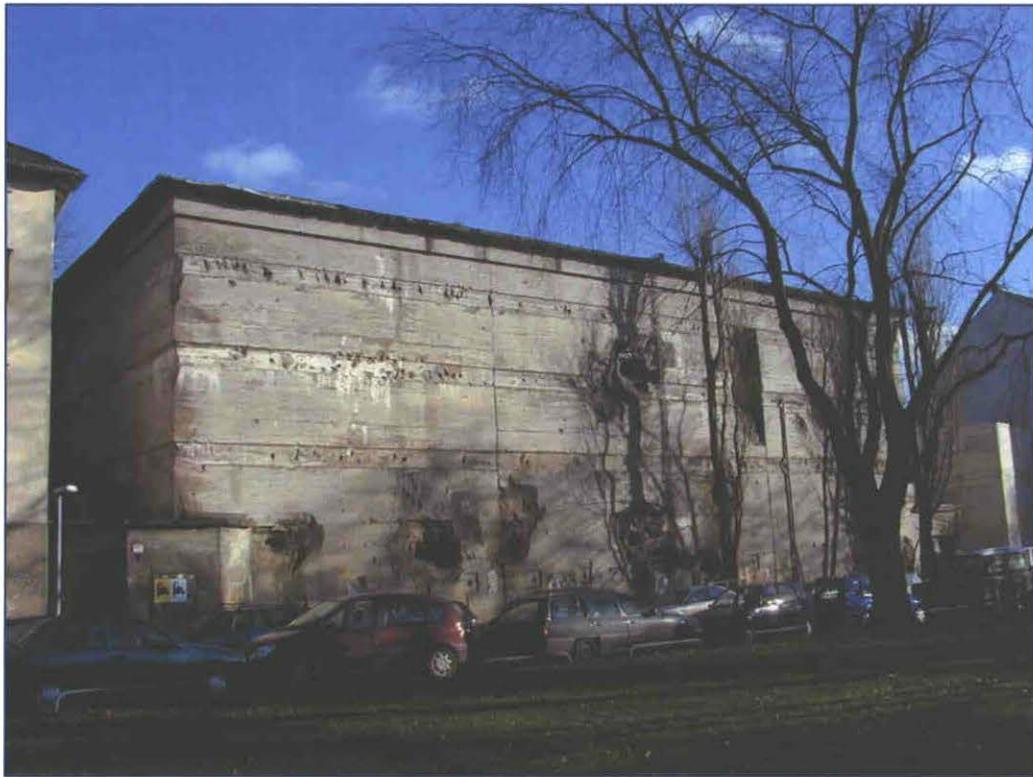
### **XIX Corps** (Maj. Gen. Charles H. Corlett)

**30th Infantry Division (Old Hickory).** Maj. Gen. Leland S. Hobbs. Normandy; repelled German counterattack at Mortain; and at Aachen.

**2nd Armored Division (Hell on Wheels).** Maj. Gen. Ernest N. Harmon. North Africa, Sicily, Normandy, and around Aachen.

# Allied Command Architecture & Order of Battle





***The Air Raid Shelter in Aachen, showing the effects of engagement by a 155mm 'Sniper Rifle'.***

## THE UNITED STATES ARMY IN THE FALL OF 1944

**Size of the Force.** The Army in the fall of 1944 was the mightiest force the United States had ever raised. In his 12th U.S. Army Group, Lieutenant General Omar N. Bradley commanded more soldiers than any American general had ever led before. Bradley's three field armies were arrayed across the front lines along the German borders: the Ninth Army, under Lt. Gen. William Simpson in the extreme north, the First Army, under Lt. Gen. Courtney Hodges in the center, and the Third Army, under Lt. Gen. George S. Patton, Jr., in the south. Arriving from the invasion of Southern France, the 6th U.S. Army Group, under command of Lt. Gen. Jacob Devers, had also fallen into line with its Seventh Army, under Lt. Gen. Alexander Patch, and a French army. By the fall of 1944, the Army had grown to a strength of almost eight million soldiers, a staggering number considering that the service had counted only about 180,000 on its rolls in 1939.

**Shortage of Infantrymen.** Nonetheless, in the fall of 1944, the Army had a serious personnel problem. The 81 rifle squads of a typical infantry division numbered a total of only 3,240 riflemen. The remainder of the 14,000 soldiers of the division performed other tasks. Some, including the artillery, armor, tank destroyer units, and others, were of the combat arms. The remainder handled the essential supply and administrative tasks to keep the division in action. The situation in the division repeated itself at higher echelons. At the field army level (roughly 350,000 men), about one soldier in seven was in the front line. In the European theater as a whole, Omar Bradley estimated that only one soldier out of fifteen fought with a rifle. Although riflemen were the minority in the Army, they suffered the highest casualty rate--83 percent in Normandy. Bradley later reported that three out of every four casualties came from a rifle platoon, and that the rate of loss in rifle platoons was 90 percent. Thus there began in Normandy and continued through December of 1944 a severe infantry shortage in Europe, compounded by Army decisions to send more riflemen to the Pacific. Through the fall of 1944, Bradley was working hard to solve the problem, and found that the only way was to assign men from other skills--including antiaircraft artillerymen, now that the German Air Force seemed largely defeated--to the infantry.

**German tanks superior; American tanks more numerous.** The Army was far more lavishly equipped than its enemy, but in almost every category of weaponry, the Germans had superior hardware. Tanks are the best example. Until 1935 in American doctrine, the tank was essentially a machine-gun carrier that accompanied the Infantry. Experiments with mounting heavy guns in tanks did not get very far, the Chief of Infantry in 1938 declaring that a 75-mm gun was useless in a tank. In 1940, both the rival armies fought the Battle of France with tanks armed to a 75-mm standard, and the Germans had already experimented with the 88-mm gun in a turret. In June 1940, the U.S. adopted the 75-mm gun for tanks. In the spring of 1944, as Anglo-American armies prepared for the invasion of Europe, the largest gun on an operational American tank was still a short-barrelled, low-muzzle-velocity 75-mm, the standard armament of the then-standard M4 Sherman tank. At the same time, Germany's Panther tanks carried long-barreled, high-muzzle-velocity 75s, and the Tiger carried the 88-mm gun. To kill tanks, American

doctrine relied on the tank destroyer, a fast, heavily-gunned, lightly-armored vehicle standardized as the M10 in 1942. It mounted a 3-inch, high-muzzle-velocity, flat-trajectory gun on a Sherman chassis. The need for more power to cope with German tanks brought the M18, with a 76-mm gun, into service in 1944. The M18 had a shallow open turret and was mounted on a M24 light tank chassis. The M36, an M10 redesigned to accommodate a 90-mm gun, came into service about the same time. On none of these vehicles was the armor comparable to that of German tanks. Tank destroyers, appropriately armed to be "killer tanks," lacked the armor to stand up to German tanks for the fight.

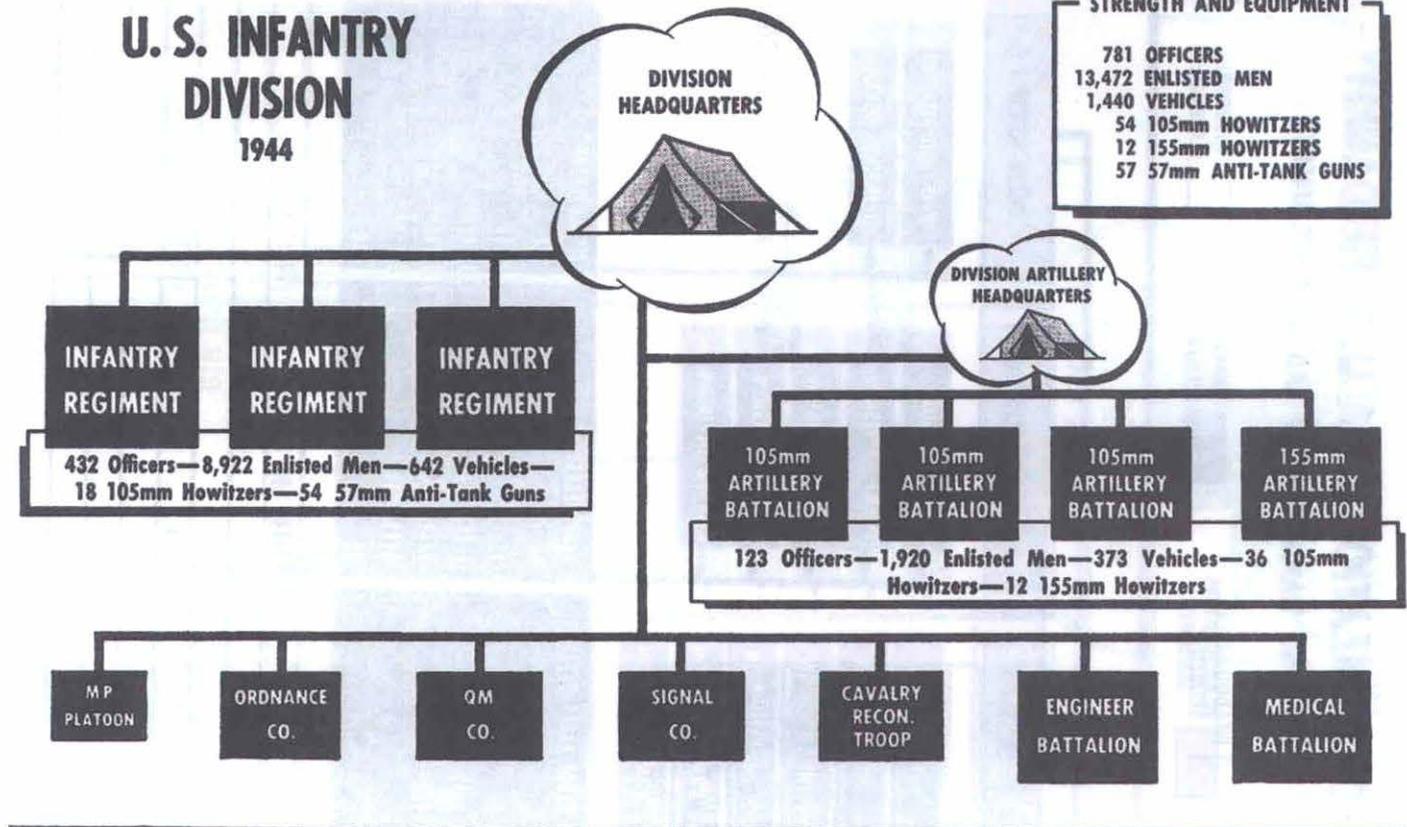
**Inferior American anti-tank weapons.** Anti-tank weapons were a similar case. The American 2.36-inch rocket launcher, or "bazooka," was too small to penetrate the front armor of German tanks and demanded careful aim against soft spots. This was no easy chore for an exposed, nervous infantryman when a massive German tank loomed so close that he could hear the squeak of the bogies. The Germans adopted an 88-mm Panzerfaust, a rocket-propelled shaped-charge grenade that was about twice as powerful as the American bazooka. When James M. Gavin was a colonel commanding the 505th Parachute Infantry, his men tried out the bazooka in Sicily and found it disappointing. Gavin later wrote that "As for the 82nd Airborne Division, it did not get adequate antitank weapons until it began to capture the first German Panzerfausts. By the fall of '44 we had truckloads of them. We also captured German instructions for their use, made translations, and conducted our own training with them. They were the best hand-carried antitank weapon of the war." The U.S. did not even initiate a project for a more powerful, 3.5-inch rocket until August 1944.

**American firepower edge: M1 rifle and artillery fire direction.** In two areas, however, the United States had a distinct advantage. The Garand .30-caliber M1 semi-automatic was the best standard infantry shoulder arm of the war. No other rifle matched its combination of accuracy, rate of fire, and reliability. In artillery the American Army also had the edge. It was not that the artillery was qualitatively better than German equipment, although the U.S. 105-mm howitzer was at least the equal of its German counterpart of the same caliber. The effectiveness of American artillery was multiplied by the best equipment and techniques of any army for fire direction, observation, and coordination. "I do not have to tell you who won the war," George Patton said in 1945. "You know our artillery did." General George C. Marshall agreed when he wrote that "We believe that our use of massed heavy artillery fire was far more effective than the German techniques," concluding that "our method of employment of these weapons has been one of the decisive factors of our ground campaigns throughout the world."



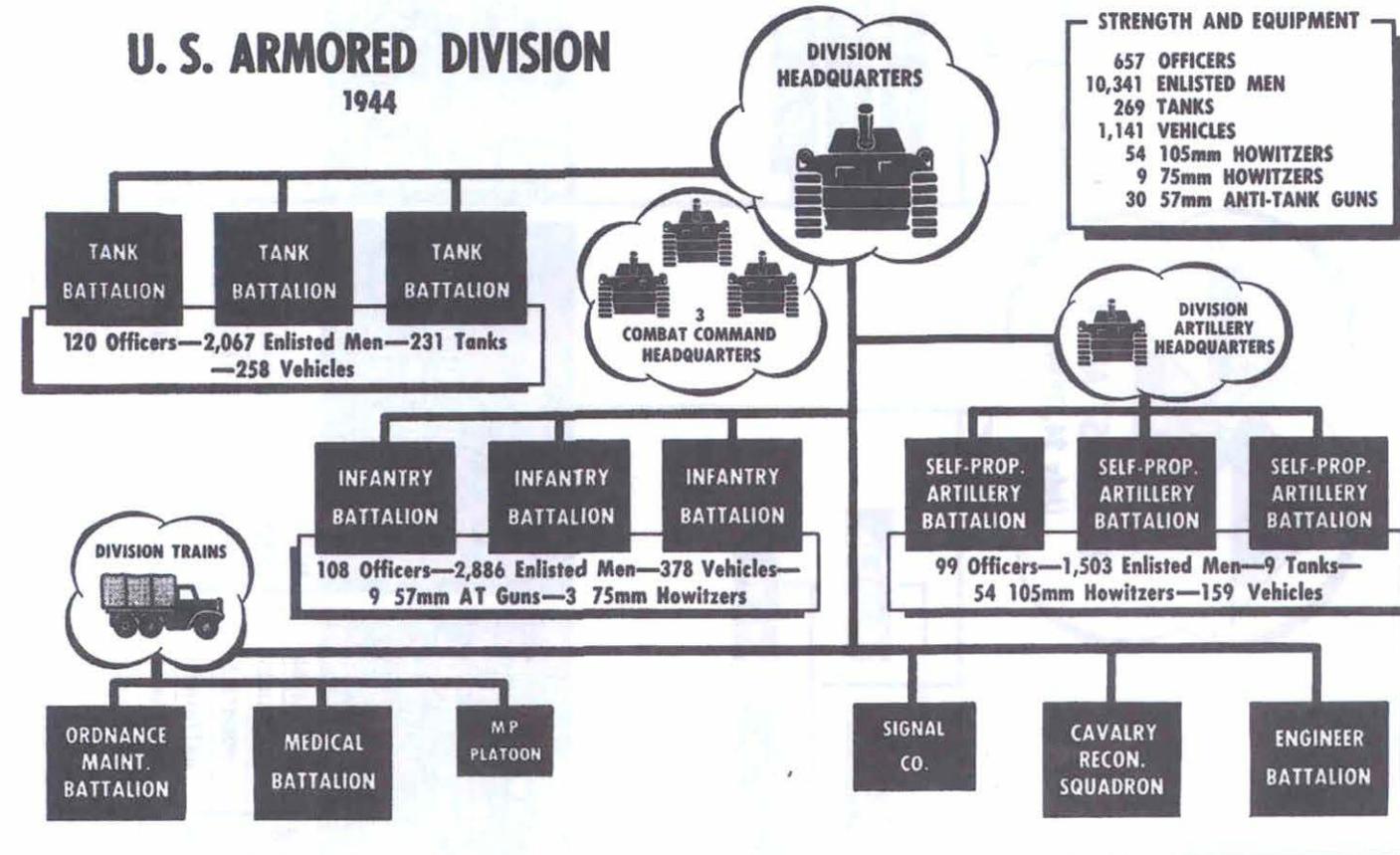
# U. S. INFANTRY DIVISION

1944

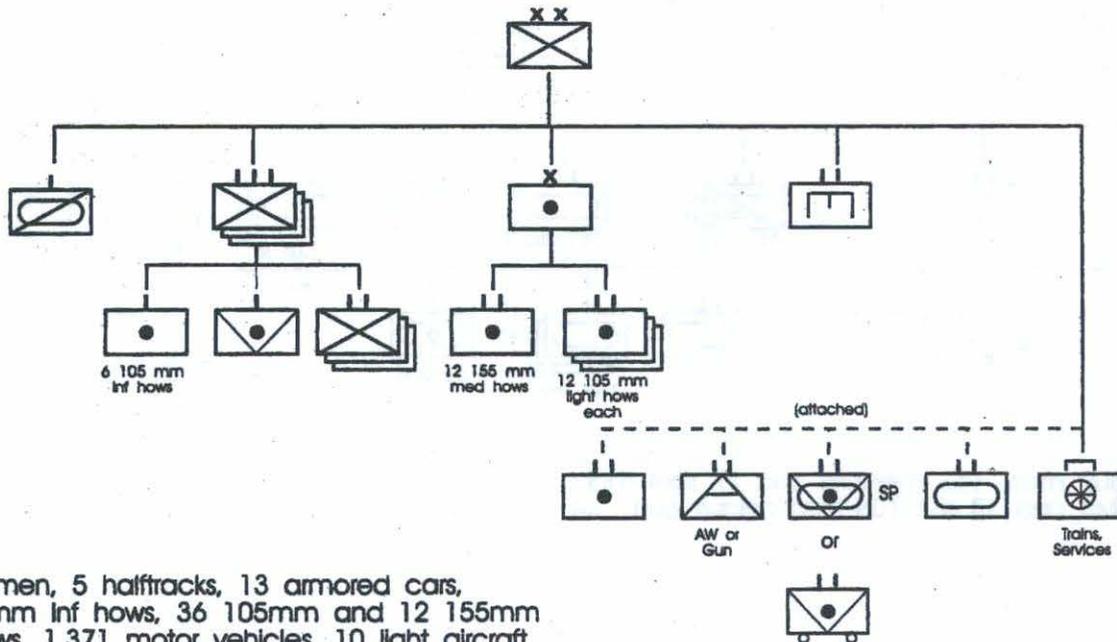


# U. S. ARMORED DIVISION

1944

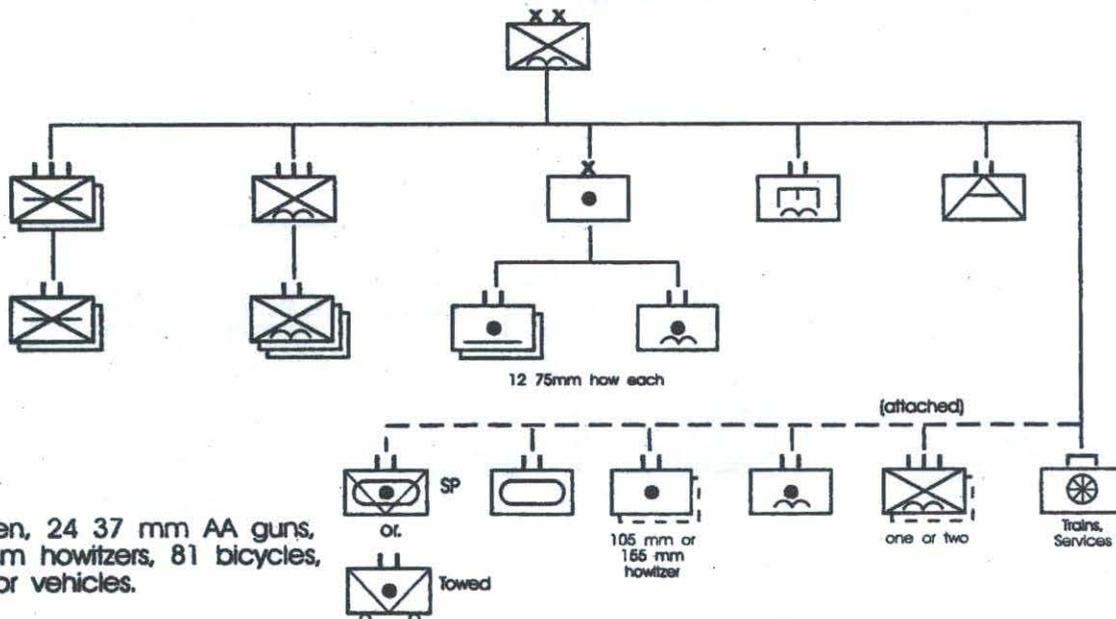


## US Infantry Division



14,253 men, 5 halftracks, 13 armored cars,  
 18 105mm Inf hows, 36 105mm and 12 155mm  
 field hows, 1,371 motor vehicles, 10 light aircraft.

## US Airborne Division

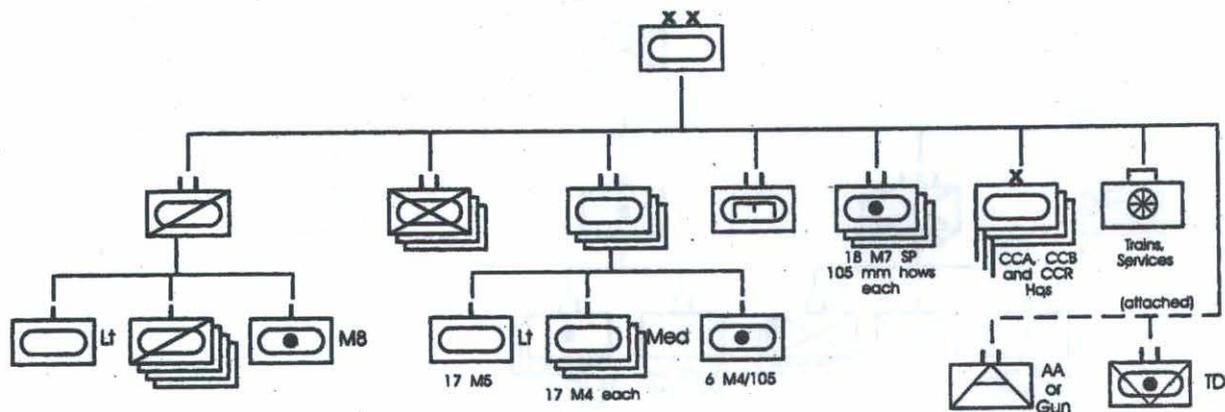


8,600 men, 24 37 mm AA guns,  
 36 75 mm howitzers, 81 bicycles,  
 392 motor vehicles.

Note that the 82d and 101st Airborne had attached two parachute infantry regiments, each, along with a parachute field artillery battalion. Each of these divisions also contained a single three-battalion glider infantry regiment.

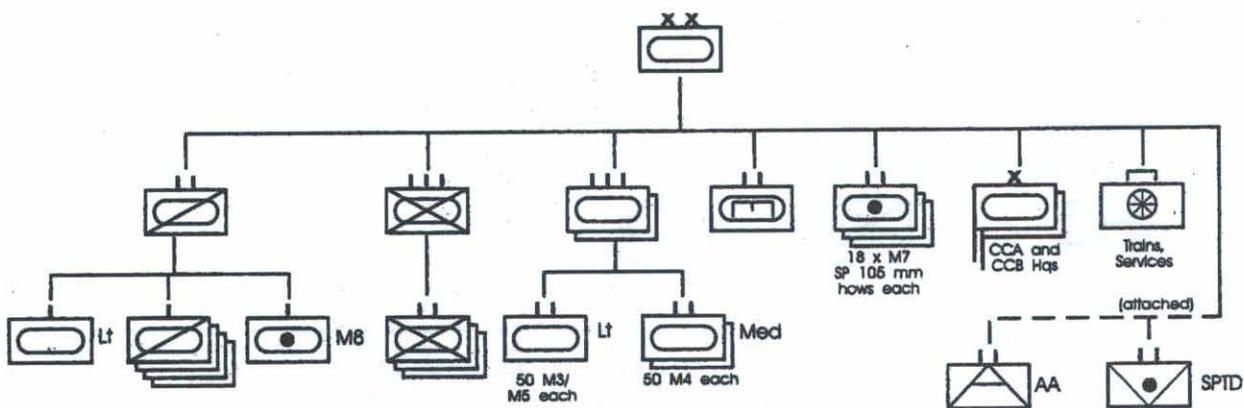
The 17th Airborne had two glider and two parachute regiments, and three artillery battalions. The 17th Airborne thus contained 11,000 men, and the other two divisions about 13,500 apiece.

## US Armored Division



10,500 men, 168 medium and 77 light tanks, 450 halftracks, 54 SP M7 105 mm howitzers, 17 M8 and 18 M4 105 mm assault guns, 54 armored cars, 1,031 motor vehicles, 8 light aircraft.

## US "Heavy" Armored Division



14,500 men, 232 medium and 158 light tanks, 640 halftracks, 54 SP 105 mm howitzers, 18 M4 105 mm and 14 M8 75 mm how. assault guns, 54 armored cars, 1,242 motor vehicles.



**Thirteen Commanders of the Western Front**

***Front row, L to R: Lt. Gen. Patton, Lt. Gen. Bradley, General Eisenhower, Lt. Gen. Hodges, Lt. Gen. Simpson.***

***Second row: Maj. Gen. Kean, Maj. Gen. Corlett, Maj. Gen. Collins, Maj. Gen. Gerow, Maj. Gen. Quesada.***

***Third row: Maj. Gen. Allen, Brig. Gen. Hart, Brig. Gen. Thorson.***

***Photographed in Belgium, 10 October 1944***

# ***Biographical Sketches - Senior US Commanders***

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## **General of the Army Dwight David Eisenhower Supreme Commander, Allied Expeditionary Forces**



Promoted to five star rank on the eve of the German counteroffensive through the Ardennes, Eisenhower was the senior officer in the European Theater of Operations and commander of the Allied coalition against Hitler. Born in the little east Texas town of Denison in 1890, he graduated from the U. S. Military Academy at West Point in 1915 with a commission in the infantry. World War I brought the temporary rank of lieutenant colonel and service with training the Army's new tank corps, but Eisenhower was disappointed that he never had the chance to command in France during the fighting. He was promoted to major in 1920 and held that rank through the next sixteen years of service in the small interwar Army, serving in various staff positions and, occasionally, with troops. He did not command a battalion until 1940. The key to his professional development was an early assignment in Panama with Brig. Gen. Fox Conner, operations officer on General John J. Pershing's staff during

World War I in France and at that time commanding an infantry brigade. Conner tutored Eisenhower in the military art and, most significantly, caused him to think deeply about the problems of coalition command. After graduating from the Command and General Staff School at Fort Leavenworth, the acknowledged portal to future advancement, and two years later from the Army War College, Eisenhower served on the War Department General Staff, where he worked in the Office of the Chief of Staff while Douglas MacArthur led the Army. He subsequently worked again for MacArthur in the Philippines and returned to the United States as a lieutenant colonel in 1939 for battalion command in the 15th Infantry, duty as regimental executive officer, and then as chief of staff of the 3rd Infantry Division. Thereafter, Eisenhower became chief of staff of the newly-activated IX Corps and then of Third Army. It was in that position that he first gained national attention, being credited with the battle plan by means of which Lt. Gen. Walter Kruger's Third Army decisively defeated Lt. Gen. Ben Lear's Second Army in the famous Louisiana Maneuvers of 1941.

Almost immediately, Army Chief of Staff George C. Marshall summoned Eisenhower to Washington, where he soon made the younger man chief of the War Plans Division of the general staff and quickly promoted him to major general. Developing plans that were then in formulation,

Eisenhower sketched the basic strategy of establishing a base in the United Kingdom and attacking Germany by amphibious landings in France. In June 1942, Marshall named him the commanding general of the new European Theater. In only a few months, Eisenhower had earned Marshall's full trust. Marshall saw in him a man who had the vision to execute the strategy that the Allies had agreed upon. After commanding the 1942 Allied landings in North Africa and the subsequent campaign in Tunisia, Eisenhower went on to command the Allied assault on Sicily and the Italian mainland, in the process gaining valuable experience not only in coalition command, but also in the difficult problems of amphibious operations. At the end of 1943, he was named Supreme Allied Commander for the invasion of Europe and directed the SHAEF effort to "utilize the resources of two great nations . . . with the decisiveness of a single authority." This was never easy, but in Eisenhower, President Franklin Roosevelt and Prime Minister Winston Churchill found a man whose single-minded dedication to the goal of Allied unity was equal to the task. Following the success of the Allied landings at Normandy on 6 June 1944, the buildup of the beachhead, the breakout at St. Lo, the destruction of a large part of the German Army in the west in the Falaise Pocket, and the race across France in September, 1944, Eisenhower's armies stood on the very frontiers of the Reich by the early fall -- far ahead of the most ambitious predictions of staff planners. It was at that point that a shortage of supplies imposed by a paucity of good ports and overextended lines of supply from the Norman beaches caused the Allies to pause and allowed the Germans to regroup and solidify their defenses along the *Westwall* fortifications, known to Americans as the Siegfried Line

Eisenhower's perpetual good humor was often strained by the problems involved in keeping the Allied coalition firmly wedded to a single strategy, and in coping with the strong personalities of many of his subordinates. His perennial problems were Field Marshal Sir Bernard Law Montgomery, commander of British 21st Army Group, and Lt. Gen. George S. Patton, Jr., commander of Third U.S. Army -- two men who were, as General Omar N. Bradley remarked in 1978, "two sides of the same coin." Some British commanders, and in particular Montgomery and his mentor, Field Marshal Sir Alan Brooke, Chief of the Imperial General Staff, saw Eisenhower as "a nice chap; no general," and thought him unsuited to command the ground battle, although they agreed he was superb at the political level. American commanders, including Patton and Bradley, often complained that Eisenhower forgot that he was an American and was unable to say no to Montgomery. By November of 1944, however, Eisenhower had firm control of SHAEF and imposed his will in his subordinates. Although at least one major disagreement lay in the future, he had disposed of Montgomery's often-expressed preference for a single thrust toward Berlin and insisted on a broad-front strategy with the industrial heartland of Germany as the ultimate goal.

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## Lieutenant General Omar Nelson Bradley Commanding General, 12th U.S. Army Group

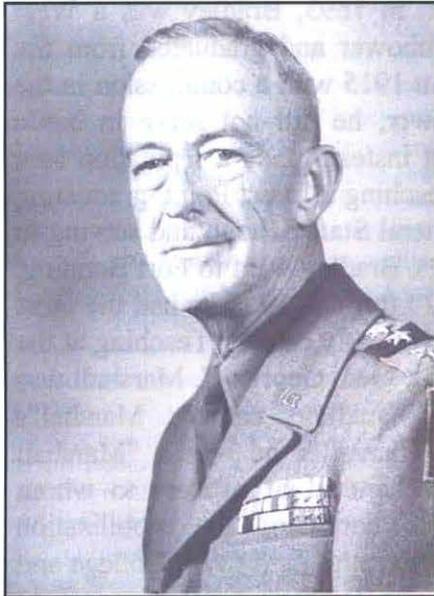


Born in Clark, Missouri, in 1893, Bradley was a West Point classmate of Eisenhower and graduated from the U.S. Military Academy in 1915 with a commission in the infantry. Like Eisenhower, he did not serve in battle during World War I, but instead made a reputation as a trainer of troops. After teaching at West Point, graduating from Command and General Staff School, and serving in various troop assignments, Bradley went to Fort Benning, Georgia, where from 1929 through 1933 he had the most important assignment of his early career. Teaching at the infantry school while Brig. Gen. George C. Marshall was assistant commandant, Bradley earned Marshall's confidence and regard. Thereafter he was a "Marshall man," one of the select handful of officers to whom Marshall later looked to command the mobilization Army. After graduating from the Army War College and again serving at West Point, Bradley in 1938 served on the War Department General Staff. Marshall promoted

him over the grade of colonel to brigadier general in 1941 and made him commandant of the Infantry School. Soon, he commanded both the 82nd and 28th Infantry Division during their training and, as a major general, went overseas to serve with Eisenhower in North Africa. There, he took command of II Corps during the battles in Tunisia and, promoted to lieutenant general, led that corps in the invasion of Sicily in 1943. At that time, he was under command of Lt. Gen. George S. Patton, Jr., who led Seventh Army. Selected by Eisenhower as the American ground commander for the invasion of Europe, Bradley went to England and took over First U.S. Army, commanding it in the assault at Normandy and the exploitation from the beachhead. With the activation of 12th Army Group in July, 1944, Bradley moved up to a command that included First Army and Third Army, under command of Patton (by then Bradley's subordinate), and eventually of the Ninth Army (in September 1944) and Fifteenth Army (after the Battle of the Bulge) in the advance across France and to the borders of Germany. Bradley's 12th Army Group eventually numbered 1.3 million men, the greatest force ever to serve under one American field commander.

Bradley ran the Veterans Administration at the end of the war and became Chief of Staff of the Army in 1948. In 1949 he was promoted to the rank of General of the Army and became the first Chairman of the Joint Chiefs of Staff. He held that post through the Korean War until he retired in 1953. He wrote his war memoir, *A Soldier's Story*, in 1951, and subsequently authored another memoir in collaboration with Clay Blair. He died in New York City in 1981.

## Major General Courtney H. Hodges Commanding General, First U.S. Army



Courtney Hodges was born in Perry, Georgia, on 5 January 1887 and entered the U. S. Military Academy in 1904 at the age of seventeen. Not well grounded academically, he was “found” deficient in mathematics and resigned after one year. Had he graduated, he would have been a member of the Class of '08 and, as such, some seven years senior to the men under whom he eventually served in Europe, Bradley and Eisenhower, both members of the Class of '15. On 5 November 1906, Hodges enlisted in the Army as a private and—a great rarity of the pre-World War I Army—earned a commission from the ranks in 1909, just one year behind his USMA classmates. In 1916, he took part in the Punitive Expedition into Mexico against Pancho Villa.

During World War I, he won a Distinguished Service Cross and a Silver Star during the Meuse-Argonne offensive of 1918 and rose to the rank of temporary lieutenant colonel, commanding an infantry battalion in the 5<sup>th</sup> Infantry Division. In the last days of the war, he personally led a reconnaissance across the Meuse River and into the main German battle positions. In forty hours of battle, his position became the spearhead of the attack that finally put the Army across the Meuse in force.

Hodges met Bradley when they taught at West Point together from 1920-1924, where then-Maj. Hodges was a member of the Tactical Department. Bradley commented that he was perhaps the first non-graduate to teach tactics to cadets and “ironically, he was a profound inspiration to the very corps that had earlier rejected him.” Bradley thought him the “quintessential Georgia gentleman,” and the most modest man he had ever met. Hodges was an exceptional marksman and was at that time the Army’s leading light in the national rifle matches.

While George C. Marshall was Assistant Commandant at the Infantry School—the famous “Benning Renaissance” of 1927-1930—Hodges served there as a member of the Infantry Board and made a strong favorable impression on Marshall. While there, the already close friendship with Omar Bradley, who was also a member of the faculty, flourished. In 1933-1934, Bradley and Hodges were classmates at the Army War College. Thereafter, Hodges served in the Philippines before returning to the United States in 1941 to become Chief of Infantry, and therefore responsible for the organization and training of what the Army still saw as its primary arm. In 1943, Hodges assumed command of Third U.S. Army from Lt. Gen. Walter Krueger. He did well in that assignment, convincing Marshall that, despite his age—he was fifty seven—he was not too old to go to war. Hodges arrived in Europe to understudy Bradley as deputy commanding general of First Army and ultimately to take command when Bradley was promoted to command 12<sup>th</sup> Army Group. Bradley and Hodges were alike in many ways, and thought much the same way about fighting the war. That prompted some to remark that, when Hodges took over First Army from Bradley, “the new broom swept nothing.” Bradley’s aide de camp, Maj. Chet Hansen, commented that Hodges was not an inspiring presence as a soldier, looking “like a small town banker in uniform.” Bradley,

he thought, exuded confidence and firmness. Hodges, on the other hand, seemed “more worrier than warrior.” That was the view of many of his subordinates. Maj. Gen. Charles Corlett, XIX Corps commander, complained that Hodges didn’t understand what was really going on in the depleted infantry divisions that were fighting in the Huertgen Forest, despite his frequent telephonic demands for information. Hodges, moreover, clearly played favorites, a fact that his subordinates couldn’t fail to note. He doted on Maj. Gen. Joe Collins, VII Corps commander. Hodges and Corlett, on the other hand, barely could exchange a civil word. Others saw Hodges differently. Maj. Gen. James M. Gavin delivered a complimentary verdict that still said nothing about his virtues as an Army commander:

I had served under Hodges earlier in the Philippine Islands in the 1930s. He was a fine Soldier with a distinguished record in World War I, quiet in manner and thoughtful and considerate in his relations with his subordinates. He was highly regarded in the peacetime army.

Even with their years of friendship and mutual esteem, Bradley remained concerned about Hodges and his abilities. “I began to fret privately,” he wrote years later, because “Courtney seemed indecisive and overly conservative. I hoped that my veteran First Army staff—Bill Kean in particular—would keep a fire under him.” Eisenhower seems to have shared the same worries, fearing that Hodges, separated from First Army staff, might lack drive.” Ultimately, however, assessing the comparative merits of his major commanders, Bradley concluded that Hodges “was on a par with George Patton, but owing to his modesty and low profile, he has been all but forgotten.”

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## Major General Leonard T. Gerow Commanding General, V Corps



Born in Petersburg, Virginia, Leonard T. (Gee) Gerow was a 1911 graduate of the Virginia Military Institute. A good friend of Bradley and Eisenhower, he served in the Punitive Expedition and in France in World War I, winning the Distinguished Service Medal. Bradley and Gerow met in 1924 when they were classmates in the Advanced Infantry Course at Fort Benning. He graduated first in the class; Bradley, second. Marshall selected Gerow to head War Plans Division of the WDGS. “He was an outstanding gentlemen and soldier—cool, hard-working, intelligent, well organized, competitive—clearly destined for high rank and responsibility.”

In March of 1939, Gerow became chairman of the special board for the development of tactical doctrine at Fort Benning, and then was Chief of Staff of the Provisional 2<sup>nd</sup> Division (later 2<sup>nd</sup> Infantry Division) at Fort Sam Houston. He remained in that position until the end of 1939. Gerow was a senior

control officer with Third Army during the 1940 Louisiana maneuvers. After promotion to Colonel, he was assistant commandant of the Infantry School.

Gerow was promoted to brigadier general in October 1940, well before Patton, Clark, Spaatz, or Eisenhower, and was assigned to duty with the 8<sup>th</sup> Infantry Division at Fort Jackson. In December of that year, he became Chief, War Plans Division, WDGS.

Gerow remained at War Plans until February of 1942, when he was promoted to major general and took command of the 29<sup>th</sup> Infantry Division at Fort Meade. He took the division to England in October 1942, and was subsequently appointed Commander of Field Forces, European Theater of Operations.

At the age of 53, Gerow took command of V Corps in July of 1943. At that time, he was one of the youngest generals to be given command of a major American formation. He commanded V Corps during all of its operations from Omaha Beach on D-Day through January of 1945. These operations included Normandy; the Breakout; the liberation of Paris, during which event he was the first American general to enter that city; the capture of Compeigne, St. Quentin, Charlesville, Sedan, Bastogne, and the city of Luxembourg; penetration of the Siegfried Line; the Huertgen Forest, and the Battle of the Bulge. Gen. Omar Bradley considered Gerow one of his most trustworthy subordinates.

Gerow was promoted to lieutenant general on 1 January 1945 and assumed command of the Fifteenth Army on 15 January. Upon his return to the United States that year, he became Commandant of the Command and General Staff School, where he remained until January of 1948, when he assumed command of Second Army at Fort Meade.

Gerow retired on 31 July 1950. He was temporarily recalled to active duty in April 1951 and served as a member of the Army Logistical Support Panel in the Office of the Chief, Army Field Forces, Fort Monroe, Virginia. While in retirement, Gerow was promoted on the retired list to the rank of general, under the Act of 19 July 1954. He died at Fort Lee, Virginia, on 12 October 1972 and was buried in Arlington Cemetery.

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## **Major General Joseph Lawton Collins Commanding General, VII Corps**

Born in New Orleans in 1896, Collins graduated from West Point in 1917. He did not serve in the AEF but was ordered to duty with the Third Army in occupation of Germany in May of 1919. He taught at West Point from 1921 through 1925 and then attended the Infantry School at Fort Benning. From 1927 through 1931, he was an instructor at Benning. Promoted to major in 1932, Collins was next a student to the Command and General Staff School in 1933, whereupon he was ordered to the Philippines. He graduated from the Army Industrial College in 1937 and the Army War College in 1938, serving as an instructor there until 1941. In that year, he was appointed as chief of staff of VII corps in Alabama.



After the attack on Pearl Harbor, Collins became chief of staff to Maj. Gen. Delos C. Emmons, commander of the Hawaiian Department. Promoted to temporary brigadier general in 1942, Collins took command of the 25<sup>th</sup> Infantry Division and led it in battle at Guadalcanal and New Georgia, establishing a reputation as an effective and vigorous combat commander. In March of 1944, he was ordered to England, where he assumed command of VII Corps for the Normandy landings. VII Corps landed at Utah Beach and then secured the Cotentin Peninsula and the port of Cherbourg in June and July. In July, VII Corps was the spearhead for the breakout at St. Lô and played a major part in the envelopment of German Seventh Army at Falaise.

Young, attractive, vigorous, and well-spoken, Collins was a good corps commander who consistently delivered results. As a consequence, he was Omar Bradley's favorite commander and a particular favorite of Eisenhower's. Hard driving and able, he had a gift for appearing at the correct point on the battlefield to influence events, as he demonstrated particularly at La Fiere, behind Utah Beach, where he

orchestrated the resources of VII Corps to support a river crossing at a critical moment.

He was impatient with those who lacked his mental agility, however, and was quick to relieve officers from command, occasionally impulsively. In fact, far more division commanders were relieved of command in VII Corps than in any other corps in the European Theater of Operations.

Collins became Chief of Staff of the Army in 1949, succeeding Bradley. He remained in the Army at Eisenhower's request after that tour was over as the U.S. Representative on the Military Committee and Standing Group of NATO, 1953-1956. He was briefly Eisenhower's personal representative to Vietnam with the rank of ambassador. He retired in 1956. Collins died in Washington, D.C., on 12 September 1987.

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## **Major General Charles Hanson Corlett Commanding General, XIX Corps**

Charles H. Corlett was born in Nebraska in 1889 and was commissioned into the infantry from the United States Military Academy in 1913. During World War I, he served in the Signal Corps in the American Expeditionary Forces. He resigned from the Army in May of 1919 and became the manager of a cattle company until 1920, when he reentered the service. He was an instructor at the Coast Artillery School in 1925 and 1926 and at Command and General Staff School from 1927 through 1931. He served on the War Department General Staff from 1934 through 1938. From 1938 to 1940, he was Provost Marshal in Hawaii. In 1940 and 1941, he commanded the



30<sup>th</sup> Infantry Regiment, and then was chief of staff of IX Corps. Corlett was promoted to brigadier general in September of 1941 and to major general in September of 1942.

From 1942 through 1943, he was commanding general of Task Force Kiska, for the fighting in the Aleutian Islands. In 1944, he commanded 7<sup>th</sup> Infantry Division with great success in the fighting at Kwajalein island. In part because of his experience with amphibious operations, he was then reassigned to the European Theater of Operations, to assist in the landings in Normandy. Corlett assumed command of XIX Corps in 1944 and commanded it until 1945, when he took command of XXXVI Corps. During the war, he was decorated with the Distinguished Service Medal with second Oak Leaf Cluster, the Silver Star, and the Legion of Merit.

Corlett did not find a warm reception when he arrived in England. The commanders planning Operation OVERLORD were frankly uninterested in using the fruits of his experience with amphibious operations in the Pacific. As a consequence, Corlett was sensitive about the regard in which he was held and did not seem to get on very well with his Army commander. Difficult personal relationships were not enhanced by the fact that he was ill soon after his arrival in Europe, evidently of serious high blood pressure. Throughout the fighting in Normandy, Corlett felt neglected by Bradley and Hodges and was jealous of the intimate relationship both of his superiors had with the VII Corps commander, Collins. Throughout the fighting in France, Corlett was, among the Corps commanders, the “odd man out.”

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## **Major General Norman D. Cota** **Commanding General, 28<sup>th</sup> Infantry Division**

Norman D. Cota was born 30 May 1893 at Chelsea, Massachusetts, and graduated from the United States Military Academy in April, 1917. An infantryman, he was first assigned to training duty in the United States, and then as an instructor at the Military Academy, entirely missing overseas duty in World War I. From 1920 through 1924 he served principally as a finance officer. Cota graduated from the Army War College in 1936.

From 1938 to 1940, he taught at the Command and General Staff School. In November, 1940, he became executive officer of the 16<sup>th</sup> Infantry at Fort Jay, New York, followed in March of 1941 by assignment as G-2 of the 1<sup>st</sup> Infantry Division. In July of 1941, he became divisional G-3, a post he held until June of 1942. While assigned as G-3, he devised and carried out extensive amphibious training exercises for the division. He became division Chief of Staff in June of 1942, while the division was preparing for movement overseas.



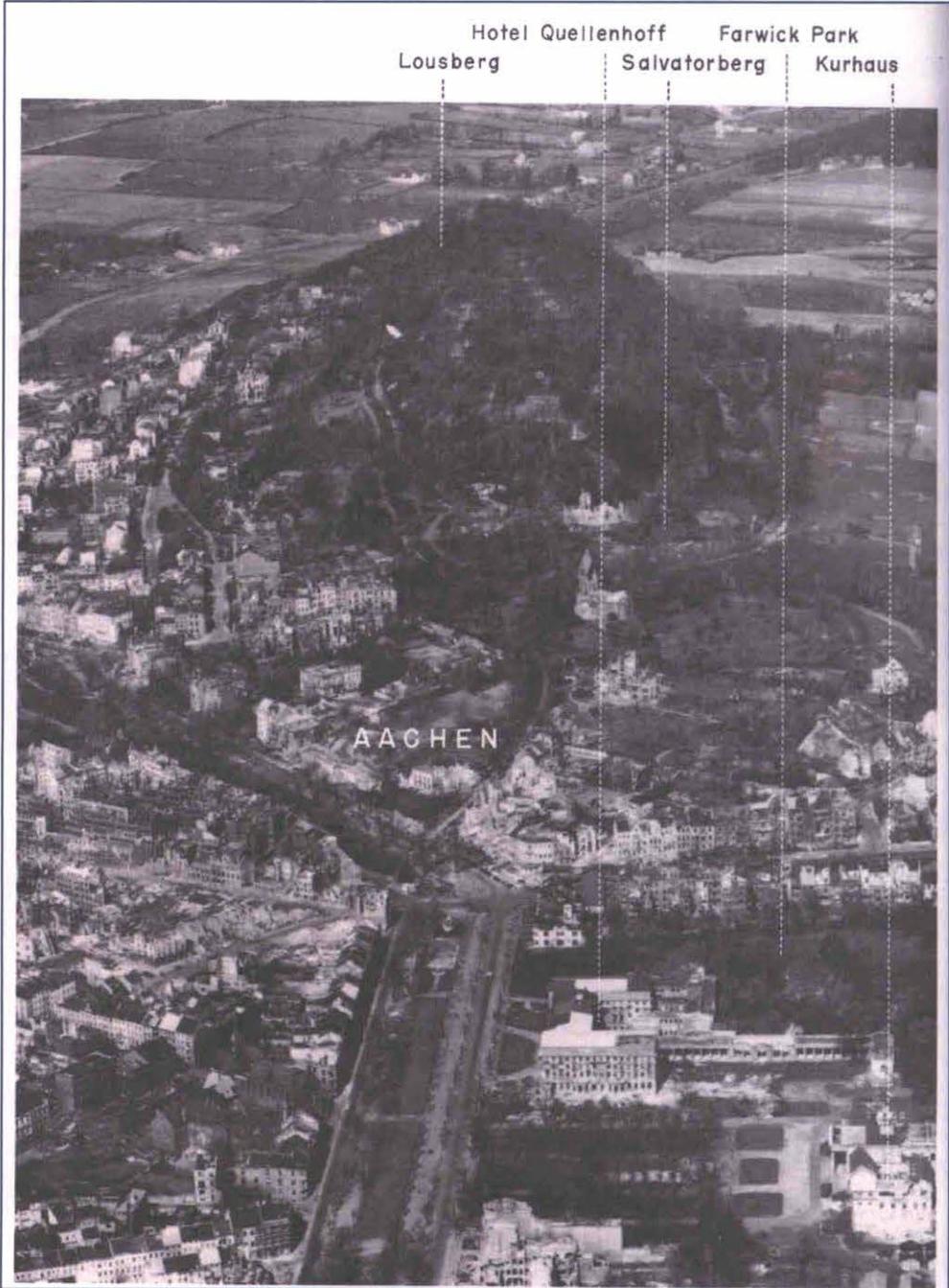
In February of 1943, he was promoted to brigadier general and assigned to British Combined Operations Headquarters in London. Through the spring and summer of 1943, he represented the United States in a series of Anglo-American conferences on combined operations techniques and amphibious operations. In October of 1943, he became Assistant Division Commander of the 29<sup>th</sup> Infantry Division and began training that division for the landings in France.

Cota distinguished himself through personal gallantry while serving as Assistant Division Commander of the 29<sup>th</sup> Infantry Division during the Normandy landings, and was decorated with both the Distinguished Service Cross and the British Distinguished Service Order.

A member of his Weapons Section while teaching at the Infantry School in 1930, Cota had known Bradley for years. For his part, Bradley considered Cota a good friend. After relieving Maj. Gen. Lloyd Brown from command of the 28<sup>th</sup> Infantry Division during the hedgerow fighting in France,

Bradley assigned it to the ADC of the 9<sup>th</sup> Infantry Division, who was mortally wounded a few hours after taking command. His next choice, in August, was Cota, largely because of his heroism at Omaha Beach. In his postwar analysis, Bradley concluded that Cota led the 28<sup>th</sup> Infantry Division with great distinction, and that the division "soon became one of the toughest and most dependable in my command."

After the war, Cota brought the division back to the United States and was assigned in 1946 as commanding general of the Fourth Service Command at Fort Jackson. He retired as a major general in June, 1946. He died on 4 October 1971.

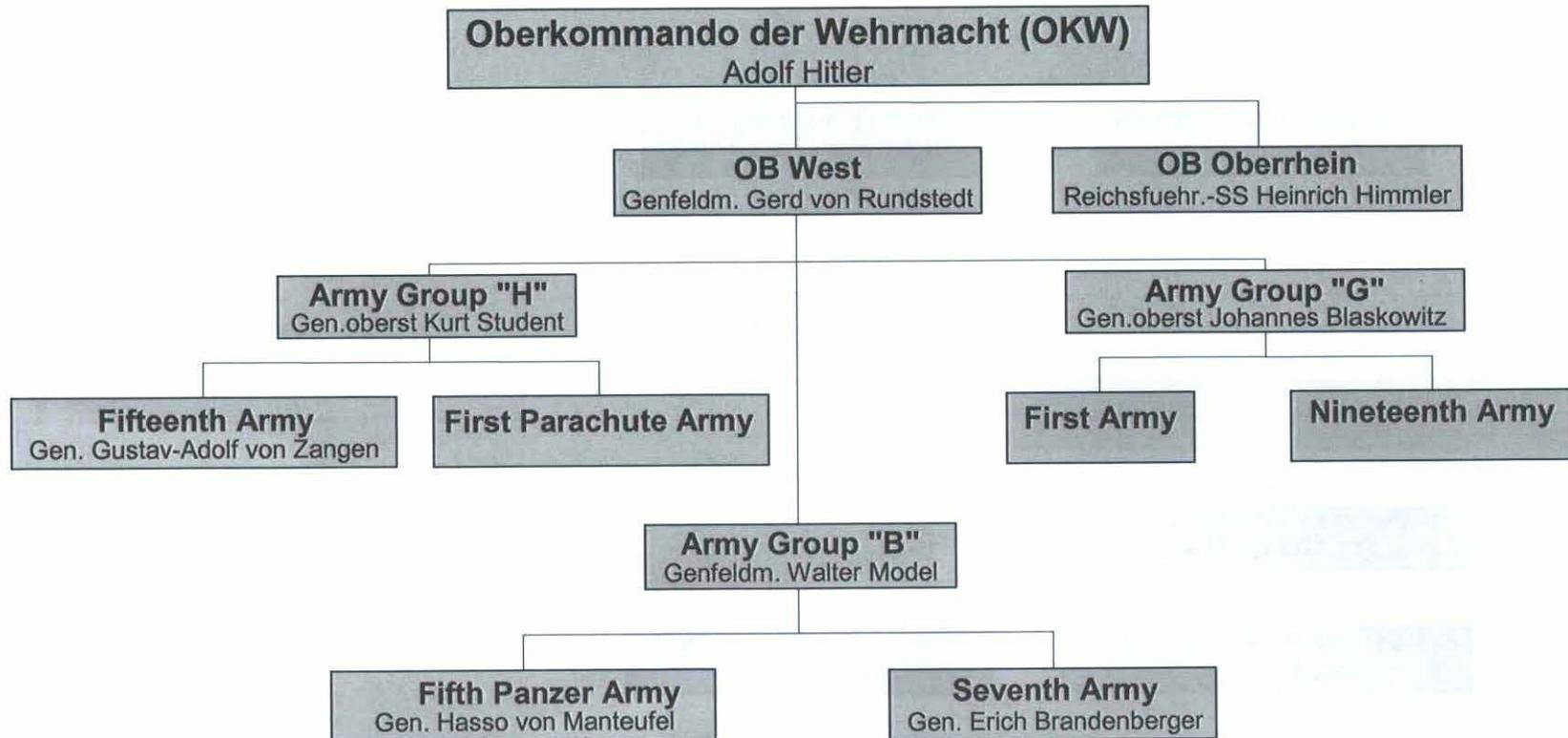


*Aerial view of Aachen*



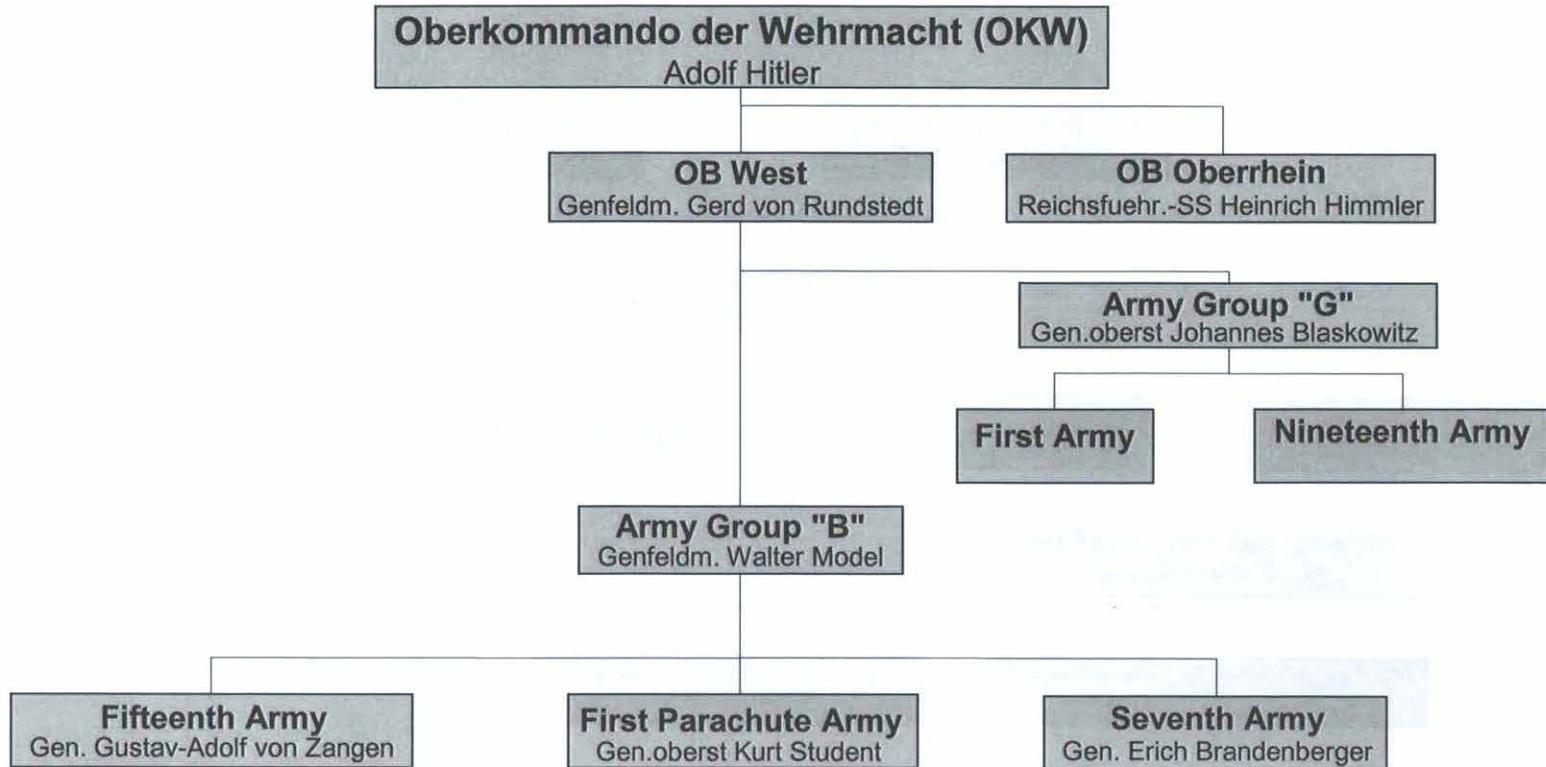
# German Command Architecture

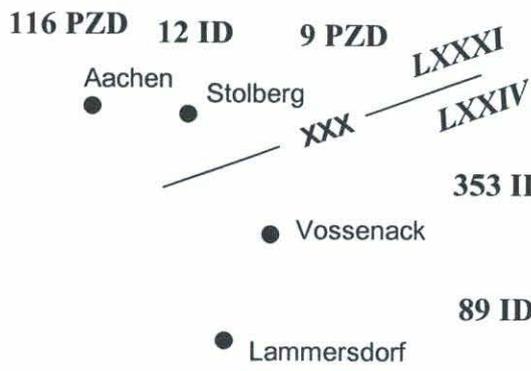
Nov-Dec '44



# German Command Architecture

Sep-Oct '44





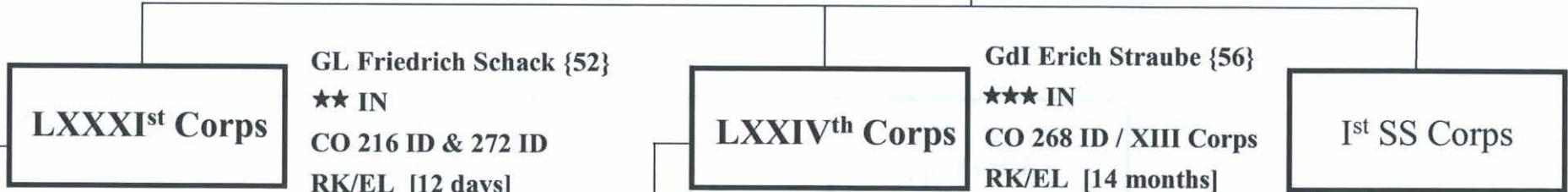
# 16 September 1944

**Army Group B**

GFM Walter Model {53}  
 ★★★★★ IN/PZ/GS  
 CO 3 PZD / XXXXI Pz Corps / 9 Army  
 RK/EL/SW/BR [30 days]

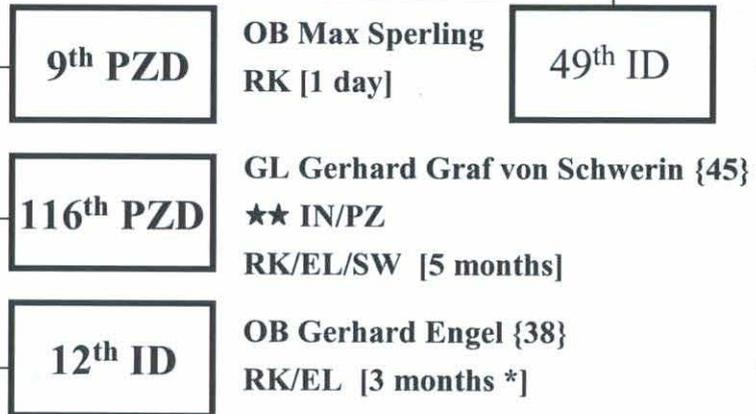


GdPZ Erich Brandenberger {51}  
 ★★★ FA/PZ/GS  
 CO 8 PZD / XVII & XXIX Corps  
 RK/EL [19 days]



GL Friedrich Schack {52}  
 ★★ IN  
 CO 216 ID & 272 ID  
 RK/EL [12 days]

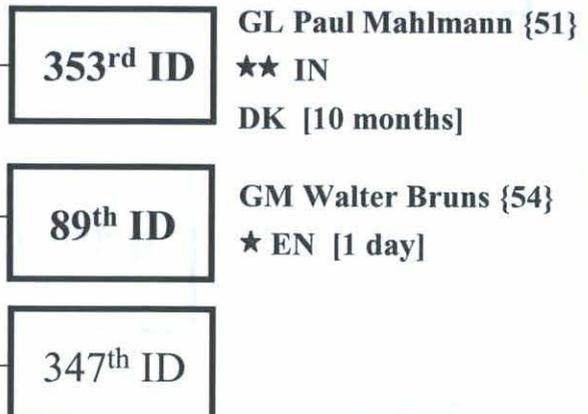
GdI Erich Straube {56}  
 ★★★ IN  
 CO 268 ID / XIII Corps  
 RK/EL [14 months]



OB Max Sperling  
 RK [1 day]

GL Gerhard Graf von Schwerin {45}  
 ★★ IN/PZ  
 RK/EL/SW [5 months]

OB Gerhard Engel {38}  
 RK/EL [3 months \*]

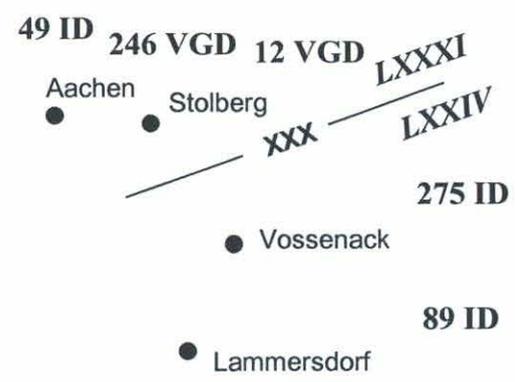


GL Paul Mahlmann {51}  
 ★★ IN  
 DK [10 months]

GM Walter Bruns {54}  
 ★ EN [1 day]

**Grade:** GFM=Field Marshal; GdPZ=General of Panzer Troops; GdI=General of Infantry; GL=Generalleutnant; GM=Generalmajor; OB=Colonel  
 ★★★★★=US equivalent  
**Branch:** IN=Infantry; PZ=Panzer; FA= Field Artillery; EN=Engineer; GS=General Staff  
 CO=formerly commanded  
**Awards:** RK=Knight's Cross; EL=Oak Leaves; SW=Swords; BR=Diamonds  
 [X]=Time in this position; {Y}=Age  
**Units:** PZD=Panzer Division; ID=Infantry Division; VGD=Volksgrenadier Division; FJD=Parachute Division

13 October 1944



**Army Group B**

**15<sup>th</sup> Army**

**1<sup>st</sup> Parachute Army**

**7<sup>th</sup> Army**

**LXXXI<sup>st</sup> Corps**

GdI Friedrich Koechling {51}  
★★★ IN/GS  
CO 254 ID / IL Mtn Corps  
RK [22 days]

246<sup>th</sup> VGD

12<sup>th</sup> VGD

49 ID

**LXXIV<sup>th</sup> Corps**

GL Hans Schmidt {49}  
★★ IN  
RK [9 months]

275<sup>th</sup> ID

89<sup>th</sup> ID

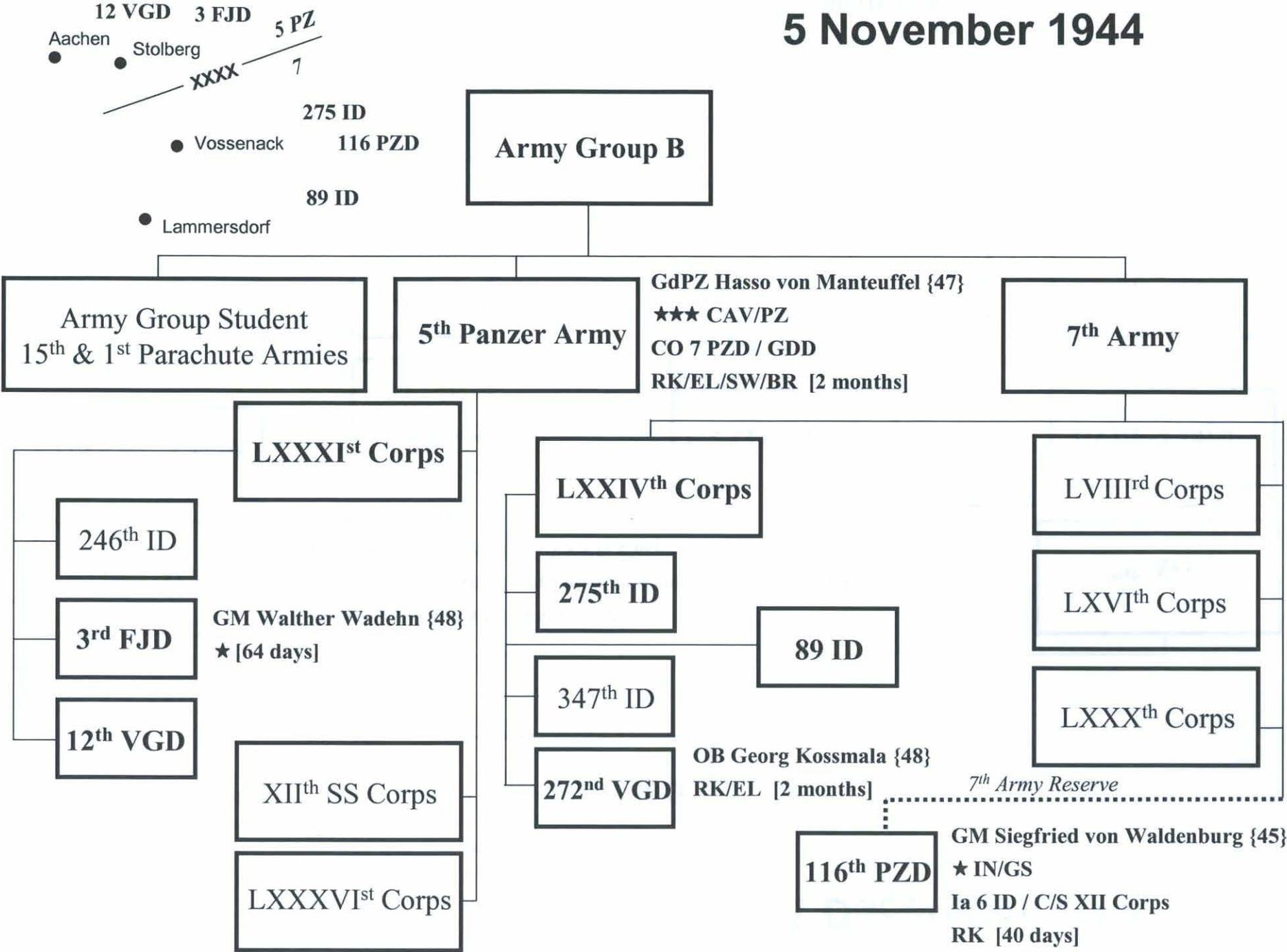
347<sup>th</sup> ID

**LXXX<sup>th</sup> Corps**

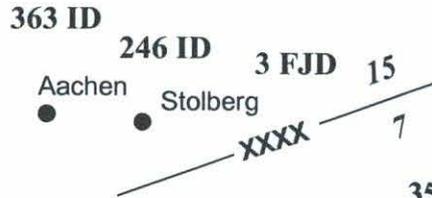
**LXVI<sup>th</sup> Corps**

**1<sup>st</sup> SS Corps**

# 5 November 1944

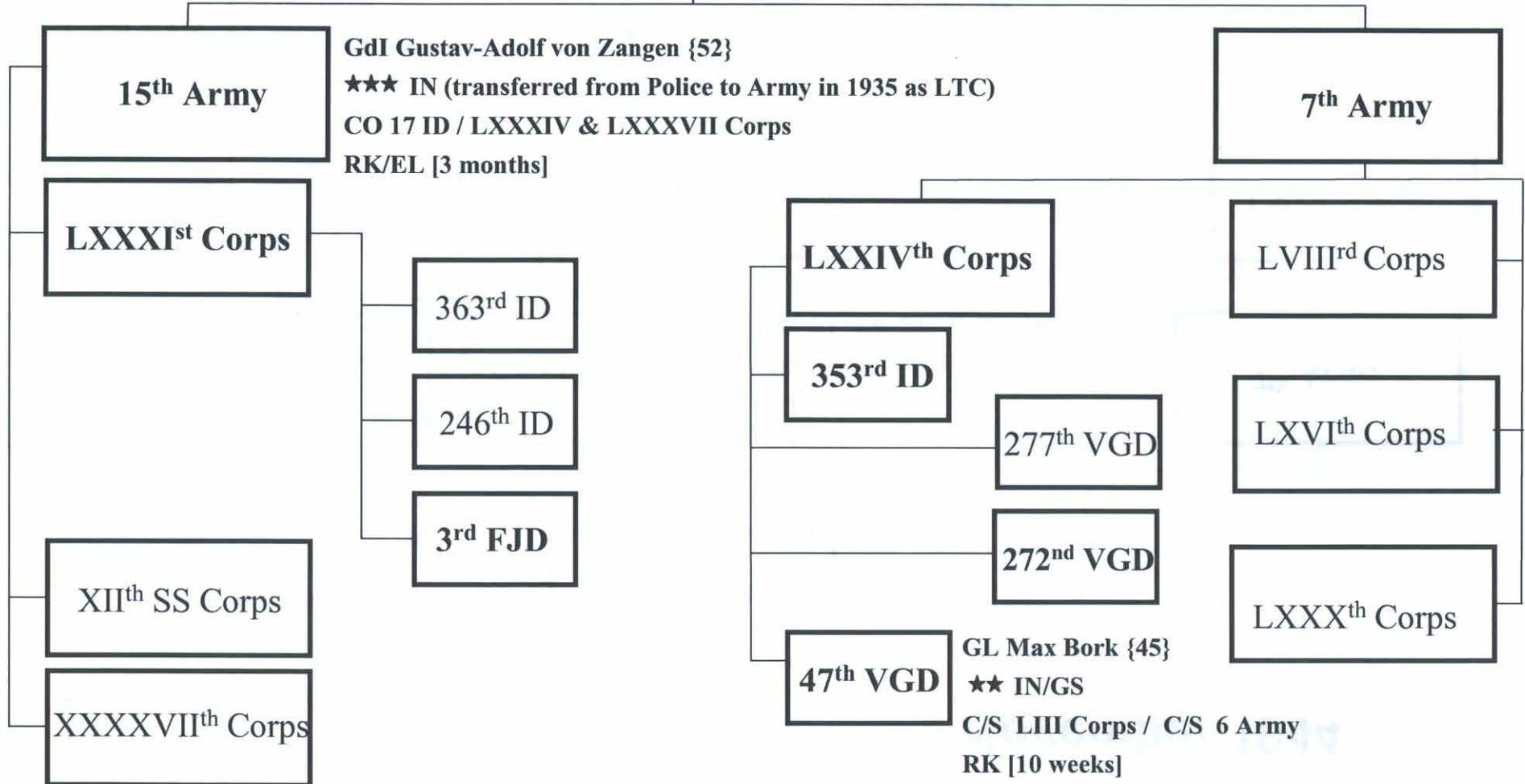


# 1 December 1944



353 ID  
● Vossenack  
47 VGD  
● Lammersdorf

**Army Group B**



## Snapshots of Selected German Divisions

**3rd Parachute Division.** Practically destroyed in Normandy, it was rebuilt in Holland from rear echelon air force ground troops. Both troops and commanders were inexperienced.

**9th Panzer Division.** A veteran division that fought in Normandy. With attached Tiger tanks, the division had just over 100 tanks by December '44.

**12th Volksgrenadier Division.** Suffered heavy losses in Russia in summer 1944. Rebuilt and fought well around Aachen.

**116th Panzer Division.** A proud unit that suffered heavy losses in Normandy and the Huertgen Forest.

**246th Volksgrenadier Division.** Virtually destroyed on eastern front, the rebuilt division also lost heavily in fall fighting around Aachen.

**272nd Volksgrenadier Division.** Virtually destroyed in Normandy and hastily rebuilt.

**277th Volksgrenadier Division.** Only about 1000 veterans. A weak division.



SCHWAMMENAUEL DAM



## THE GERMAN ARMY IN THE FALL OF 1944

The German Army in 1944 had long since passed the peak of its power. Yet no American or British soldier who had fought in North Africa or Italy would be inclined to take any part of that army lightly, not even the static, or coastal defense, divisions that had manned the fortifications along the Norman coast. According to an old British military adage, "He who has not fought the Germans does not know war." American troops agreed. During the breakout from the Normandy beachhead, Major General Raymond O. Barton, commanding the 4th Infantry Division, visited one of his battalions, urging it on with assurances that the German formation in front of it was only second rate and not much of an opponent. A young S-2 lieutenant remarked: "General, I think you'd better put the Germans on the distribution list. They don't seem to realize that."

An important part of the German Army's fighting capacity was its rigorous selection process for, and equally rigorous professional education system of, both officers and noncommissioned officers, and the ability of those men to transmit combat skills to their soldiers. German divisions demonstrated an astonishing ability to rebound in a matter of weeks from shattering casualties, as long as a reasonable cadre of the officers remained to train the replacements. A mere handful of German officers accomplished apparent miracles of training and leadership. At the beginning of the war, German officers comprised only 2.86 percent of the total army strength, and declined in relative size as the war went on. By contrast, officers were 7 percent of the total strength of the U. S. Army (growing to 15 percent by the Vietnam War). Unit consciousness and solidarity helped make the German Army an effective fighting force. German leadership capably welded individual soldiers into cohesive units such that the company was the primary group, whereas in the American Army the usual primary group was the squad or, at the largest, the platoon.

Fighting in Normandy and across France from June through September of 1944 depleted the German army in the west, literally destroying many divisions and seriously damaging more. From the equipment point of view, Field Marshal Model considered the retreat across the Seine almost as great a disaster as the Falaise Pocket. Only 100 to 120 of the 1,300 tanks and assault guns committed to the Battle of Normandy ever made it back across the Seine. The average panzer division in September had less than ten tanks. The Germans had lost an additional 15,000 vehicles of other types, with corresponding effects on tactical mobility and sustainability of forces. The paradox of Hitler's "stand fast" strategy in Normandy was this: he had used up his Panzer divisions in the hedgerows of Normandy (ideal infantry terrain), while Rommel cried for infantry. When the Allies reached good tank country, Model had nothing left with which to stop them except infantry, which was of marginal value there.

In preparation for the upcoming offensive in the Ardennes, Hitler gave orders on 2 September to raise twenty-five new divisions to become available between 1 October and 1 December. Those twenty-five and the eighteen raised in July and August were designated *Volksgrenadier* divisions, a title intended to appeal to national and military pride. Some of the divisions were assigned new numbers in the 500 series, but others carried numbers

belonging to divisions that had been totally destroyed, for Hitler had on 10 August forbidden the practice of erasing such divisions from the army rolls.

The organization and equipment of the *Volksgrenadier* division reflected the German army tendency, current since 1943, to reduce manpower in combat divisions while increasing their firepower. Early in 1944, the army reduced the standard infantry division from about 17,000 to about 12,500 officers and men. The *Volksgrenadier* division was even smaller, at 10,000. It generally had three infantry regiments with two rifle battalions apiece and a smaller slice of organic service troops. Equipment varied with availability, but the attempt was to arm two platoons in each company with the 1944 model machine pistol, add more field artillery, and provide a slightly larger complement of antitank weapons and assault guns. The ideal of fourteen assault guns (the standard accompanying weapon for the German infantry in the attack) per division was seldom realized. About three-fourths of the divisional transportation was horse-drawn. One unit, the *Füsilier* battalion, was equipped with bicycles. The *Füsilier* battalion customarily served as the division reserve, and replaced the reconnaissance battalion in the division organization. By 1944 it was clear that an army that customarily fought on the defensive had a diminished need for reconnaissance units.

In general, the personnel policy was to bring survivors of divisions destroyed on the eastern front to Germany, there to be used as cadres in the formation of new divisions, and finally sent to the western front as the veteran core of these inexperienced formations. Ranks were not as closely tied to position in the German Army as in the American. By 1944, division commanders were frequently colonels, but might as easily be lieutenant generals. Officers from captain through colonel commanded regiments. Generally speaking, a German Army colonel was both more senior and more experienced than his American counterpart.

## Equipment

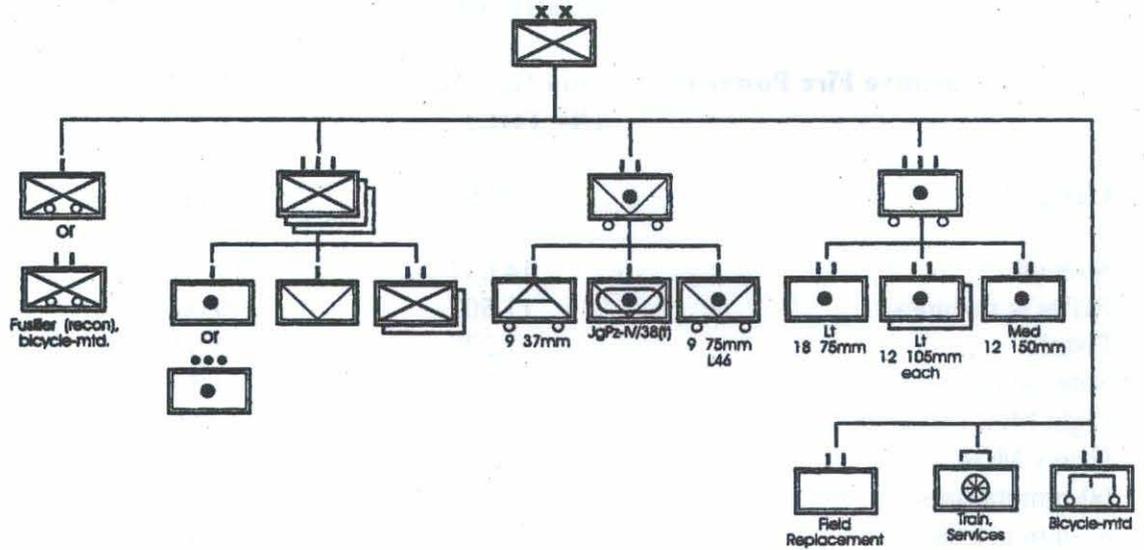
### Comparative Fire Power of U.S. and German 1944-Type Infantry Division (By TOE)

Category	U.S.	German
Strength	14,037	12,769
Rifles & carbines	11,507	9,069
Pistols	1,228	1,981
Submachine guns	295	1,503
Light MGs and automatic rifles	539	566
Heavy MGs	90	90
60-mm mortars	90	-
81-mm mortars	54	48
120-mm mortars	-	28
Bazookas	558*	108**
Flame throwers	-	20
U.S. .50-cal MG; German 20-mm AA gun	237	12
37-mm AT guns	13	-
57-mm AT guns	57	-
75-mm AT guns	-	35
75-mm infantry howitzers	-	18
105-mm howitzers	54	36
U.S. 155-mm howitzers; German 150-mm	12	18

\* Also 2,131 rifle grenade launchers

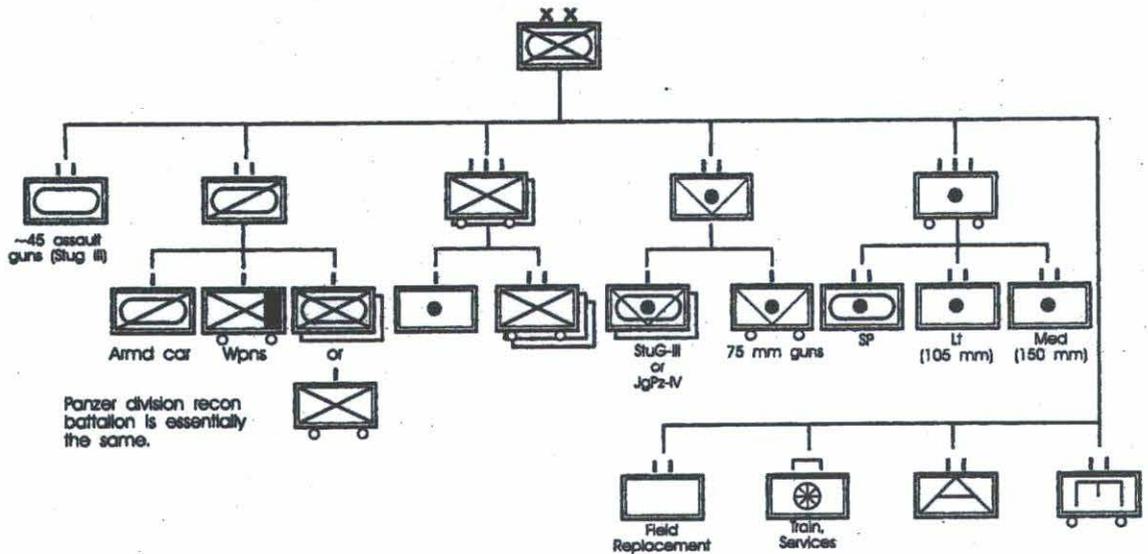
\*\*Either Panzerfausts or antitank rifles

## Volksgrenadier Division



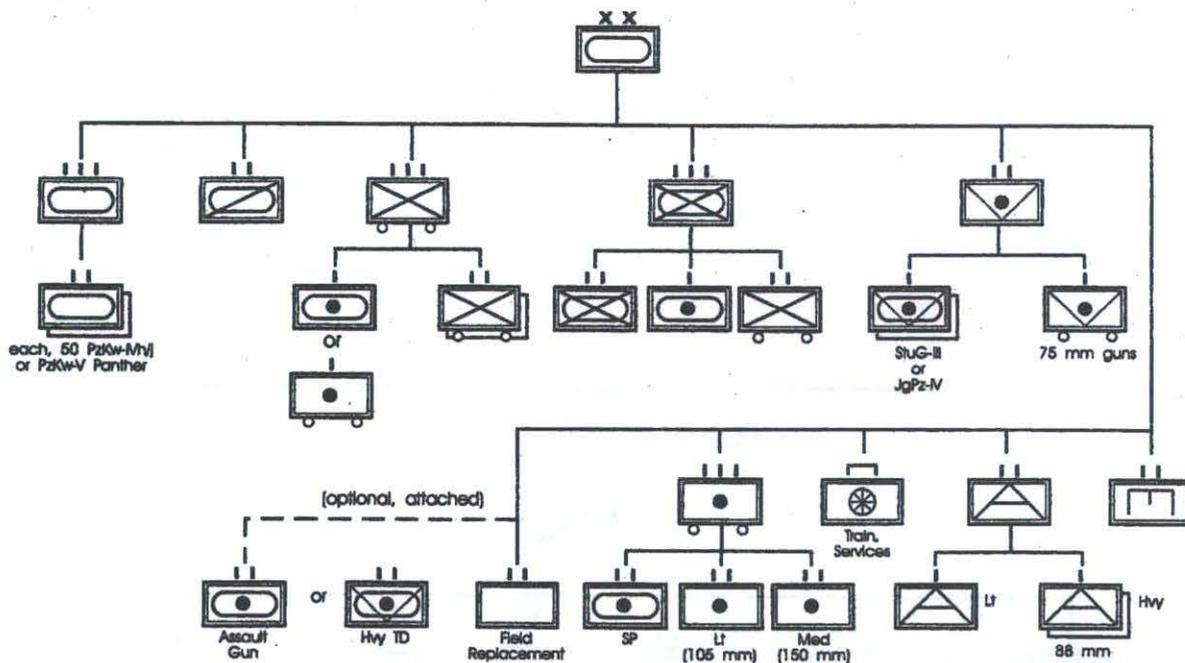
11,000 men, 14 TDs, 60 lt and 18 med horse-drawn arty, 150 motor vehicles, 3,000 horses.

## Panzergrenadier Division



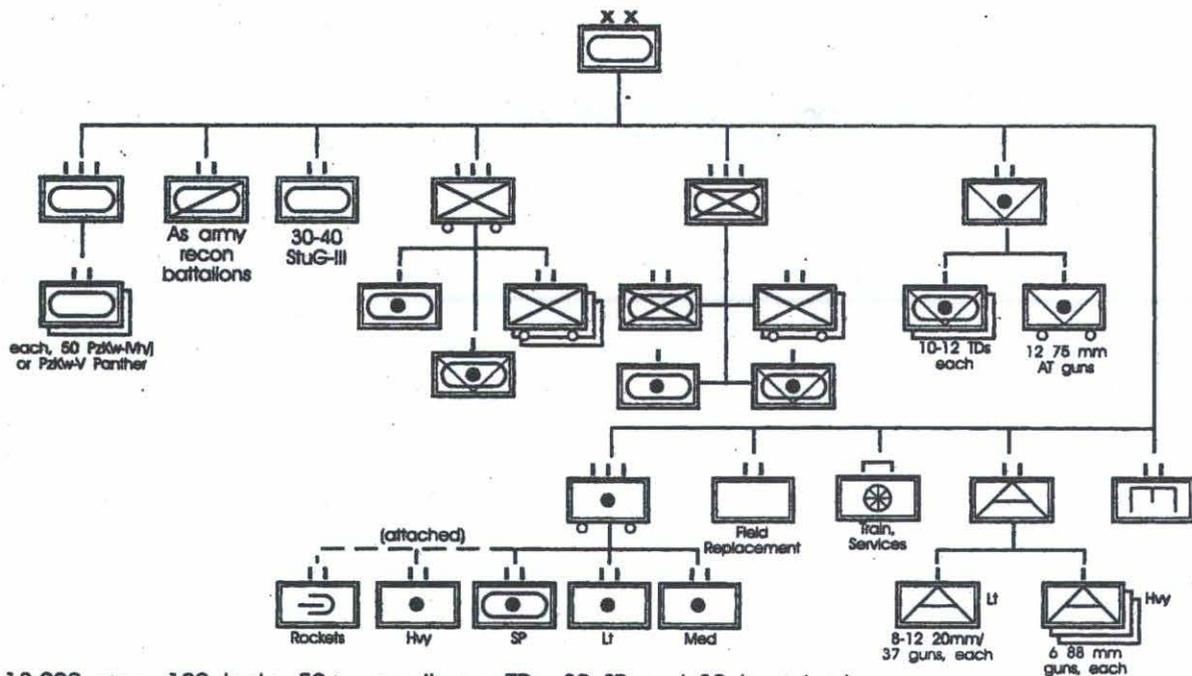
14,500 men, 45 tanks/assault guns, 30 TDs, 12 towed 150 mm Inf hows, 12 SP 105 mm and 6 Sp 150 mm hows, 12 towed 105 mm hows, 8 towed 150 mm hows, 4 towed 105 mm guns, 12 75 mm AT guns, 12 88 mm AA guns, 16 armored cars, 40 halftracks, 2,500 motor vehicles.

## Panzer Division



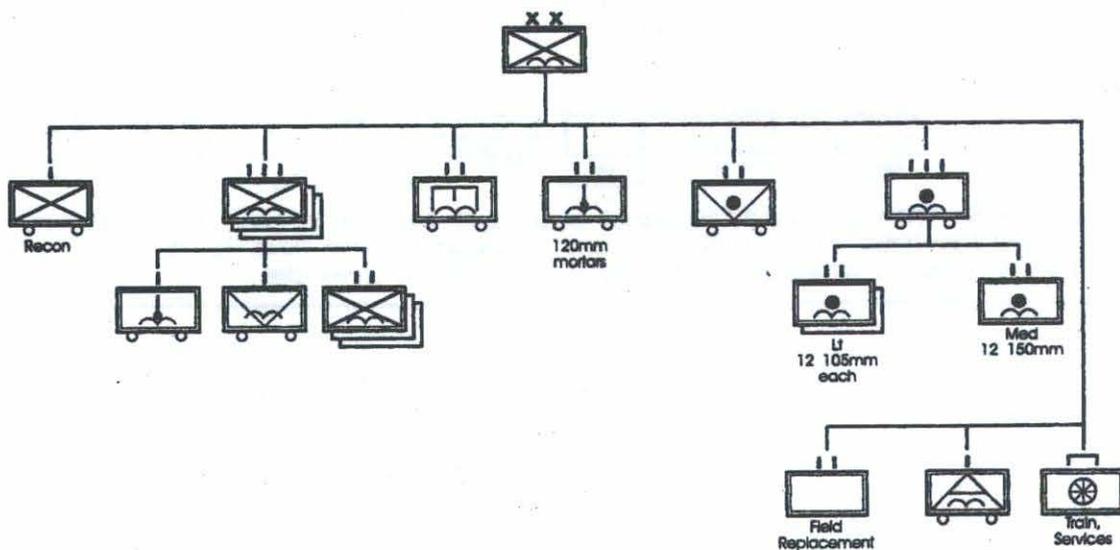
14,000 men, 100-110 tanks, 30 TDs/assault guns, 12 SP 150 mm Inf hows, 12 SP 105 mm and 6 SP 150 mm hows, 12 towed 105 mm and 12 towed 150 mm hows, 12 75 mm AT guns, 12 88 mm AA guns, 16 armored cars, 150 halftracks, 2,500 motor vehicles.

## SS Panzer Division



18,000 men, 120 tanks, 50+ assault guns/TDs, 30 SP and 30 towed arty, 3,000+ motor vehicles, plus 18 MRLs and 10-12 hvy arty, 25 armored cars, 180+ halftracks.

## Fallschirmjäger Division



16,500 men, 24 105mm and 12 150mm motor-drawn howitzers, 18 88mm AA guns, 60+ 75mm AT guns, 2,000 motor vehicles.



***Generalfeldmarschall Walter Model during a visit to the 89th Infantry Division CP, east of Schmidt, late November 1944. Model is buried in the German military cemetery outside of Vossenack.***



# ***Biographical Sketches - Senior German Commanders***

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## **Field Marshal Karl Rudolf Gerd von Rundstedt, *Oberbefehlshaber-West* (Commander-in-Chief, West)**



Born 12 December 1875 at Aschersleben in the Harz mountains and a graduate of the prestigious *Hauptkadettenanstalt* at Gross-Lichterfelde, von Rundstedt began active military service 22 March 1892 and earned a commission as lieutenant in the 83d Royal Prussian Infantry Regiment on 17 June 1893. After ten years of regimental service he passed the entrance examination for the *Kriegsakademie* in Berlin. After graduating, he was appointed to the Great General Staff, on which he served until 1909. He then served on General Staff with troops as a captain in a corps headquarters.

Just finishing a tour of command of an infantry company when war broke out in 1914, he was assigned as operations officer in the 22d Reserve Infantry Division, which participated in the great attack across France with the First German Army. In 1915 he was promoted to major and sent to the

eastern front as a division chief of staff. The fighting along the Narew River line in the summer of 1915 resulted in mobile warfare, and von Rundstedt got a taste of maneuvering troops in an advance that extended more than 250 miles. Before the end of the war, he had also served as a corps chief of staff.

He remained in the 100,000-man German army at the end of the war, commanding the 18th Infantry Regiment as a colonel (his first troop command since 1914). As a major general, he was chief of staff of a military district. Promoted to lieutenant general, he commanded the 2nd Cavalry Division. In 1934, as general of infantry, he commanded 1st Army Group. In 1938, he led the Second Army in the occupation of the Sudetenland.

He resigned from the army in 1938 in protest against Hitler's policies, which he thought would lead to a war for which Germany was grossly unprepared. He retired as a colonel-general and was appointed colonel-in-chief of the 18th Infantry Regiment, a distinction he valued highly. As a field marshal, he customarily wore his marshal's rank insignia on the uniform of a colonel of the 18th Infantry Regiment. With the invasion of Poland in 1939, he accepted recall to active duty and commanded army groups with

distinction in Poland, Belgium, and France. Hitler promoted him to field marshal after the fall of France in 1940. In 1941 he commanded Army Group South in Operation BARBAROSSA, the invasion of Russia. Hitler relieved him of command in Russia at the end of 1941, although von Rundstedt gave impaired health (he had a heart attack in early November) as the reason. In March 1942, he was appointed commander-in-chief, west, with headquarters in France. By 1944, however, Hitler had given actual command of the army groups in France to von Rundstedt's subordinates and himself retained command of the operational reserve. The old man joked that his sole military prerogative was to change the guard at his headquarters. In July 1944, Hitler once again relieved him, but again reappointed him C-in-C West on 5 September. His professional reputation did as much as his abilities to bring order out of the chaos of the German forces on the west and, aided by the Allies' supply difficulties, von Rundstedt stabilized the front. He remained in command through the Battle of the Bulge, which was not his plan and in which he had no faith, and was finally dismissed from command in March of 1945. He died in Celle on 24 February 1953.

A soldier for more than half a century, von Rundstedt learned the lessons of World War I well and insisted on increasing fire support and mobility for the infantryman. He approved of tanks but did not envision the kind of rôle for them that such advocates as Heinz Guderian pressed for. Fluent enough in French to have passed the army's interpreter examination, he could also speak English. Stiff, formal, dedicated to his profession, he led a simple life and was indifferent to money or possessions. Yet he was affable to subordinates, extravagantly polite to women, smoked too much, and enjoyed an occasional drink.

Unlike men such as Rommel and Guderian, he preferred to command from a headquarters, rather than from the front line. He felt that commanders at the front risked becoming so involved in the local fight that they lost perspective on the entire battle (a failing to which Erwin Rommel was occasionally prone). He refused to become immersed in details and preferred to work from a 1:1,000,000 map, from which he could take in the entire situation at a glance. Thus he depended heavily on his chief of staff, who happened to be Erich von Manstein early in the war. It was a particularly successful professional relationship.

Almost seventy years old in 1944, von Rundstedt was a soldier of the old school, widely admired by the German officer corps. Hitler disliked him intensely, partly because of the social class of officers he represented and partly because he knew that von Rundstedt referred to the Fuehrer in private as "the Corporal." By the fall of 1944, his age was showing. Many of his associates saw him for what Hitler intended him to be—a figurehead.

At SHAEF headquarters, it was Rundstedt "whom we always considered the ablest of the German generals," as Eisenhower later said. Even Bernard Montgomery, rarely given to praising other generals, said "I used to think that Rommel was good, but my opinion is that Rundstedt would have hit him for six. Rundstedt is the best German general I have come up against."

The following quotations reveal a little about the inner man:

- On the 1944 Ardennes Counteroffensive: "If old von Moltke thought that I had planned the offensive he would turn over in his grave."
- On freedom of action: "You see the guard posted outside. If I want to post him on the other side of the house I must first ask permission of Berchtesgaden."

## Field Marshal Otto Moritz Walter Model Commanding General, Army Group B



Born 24 January 1891 in Gentheim, near Magdeburg, the son of a teacher, Model was not a member of the military aristocracy of Germany. He attended a classical gymnasium in Erfurt where he excelled in Greek, Latin and history. In 1908 he became an officer cadet in the *Kriegsschule*, and in 1910 he was appointed in the 52nd Infantry Regiment. He served on the western front between 1914 and 1916, was severely wounded in 1915, and attended an abbreviated general staff officer course in 1916. He returned to the front as a brigade adjutant and company commander and was again badly wounded. He served in various staff assignments from 1917 through 1919 and entered the post-war Reichswehr. He commanded a company in the 8th Infantry Regiment between 1925 and 1928, was a staff officer from 1928 through 1933, and commanded a battalion in the 2nd Infantry Regiment in 1933-1934. As a battalion commander, his favorite saying was "Can't

that be done faster?" In 1934 he became commander of the 2nd Infantry. Despite not having a technical background, Model found himself appointed to the technical warfare section of the War Ministry in 1935. He was already a strong advocate of motorization and visited the Red Army to study these questions. His drive contributed to considerable progress in weapons modernization. At the outbreak of war, he was Chief of Staff of IV Corps.

In three years of hard fighting on the eastern front, Model earned the distinction as "the Führer's Fireman" for his ingenuity which enabled him to salvage apparently hopeless situations. One of the few officers who enjoyed Hitler's complete trust, he was also appreciated by his peers. Heinz Guderian called him "a bold inexhaustible soldier . . . the best possible man to perform the fantastically difficult task of reconstructing the line in the center of the Eastern Front." In Russia he established a reputation as a "lion of the defense." In January 1944, at age fifty-three, he became the youngest field marshal in the German army.

As a lieutenant, Model earned a reputation as an ambitious and conscientious officer who was not afraid to speak his mind, but who formed no close fellowships with his fellow officers. That pattern characterized his entire career. Juniors regarded him as a hard taskmaster and peers thought of him as fractious. Utterly lacking tact, he freely criticized his superiors. Although he considered himself to be apolitical, he made the most of all of his contacts with the Nazi Party, developing an attitude that his fellow generals found difficult to understand. When he became an army commander he appointed a Waffen-SS officer as his aide-de-camp, which his fellow Army officers interpreted as kowtowing to the party.

Field Marshal Erich von Manstein commented on Model's extraordinary and ruthless drive, as well as his self-assurance and determination, and particularly his personal courage. "He

was always to be found in the most critical sector of any front he commanded," von Manstein wrote. Units he commanded often suffered very heavy casualties. Model often issued direct orders to the smallest of units and, unlike von Rundstedt, would sometimes lead them personally into action. During the battle of the Bulge, one German lieutenant met Model near St. Vith; he wrote in his diary that "Generalfeldmarschall Model himself directs traffic . . . a little, undistinguished-looking man with a monocle."

F. W. von Mellenthin, who served under Model as a staff officer, wrote that "in purely military terms, he was an outstanding soldier. In addition, he was a good and capable staff officer but inclined to rely too much on his own judgment and knowledge without as a rule being responsive to advice. He was a much better tactician than he was a strategist, and defensive positions were more to his taste than wide-ranging offensive operations. He possessed an astounding talent for improvisation, and there can be no disputing the originality of his conduct of affairs." Other judgements were similar: ". . . he trusted no one but himself. He wanted to have every single thing under his own control. Lacking confidence in others, he found it difficult to delegate tasks and responsibilities." "His manner was rough," according to von Manteuffel, "and his methods were not always acceptable in the higher quarters of the German Army, but they were both to Hitler's liking."

General Hans Speidel (Rommel's chief of staff) observed that "his keen tactical eye was not balanced by an instinct for the possible. He thought too highly of his own ability, was erratic, and lacked a sense of moderation. Although he had been schooled in strategy, he could not rid his mind of the details of tactical leadership."

Sixteen years von Rundstedt's junior, he treated the old man with respect but ran his army group pretty much as he pleased. For his part, von Rundstedt was no admirer of Model, whom he once described as having the makings of a good sergeant major. Still the two men managed to tolerate one another successfully. Model was appalled when he learned that Friedrich Paulus had surrendered to the Russians at Stalingrad. "A field marshal," he said, "does not become a prisoner. Such a thing is just not possible." On 21 April 1945, he committed suicide near Düsseldorf, rather than surrender to American forces.

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### ***General der Panzertruppen Hasso Eccard von Manteuffel*** **Commanding General, 5th Panzer Army**

Born in Potsdam on 14 January 1897, Manteuffel graduated from the Berlin-Lichterfelde cadet academy, and joined the 3d Brandenburg Hussar Regiment as a second lieutenant in 1916. He served on the western front as a lieutenant of infantry and was wounded during the battle of the Somme. In 1919, he continued fighting on Germany's eastern frontier as a member of the para-military *Freikorps*, but was then taken into the *Reichswehr*.

He transferred to the cavalry, commanded a squadron as a lieutenant, and then served seven years as a regimental adjutant. He adopted then-Major Heinz Guderian's ideas about the possibilities of armor. He joined the inspectorate of Armored Forces in 1934, shortly after Guderian became its chief of staff. In 1935 he was assigned to the 2nd Panzer Division as a

squadron commander of a motorcycle rifle battalion. During the attack on France, he commanded the 7th Rifle Regiment of Rommel's 7th Panzer Division.



He disagreed with the attack on Russia but nonetheless volunteered for combat duty. He commanded an infantry regiment in the attack on Russia, and with particular distinction in the failed drive on Moscow. His army commander, *Generaloberst* Walter Model, threatened to court-martial him during the subsequent retreat when von Manteuffel called off an attack because his troops could hardly move in the deep snow. The division commander circumvented Model's intention by sending von Manteuffel with the advance party for the division's transfer to France. By 1944, von Manteuffel had commanded a division in North Africa and led the elite *Grossdeutschland* panzer division on the eastern front. He so impressed Hitler that the Führer jumped him past corps to command the 5th Panzer

Army on the western front, under Model's overall command.

General von Manteuffel was remarkably forthright in his discussions with Hitler about the upcoming battle. He had personally reconnoitered the American forward positions facing the Our River. He determined that the U.S. 28th Infantry Division's 110th Infantry pulled back its outposts from the river at night. He also found that the division's 112th Infantry, on the German side of the Our, occupied widely spaced positions. Thus von Manteuffel argued to Hitler that the artillery preparation should be withheld, so that his assault troops could quietly cross the river while the artillery fire instead hit the American positions a mile or so back, along what was known as Skyline Drive. Hitler agreed to this.

In general, von Manteuffel argued that a shorter artillery preparation would accomplish as much as a long one, while lessening the Americans' alertness. He wanted to attack well before daylight, at 0600, rather than an 1000. Because the day was short, a 1000 attack would give him only six hours of light on the crucial first day of fighting. Instead, he wanted to attack aided by "artificial moonlight," created by bouncing the light of anti-aircraft searchlights off of the clouds. "How do you know you will have clouds?" Hitler asked. Von Manteuffel responded: "You have already decided there will be bad weather."

Contemporaries described von Manteuffel as personally gentlemanly and courteous, and as professionally intense, demanding, and energetic. His efficiency reports for combat command described him as "indefatigable" and "a daredevil, a bold and dashing leader." Other formal evaluations considered that he was "quick thinking, tactically able to take in the whole situation at a glance." General Hermann Balck and Field Marshal Erich von Manstein, themselves exceptional armored commanders, described von Manstein as "an exceptional Panzer commander." Manteuffel was forty-seven years old in 1944, considered young for an army command. At 5 feet, 2 inches, and 120 pounds, his physique was also not prepossessing, and he frequently suffered from migraines.

## ***General der Panzertruppen Erich Brandenberger*** **Commanding General, 7<sup>th</sup> Army**



Born 1892 in Augsburg, Erich Brandenberger was fifty-one years old during the Hürtgen Forest fighting. Brandenberger entered German Army in 1911 as a Field Artillery officer. He fought in World War I with the 6<sup>th</sup> Bavarian Field Artillery Regiment, where he won both the Iron Cross 2<sup>nd</sup> and 1<sup>st</sup> Class; he was wounded during this conflict. After World War I, Brandenberger remained in the *Reichswehr* as a General Staff officer. During the 1939 Polish Campaign, he served as chief of staff for the XXIII<sup>rd</sup> Army Corps. He assumed command of the 8<sup>th</sup> Panzer Division in 1941 and led this unit into Russia during *Operation Barbarossa*.

During the Russian Campaign, Brandenberger commanded the LIX<sup>th</sup> Army Corps (Army Group Center) at Velikye Luki) and the XXIX<sup>th</sup> Army Corps (Army Group South Ukraine) in 1943 at the Dneiper

River. He was promoted to General of Artillery (☆☆☆) in August 1943, then laterally named to General of Panzer Troops.

Brandenberger assumed command of the 7<sup>th</sup> Army in August 1944. After the Hürtgen fight, he assumed command of the 19<sup>th</sup> Army (Army Group G) in March 1945. He was awarded the Knight's Cross as CO of the 8<sup>th</sup> Panzer Division, and received the Oak Leaves as CO of the XXIX<sup>th</sup> Army Corps. He was a prisoner of war from the end of the war until 1948. Erich Brandenberger died 21 June 1955 in Bonn.

Seemingly always calm and unflappable, Erich Brandenberger performed at his best during adversity.

## ***General der Infanterie* Erich Straube** **Commanding General, LXXIV<sup>th</sup> Army Corps**



Erich Straube was born in Elsterwerda (north of Meissen) in 1887; he was fifty-six years old during the Hürtgen Forest. Straube entered the German Army in 1907; he was an Infantry officer. Straube won the Iron Cross 2<sup>nd</sup> and 1<sup>st</sup> Class during World War I; he remained in the Army after World War I as a General Staff officer.

During the 1940 French Campaign Straube served as the commander of the 268<sup>th</sup> Infantry Division – a unit that assaulted the Maginot Line. He assumed command of the XIII<sup>th</sup> Army Corps in April 1942 on the Russian front and later transferred in August 1943 to command the LXXIV<sup>th</sup> Army Corps in France. He was promoted to General of Infantry (☆☆☆) in June 1942.

Toward the end of the Hürtgen fighting, Erich Straube assumed command of the LXXXVI<sup>th</sup> Army Corps on 17 December 1944. He was awarded the Knight's

Cross in 1940 (as CO of the 268<sup>th</sup> Infantry Division), and the Oak Leaves in 1944 (LXXIV<sup>th</sup> Army Corps). Erich Straube died on 31 March 1971 in Osterode (southwest of Goslar.)

Erich Straube was reported to be very nervous and excitable. He probably worked well with his superior – Erich Brandenberger – but may well have been intimidated by Walter Model.

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## ***Generalleutnant* Hans Schmidt** **Commanding General, 275<sup>th</sup> Infantry Division**

Hans Schmidt was born 1895 in Bayreuth; he was forty-nine years old during Hürtgen Forest. He entered German Army in 1914 as an Infantry officer. Schmidt fought in World War I in the 7<sup>th</sup> Bavarian Infantry Regiment. He received the Iron Cross 2<sup>nd</sup> and 1<sup>st</sup> Class for bravery and remained in the Army after World War I. During 1939 Polish Campaign, he served as the Commander of the 3<sup>rd</sup> Battalion, 41<sup>st</sup> Infantry Regiment, 10<sup>th</sup> Infantry Division (8<sup>th</sup> Army.) In April 1940 he assumed command of the 245<sup>th</sup> Infantry Regiment, 88<sup>th</sup> Infantry Division, and remained a regimental commander for almost three years. Schmidt assumed command of the 68<sup>th</sup> Infantry Division in January 1943; he fought on the Russian Front at Voronesch (as part of the German 2<sup>nd</sup> Army) and Kiev (as part of the German 4<sup>th</sup> Panzer Army).



In October 1943 he was promoted to *Generalleutnant* (★★). Two months later, he was named Commander, 275<sup>th</sup> Infantry Division in December 1943. Stationed in France, he fought in Normandy and was awarded the Knight's Cross on 16 October 1944 for his actions the previous summer. Schmidt retired to Weiden after the war.

Hans Schmidt experienced almost twenty-four months of combat at the infantry regimental level in Poland, France and Russia. He knew exactly what his troops were experiencing, and clearly understood the nature of close combat – the type found in the Hürtgen Forest. He was physically robust, a good organizer, and reported to not get rattled under fire. He would need all three traits in the gloomy woods.

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### ***Generalleutnant* Gerhard Engel** **Commanding General, 12<sup>th</sup> Infantry Division**



Gerhard Engel was born 13 April 1906 in Guben; during action at the Hürtgen, Engel was thirty-eight years old. He entered the Germany Army in 1927 as a private in the 5<sup>th</sup> Infantry Regiment. Engel attended an officer candidate school at the Infantry School and was promoted to lieutenant in 1930. He served as a platoon leader and company executive officer for two years before assuming duties as a battalion adjutant. In 1935 Gerhard Engel, now a first lieutenant, became the adjutant for the 27<sup>th</sup> Infantry Regiment. After holding this position for two years, he became a company commander of the 11<sup>th</sup> Company for the same regiment. A year later he became one of the *Wehrmacht* adjutants to Adolf Hitler and remained in this prestigious position for five years. In 1943, Engel attended both a battalion commander's training course and a regimental commander's course. He never commanded a battalion,

but assumed duties as the commander of the 27<sup>th</sup> Infantry Regiment in February 1944. By this time he was a lieutenant colonel; he was awarded the Knight's Cross of the Iron Cross on 4 July 1944.

In the aftermath of the destruction of Army Group Center, to which Engel's regiment – a part of the 12<sup>th</sup> Infantry Division – belonged, he was named acting commander of the 12<sup>th</sup> Infantry Division on 22 July 1944. He was promoted to colonel on 20 August 1944; his date of rank was then "backdated" to 1 May 1944.

This promotion and selection raised some eyebrows in the Army. Engel had been an adjutant to Hitler; we have no evidence of the role the *Führer* played in this personnel action. We do know that the division's previous commander, *Generalleutnant* Rudolf Bamler, was captured by the Soviets on 27 June 1944. Bamler almost immediately "went over to the enemy" by becoming a member of the National Committee for a Free Germany and the Association of German Officers, an organization of German prisoners of war in the Soviet Union, who publicly urged German soldiers to defect and rebel against the Nazi regime. It is possible that Hitler wanted to ensure that the next commander of the 12<sup>th</sup> did not repeat this debacle, and so chose a man with whom he was extremely familiar – Engel.

Gerhard Engel commanded the division until 1945. He was promoted to *Generalmajor* (★) on 9 November 1944 and became the 679<sup>th</sup> recipient of the Knight's Cross of the Iron Cross with Oak Leaves on 11 December 1944. Promoted to *Generalleutnant* (★★) on 1 April 1945, he assumed command of Infantry Division "Ulrich von Hutten" two weeks later. He was a prisoner of war for eighteen months. Gerhard Engel died on 9 December 1976 in Munich.

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## WHY THE GERMAN ARMY EXCELLED

Countless books have been written on the reasons why the German Army performed so well during World War II. Most of the underlying factors for this success can be classified into one of the following categories:

- A catastrophic military defeat in 1918, which facilitated later significant organizational, doctrinal and operational change,
- A corps of far-sighted generals, who understood the nature of mobile warfare – and equally as important – who could translate this theory into practical results,
- An outstanding doctrine, from *Blitzkrieg* to troop leading procedures, which was widely understood and practiced,
- Combat formations built around the principles of combined arms,
- Experience gained by progressively fighting more difficult opponents (i.e., Poland – 1939, Norway, Belgium, France – 1940, Balkans and the British – 1941 and Russia – 1941 onward),

- Tough, disciplined and experienced non-commissioned officers and enlisted troops,
- Excellent equipment that included – but was not limited to – such "wonder weapons" as the 88-mm dual-purpose gun, the *Panther* and *Tiger* tanks, the fast-firing MG 42 machine-gun, the shaped demolition charge and individual automatic weapons such as the MP 40 and MP 44,
- An officer selection and promotion system that ensured that the very best officers assumed command positions of greater and greater responsibility,
- A superb General Staff system that selected only the smartest officers, standardized staff training and fostered independent thinkers, who could creatively operate within a general system without causing anarchy,
- Cohesive group identity found at the squad, platoon and company level,
- Outstanding officers at the company, battalion and regimental levels – officers, who knew their craft, knew their men and would find a way to win regardless of the obstacle.

The Hürtgen Forest fighting in general, and the German 12<sup>th</sup> Infantry Division during the battle in particular, allow us an insight into this last factor contributing to German Army success – outstanding officers at the company, battalion and regimental levels. During the 1930s four junior officers – all good friends – served together in the 27<sup>th</sup> Infantry Regiment of the 12<sup>th</sup> Infantry Division. Gerhard Engel, Heinz Georg Lemm, Wilhelm Osterhold and Martin Steglich: as these men went, so went the 12<sup>th</sup> Infantry Division.

Gerhard Engel, a man who would later command the division at age thirty-eight, held the position of regimental adjutant when the other three arrived in the unit. After holding this duty for two years, Engel became a company commander of the 11<sup>th</sup> Company in the regiment; a year later he became one of the *Wehrmacht* adjutants to Adolf Hitler and remained in this position until 1943. Engel skipped commanding a battalion, but returned to the 12<sup>th</sup> Infantry Division and assumed duties as the commander of the 27<sup>th</sup> Infantry Regiment in February 1944 as a lieutenant colonel; he was awarded the Knight's Cross of the Iron Cross on 4 July 1944. In the aftermath of the destruction of Army Group Center, Engel was named acting commander of the 12<sup>th</sup> Infantry Division on 22 July 1944. He was promoted to colonel on 20 August 1944; his date of rank was then "backdated" to 1 May 1944. Gerhard Engel commanded the division, to include the period of fighting at the Stolberg Corridor and the Battle of the Bulge, until 1945. He was promoted to *Generalmajor* on 9 November 1944 and won the Knight's Cross of the Iron Cross with Oak Leaves on 11 December 1944 – the superb performance of his division near Aachen undoubtedly contributed to both events. Promoted to *Generalleutnant* on 1 April 1945, he assumed command of Infantry Division "Ulrich von Hutten" two weeks later and ended the war in command of this formation. Engel spent over two years in an American prisoner of war camp after the war.

Heinz Georg Lemm entered the regiment in 1936 as an officer candidate, at age sixteen. He made the grade in this accession program; Lemm began the war as a recon platoon leader for the regiment and served in Poland, France and Russia. In the latter, Lemm and the entire 12<sup>th</sup> Infantry Division, was surrounded at Demyansk on the Russian front northwest of Moscow, but held out for many months until finally relieved. Late 1941 saw First Lieutenant Lemm in command of the 2<sup>nd</sup> Company of the regiment. By January 1943 he had risen to command the 1<sup>st</sup> Battalion, 27<sup>th</sup> Infantry Regiment – at age twenty-four. His performance did not go unrecognized; on 14 April 1943 Captain Lemm received the Knight's Cross of the Iron Cross for his exploits on the eastern front. That October, he became the acting commander of the 27<sup>th</sup> Infantry Regiment itself; he later relinquished this command to Gerhard Engel and resumed command of the 1<sup>st</sup> Battalion. In July 1944, because of the continued bravery he displayed, Lemm was awarded the Oak Leaves to his Knight's Cross. Later as permanent regimental commander, he led his troops at the Hürtgen and also attacked the 1<sup>st</sup> Infantry Division in December 1944 during fierce the fighting of the Battle of the Bulge. Subsequently promoted to colonel, in 1945 he then received the Knight's Cross with Oak Leaves and Swords – one of only 157 *Wehrmacht* officers to do so. Lemm spent his twenty-seventh birthday, and his next four, in a prisoner of war camp in the Soviet Union. After his return to Germany in 1950, he entered the *Bundeswehr* and rose to become a general officer.

Wilhelm Osterhold entered the German Army in 1935. During the Polish Campaign, he served as the adjutant of the 27<sup>th</sup> Infantry Regiment – Engel's old position. In the 1940 French campaign, Osterhold served as the adjutant for the 2<sup>nd</sup> Battalion of the regiment. Later in the year, Osterhold assumed command of the 8<sup>th</sup> Company in the regiment. In December 1941, he became an acting battalion commander during the fighting at Demyansk. When a more senior officer arrived in the battalion, Osterhold took command of the 12<sup>th</sup> Company of the regiment. In January 1943, Wilhelm Osterhold assumed command of the 3<sup>rd</sup> Battalion, 27<sup>th</sup> Infantry Regiment. He took command of the 48<sup>th</sup> Infantry Regiment, 12<sup>th</sup> infantry Division, in October 1943 – at age twenty-nine – and won the Knight's Cross of the Iron Cross as a major in March 1944. Osterhold led the regiment at Stolberg and in the Bulge until January 1945, when he received his fifth serious wound of the war. Lieutenant Colonel Wilhelm Osterhold received the Knight's Cross with Oak Leaves, one of 519 German Army troops to do so during the conflict, on 10 February 1945. Because of the extreme severity of his wounds, he remained in the hospital through the end of the war.

Martin Steglich entered the 27<sup>th</sup> Infantry Regiment at age twenty in 1936. He was a platoon leader in the 6<sup>th</sup> Company at the start of the Polish Campaign and within days assumed command of the 5<sup>th</sup> Company. He fought in France in 1940, where he saw his brother killed in action. During the Russian Campaign, Steglich was selected to fly out of the Demyansk pocket to brief Hitler in Berlin on the conditions at the front. This he did, and after a subsequent two-week leave home, Martin Steglich flew back into the encirclement to be with his unit. He left the 5<sup>th</sup> Company and assumed command of the 2<sup>nd</sup> Battalion, 27<sup>th</sup> Infantry Regiment in October 1942 and held this position until seriously wounded in 1943. On 25 January 1943, as a captain and battalion commander, Steglich became the first of the four men to receive the Knight's Cross. While recovering from his wounds, Steglich instructed at a battalion commanders' course and made several German

Army training films – one on how to destroy Russian tanks with hand-grenades, satchel charges and other close assault weapons. In November 1944, Martin Steglich assumed command of the 1221<sup>st</sup> Grenadier Regiment of the 180<sup>th</sup> Infantry Division and saw combat with the 1<sup>st</sup> Parachute Army at Venlo. On 23 March 1945, Lieutenant Colonel Martin Steglich was shot in the jaw and leg by a strafing allied P-38. Martin Steglich received the Oak Leaves to the Knight's Cross just before the end of the war. After the war, he spent three months in an American prisoner of war camp.

Engel, Lemm, Osterhold and Steglich – all four men were beloved by their troops; between them, they served as company commanders in five of the regiment's companies and all three battalions – two commanded the entire regiment. All four were incredibly brave. Winning the Knight's Cross as a battalion or regiment commander was no small feat. A German field marshal once disapproved the recommendation for the award to a regimental commander, who – firing a sub-machinegun and throwing hand-grenades – had personally led his regiment in a counterattack. In disapproving the award, the field marshal stated that such conduct did not merit the Knight's Cross, but rather was "a self-evident duty."

All four men, by 1944, had five years of combat experience. None was a General Staff officer, nor were any university graduates, but at the regimental level and below – and at the division level for Gerhard Engel – all were masters of their craft, even though three of the four were still under thirty years of age for most of the war. And above all, these four officers were survivors. Each had been seriously wounded numerous times during the war. Three had survived the lengthy encirclement at Demyansk on the Russian front, in conditions so cold that machine-guns often would not function and combat vehicles frequently would not start. Three of the four survived the destruction of Army Group Center in 1944, when the 12<sup>th</sup> Infantry Division, and over a quarter-million German troops, was swallowed into the maw of the Red Army in Byelorussia. And all four survived the cataclysmic end of the war (when hundreds of thousands of German soldiers were posted as missing, never to be found to this day) – with one surviving a five-year stint as a prisoner in the hellhole of Siberia. Regardless of the circumstances, these men knew how to find a way to survive and to win. They were not alone in these skills; and because of this, many German units fought and fought well from the beginning through the end of the war.

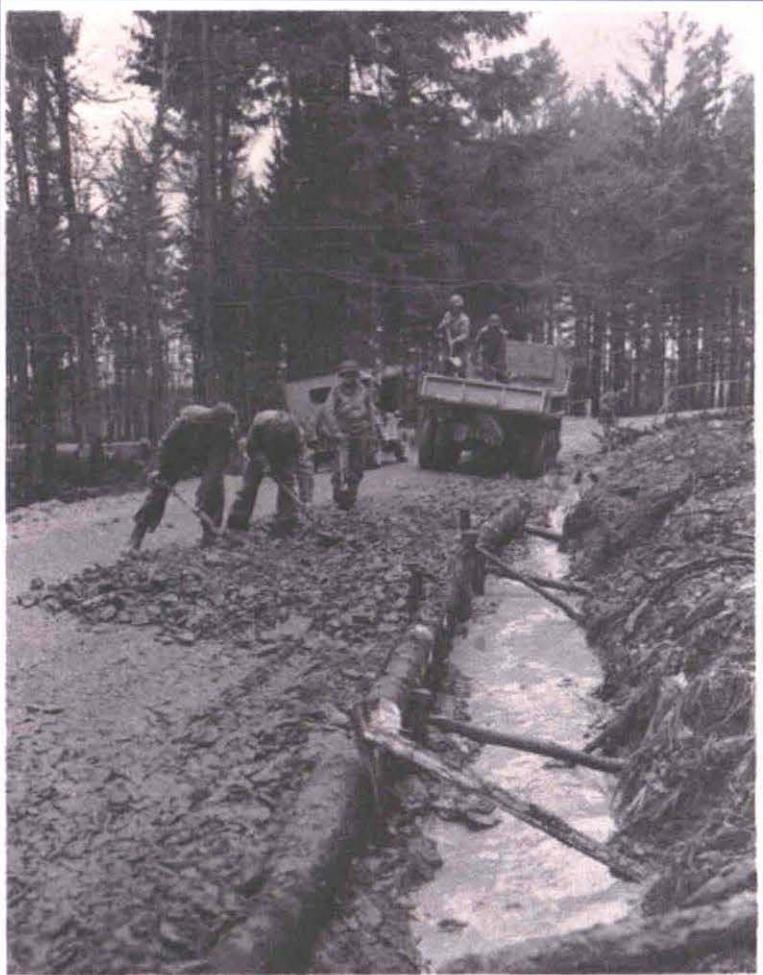


**Marker in farmer's yard in Kommerscheidt where the remains of an American Soldier, SGT Lemuel H. Herbert, were found in 1998**



## Comparative Military Rank

<b>Jargon</b>	<b>What they do</b>	<b>British</b>	<b>US</b>	<b>German</b>
(None)		(None)	(None)	<i>Reichsmarschall</i>
Five Star	Command very large formations such as Army Groups or Expeditionary Forces	Field Marshal	General of the Army	<i>Generalfeldmarschall</i> or <i>Reichsführer-SS</i>
Four Star	Command Field Armies subordinate to Army Groups or Expeditionary Forces	General	General	<i>Generaloberst</i> or <i>SS Oberstgruppenführer</i>
Three Star	Command Corps (usually three divisions) or serve on very high level staffs	Lieutenant General	Lieutenant General	<i>General (der Inf, Art, etc.)</i> or <i>SS Obergruppenführer</i>
Two Star	Command divisions (about 20,000 soldiers) or serve on very high level staffs	Major General	Major General	<i>Generalleutnant</i> or <i>SS Gruppenführer</i>
One Star	Assist division commanders, command separate formations (smaller than divisions)	Brigadier	Brigadier General	<i>Generalmajor</i> or <i>SS Brigadeführer</i>
		(None)	(None)	<i>SS Oberführer</i>
Colonel	Command regiments (the basic assault element in the invasion; three regiments make up a division)	Colonel	Colonel	<i>Oberst</i> or <i>SS Standartenführer</i>
Lieutenant Colonel	Command battalions (three to a regiment)	Lieutenant Colonel	Lieutenant Colonel	<i>Oberstleutnant</i> or <i>SS Obersturmbannführer</i>



ENGINEERS REPAIR A ROAD *in the Huertgen Forest, 25 November.*



# Equipment

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American and British Armies shared many classes of equipment and between them equipped all of the French and Polish forces engaged on the continent. The United States Army was far more lavishly equipped than the German Army, but in almost every category of weaponry, the Germans had superior hardware. Tanks are the best example. Until 1935 in American doctrine, the tank was essentially a machine-gun carrier that accompanied the Infantry. Experiments with mounting heavy guns in tanks did not get very far, the Chief of Infantry in 1938 declaring that a 75-mm. gun was useless in a tank. In 1940, both the rival armies fought the Battle of France with tanks armed to a 75-mm standard, and the Germans had already experimented with the 88-mm gun in a turret. In June 1940, the U.S. adopted the 75-mm gun for tanks. In the spring of 1944, as Anglo-American armies prepared for the invasion of Europe, the largest standard gun on an operational American tank was still a short-barreled, low-muzzle-velocity 75-mm, the standard armament of the then-standard M4 Sherman tank. Some models of the M4, and particularly the British Firefly variant, carried higher velocity weapons, notably the 76-mm gun. At the same time, however, Germany's Panther tanks carried long-barreled, high-muzzle-velocity 75s, and the Tiger carried the 88-mm gun. To kill tanks, American doctrine relied on the tank destroyer, a fast, heavily-gunned, lightly-armored vehicle standardized as the M10 in 1942. It mounted a 3-inch, high-muzzle-velocity, flat-trajectory gun on a Sherman chassis. The need for more power to cope with German tanks brought the M18, with a 76-mm gun, into service in 1944. The M18 had a shallow open turret and was mounted on a M24 light tank chassis. The M36, an M10 redesigned to accommodate a 90-mm gun, came into service about the same time. On none of these vehicles was the armor comparable to that of German tanks. Tank destroyers, appropriately armed to be "killer tanks," lacked the armor to stand up to German tanks for the fight.

Anti-tank weapons were a similar case. The American 2.36-inch rocket launcher, or "bazooka," lacked the power to penetrate the front armor of German tanks and demanded careful aim against soft spots. This was no easy chore for an exposed, nervous infantryman when a massive German tank loomed so close that he could hear the squeak of the bogies. The Germans adopted an 88-mm Panzerfaust, a rocket-propelled shaped-charge grenade that was about twice as powerful as the American bazooka. When James M. Gavin was a colonel commanding the 505th Parachute Infantry, his men tried out the bazooka in Sicily and found it disappointing. Gavin later wrote that "As for the 82nd Airborne Division, it did not get adequate antitank weapons until it began to capture the first German panzerfausts. By the fall of '44 we had truckloads of them. We also captured German instructions for their use, made translations, and conducted our own training with them. They were the best hand-carried antitank weapon of the war." The U.S. did not even initiate a project for a more powerful, 3.5-inch rocket until August 1944, and distribution of that weapon was not widespread even at the time of the Korean War.

In two areas, however, the United States had a distinct advantage. The Garand .30-caliber M1 semi-automatic rifle was the best standard infantry shoulder arm of the war. No other rifle matched its combination of accuracy, rate of fire, and reliability. In artillery, too, the American Army had the edge. It was not that the artillery was qualitatively better than German equipment,

although the U.S. 105-mm howitzer was at least the equal of its German counterpart of the same caliber. The effectiveness of American artillery was multiplied by the best equipment and techniques of any army for fire direction, observation, and coordination. "I do not have to tell you who won the war," George Patton said in 1945. "You know our artillery did." General George C. Marshall agreed when he wrote that "We believe that our use of massed heavy artillery fire was far more effective than the German techniques," concluding that "our method of employment of these weapons has been one of the decisive factors of our ground campaigns throughout the world."

American soldiers entered battle with uniforms not well suited to field duty, a fact that became even more evident in bad weather and when winter came. Overshoes or galoshes were never in adequate supply, and the consequence was a higher rate of non-battle casualties caused by frostbite and trench foot. A brief flirtation with a camouflage utility uniform was quickly ended when Americans discovered that the SS used a field uniform almost identical in design. American load-bearing equipment was little changed from the First World War. Many soldiers quickly rid themselves of what they saw as pointless encumbrances, among them the gas mask and the bayonet.

## ALLIED EQUIPMENT

### U.S. Army Infantry Weapons

	Caliber	Weight	Rate of Fire	Range***	Crew
<b>M1 Carbine</b>	.30	5.5 pounds	40-50 rpm	300 m	-
<b>M1 Garand</b>	.30	9.5 pounds	30-50 rpm	460 m	-
<b>BAR</b>	.30	19.4 pounds	550 rpm**	600 m	-
<b>Thompson</b>	.45	10.5 pounds	700 rpm**	170 m	-
<b>.30 cal MG</b>	.30	33 pounds*	400-500 rpm**	1100 m	3
<b>.50 cal M2</b>	.50	84 pounds*	450-550 rpm**	2200 m	3
<b>Bazooka M9</b>	2.36-inch	16 pounds	10	300 m	2

\*Weight without tripod or other mount.

\*\*Cyclic rate of fire.

\*\*\*Maximum effective range.



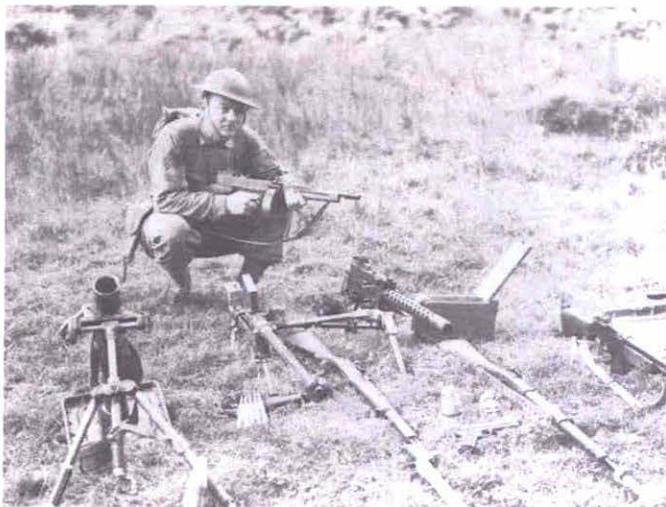
*.30 cal Heavy Machine Gun*



*Bazooka*



*Rifle Grenade*



*Weapons, left to right: Soldier is holding a .45-cal. Thompson submachine gun M1928A1. 60mm Mortar M2; British Anti-Tank Gun; .30-cal. U.S. Rifle M1 with Bayonet M1; .30-cal. Browning light Machine Gun M1919A4; hand grenades; .45-cal. M1911A1 pistol; .30-cal. U.S. Rifle M1903 with grenade launcher M1; .30-cal. Browning Automatic Rifle M1913A2.*

## U.S. Army Mortars

Mortar	Weight	Rate of Fire	Range	Crew
60 mm M2	42 pounds	18 rpm	1800 m	3
81 mm M1	136 pounds	18 rpm	2900 m	3
4.2-inch M24	650 pounds	20 rpm	5400 m	7



*60mm Mortar*



*81mm Mortar*



*4.2-inch Mortar ("4-Deuce")*

**M-1 57mm Anti-Tank Gun**



<b>Range</b>	9,230 m maximum
<b>Muzzle Velocity</b>	2800 ft/sec
<b>Weight</b>	2810 pounds
<b>Penetration</b>	82mm of armor at 500 m
<b>Mount</b>	towed

**M-7 105mm Self-Propelled Howitzer (Priest)**

<b>Chassis</b>	M4A3 Tank
<b>Howitzer</b>	M2A1 105mm howitzer
<b>Range</b>	10,980 m
<b>Shell Weight</b>	33 pounds
<b>Rate of Fire</b>	8 rpm
<b>Crew</b>	6
<b>Notes</b>	Armored division artillery



### M-2A1 105mm Towed Howitzer

**Caliber** 105mm  
**Range** 10,980 m  
**Shell Weight** 33 pounds  
**Rate of Fire** 8 rpm  
**Crew** 6  
**Notes** Infantry division artillery



### M-1 155mm Howitzer

**Caliber** 155mm  
**Weight** 12,000 pounds  
**Range** 14,700 m  
**Shell Weight** 95 pounds  
**Rate of Fire** 2 rpm  
**Crew** 6  
**Notes** Infantry Division Artillery



### M-1A1 155mm Gun

**Caliber** 155mm  
**Weight** 30,600 pounds  
**Range** 22,860 m  
**Shell Weight** 95 pounds  
**Rate of Fire** 1 rpm  
**Crew** 6  
**Notes** Corps artillery



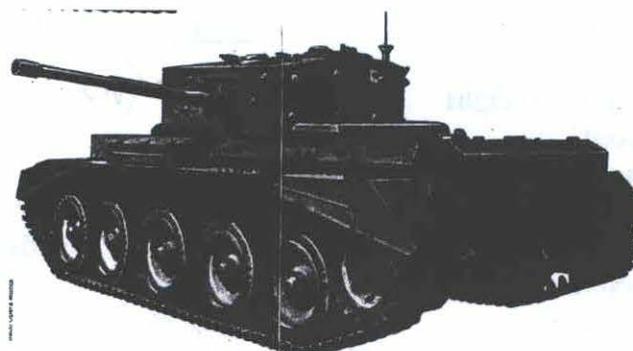
### M-2 8-inch Howitzer

<b>Caliber</b>	8-inch
<b>Weight</b>	31,700 pounds
<b>Range</b>	16,660 m
<b>Shell Weight</b>	200 pounds
<b>Rate of Fire</b>	1 rpm
<b>Crew</b>	6
<b>Notes</b>	Corps artillery



### Cromwell Tank

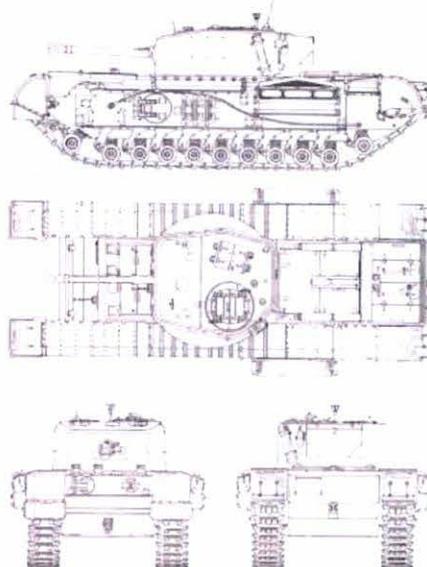
<b>Weight</b>	30.8 tons
<b>Speed</b>	27 mph maximum
<b>Range</b>	173 miles
<b>Armament</b>	75 mm gun
<b>Secondary</b>	2 x .30-cal. Machine gun
<b>Armor</b>	76 mm maximum in turret; 63 mm maximum in hull
<b>Crew</b>	5



### Churchill Tank

<b>Weight</b>	40 tons
<b>Speed</b>	12.5 mph
<b>Range</b>	
<b>Armament</b>	75 mm gun
<b>Secondary</b>	2 x .30-cal. Machine gun
<b>Armor</b>	152 mm maximum
<b>Crew</b>	5

Infantry Tank Mk. IV, Churchill Mk. VII



Original Drawing © Copyright The Tank Museum 1983

### M4A1 Sherman

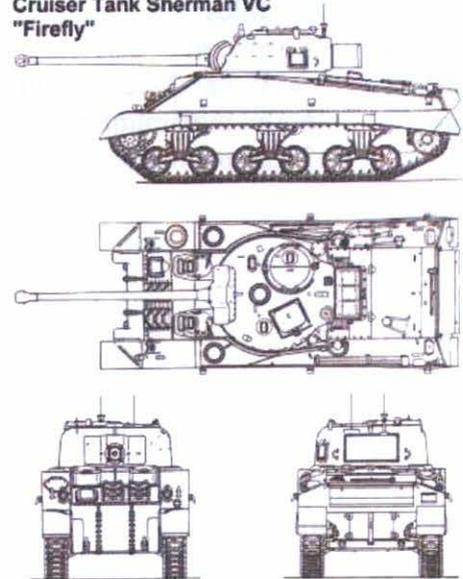
**Combat Weight** 30,300 kg  
**Speed** 34 km/h  
**Range** 412 km  
**Armament** 75mm Gun M3  
90 rounds  
**Secondary** 2 x .30 caliber MG  
1 x .50 caliber MG  
**Armor** Maximum 76mm  
Minimum 13 mm  
**Crew** 5



### Sherman "Firefly" M4 Variant

**Combat Weight** 32,700 kg  
**Speed** 40 km/h  
**Range** 451 km  
**Armament** 76.2mm ROQF 17-pounder  
Mk IV or VI with 77 rounds  
**Secondary** 1 x .30 caliber MG  
**Armor** Maximum 76mm  
Minimum 13 mm  
**Crew** 5

Cruiser Tank Sherman VC  
"Firefly"



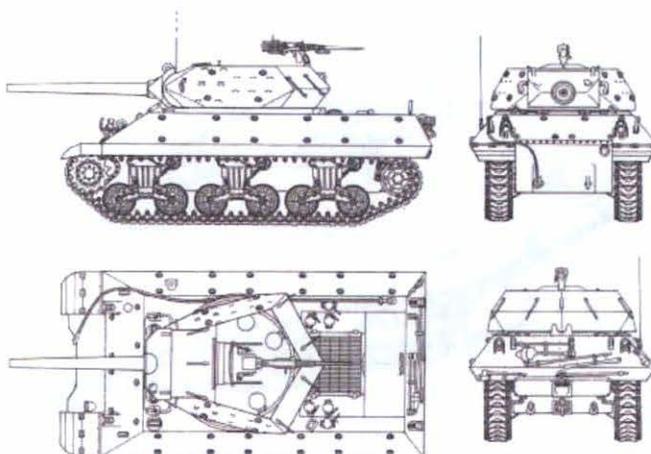
Original Drawing by D.P. Dyer  
© Copyright R.P. Hunnicutt 1978

### Light Tank Stuart M5A1

**Combat Weight** 15,500 kg  
**Speed** 58 km/h  
**Range** 161 km  
**Armament** 37mm Gun M6  
**Secondary** 3 x .30 caliber MG  
**Armor** Maximum 64mm  
Minimum 10 mm  
**Crew** 4



### 3 inch Gun Motor Carriage M10



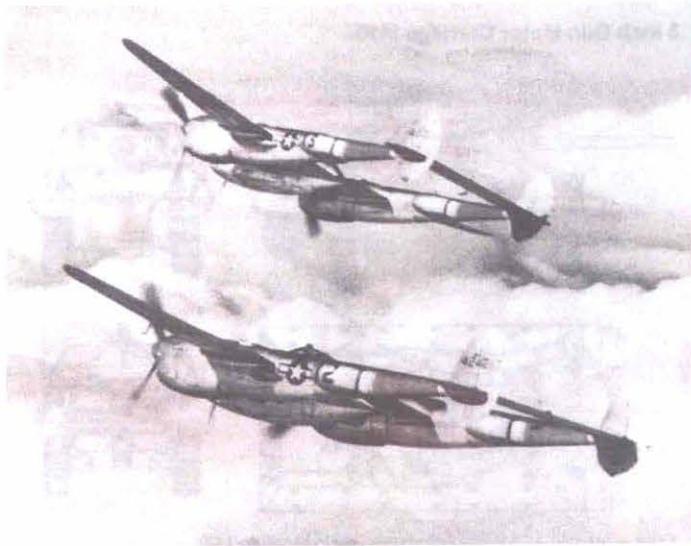
Original Drawing ©Copyright Squadron/Signal Publications 1998

### Allied Tactical Aircraft

Aircraft	Maximum Speed	Maximum Range	Armament	Ordnance Load	Service Ceiling	Number in Service
Spitfire Mk XIV	440 mph	850 miles	2 x 20mm cannon; 2 x .50-cal. MG	500 pounds	43,000 feet	960
Typhoon	412 mph	510 miles	8 x 20mm cannon	2,000 pounds or 8 rockets	35,200 feet	3,270
P-38J Lightning	410 mph	2,250 miles	1 x 20mm cannon; 4 x .50-cal. MG	3,200 pounds	44,000 feet	6,780
P-47D Thunderbolt	430 mph	590 miles	6 x or 8 x .50-cal. MG	2,500 pounds or 10 rockets	42,000 feet	12,560
P-51D Mustang	440 mph	2,100 miles	6 x .50-cal. MG	2,000 pounds or 6 rockets	41,900 feet	7,970



*Spitfire*



*P38*



*P47*



*P51*

## GERMAN EQUIPMENT

### Maschinengewehr 42 (MG42)



<b>Caliber</b>	7.92mm
<b>Rate of Fire</b>	cyclic rate of fire of up to 1,400 rpm and a practical rate of fire of 250 to 500 rpm, depending on the mount
<b>Ammunition</b>	50-round metallic-link belt
<b>Range</b>	effective range of 2000 to 2500 yards as HMG; 600-800 yards on bipod.
<b>Mounts</b>	Vehicle, tripod (heavy MG), bipod (light MG)
<b>Remarks</b>	Introduced new, simple locking system and easy barrel changing method.

### Maschinengewehr 34 (MG34)



<b>Caliber</b>	7.92mm
<b>Rate of Fire</b>	cyclic rate of fire of 900 rpm and a practical rate of fire of 100-120 rpm as a light machine gun and 300 rpm as a heavy machine gun
<b>Ammunition</b>	50-round metallic-link belt or by drums
<b>Range</b>	effective range of 2000 to 2500 yards as HMG; 600-800 yards on bipod.
<b>Mounts</b>	Vehicle, tripod (heavy MG), bipod (light MG)
<b>Remarks</b>	Largely replaced by the MG42 in infantry units by 1944

## Gewehr 98 and Karabiner 98



*Shown w/Grenade Launcher ("Schiessbecher")*

<b>Caliber</b>	7.92mm
<b>Operation</b>	bolt action rifles
<b>Construction</b>	Mauser design; wooden stock
<b>Magazine</b>	five round clip
<b>Weight</b>	9 pounds
<b>Range</b>	800 meters maximum

## Schiessbecher

### **Rifle Grenade Device for the GEW98**

<b>Types of Grenades</b>	HE, AP, smoke, illumination
<b>Firing Positions</b>	prone, kneeling, standing
<b>Range</b>	250 meters in horizontal fire; maximum range 400 meters. When Used as a mortar, 25 to 75 meters.
<b>Grenadier Load</b>	10 HE and 5 AT grenades.
<b>Remarks</b>	The Germans characteristically used it as a squad mortar and anti-tank weapon. One grenadier per rifle squad.

## Maschinenpistole 40 (MP40)



<b>Caliber</b>	9mm
<b>Operation</b>	blowback operated machine pistol
<b>Construction</b>	metal and plastic with folding stock
<b>Magazine</b>	32 rounds
<b>Rate of Fire</b>	500 rpm (cyclic) or 180 rpm (normal)

**Maschinenpistole 44 (MP44)**



**Caliber** 7.92mm  
**Magazine** 35-38 round magazine  
**Range** 600 meters maximum effective range  
**Remarks** Issued principally to airborne units.

**Stielhandgranate 24**



**Weight** 1.36 pounds  
**Length** 14 inches  
**Delay** 5 seconds  
**Charge** .365 pounds TNT

**Eihandgranate 39**



**Weight** 8 ounces  
**Delay** 5 seconds  
**Charge** 4 ounces TNT

**Panzerfaust 30**



**Length** 41 inches  
**Weight** 11 pounds  
**Charge** shaped charge anti-tank grenade  
**Range** 30 meters optimum  
**Penetration** 200 mm of armor at 30 meters

**Raketenpanzerbüchse 54** (also known as the **Panzerschreck**)



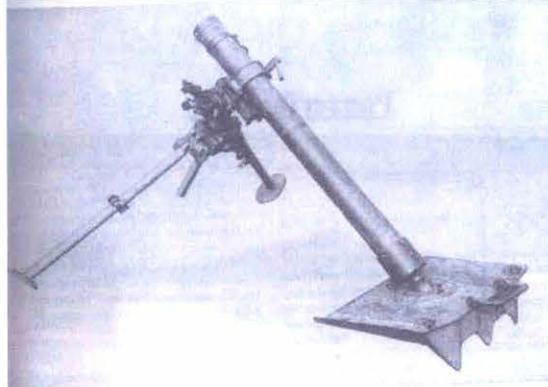
**Length** 5.5 feet  
**Weight** 20 pounds  
**Charge** 88mm shaped charge (7 pounds)  
**Range** 115 meters optimum  
**Penetration** 200 mm of armor

**Leichter Granatenwerfer 36 (50 mm Mortar)**



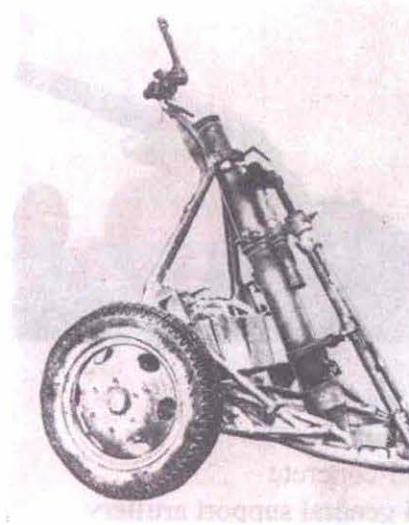
**Caliber** 50mm  
**Weight** 31 pounds  
**Range** 570 yards  
**Rate of Fire** 12-20 rpm

**Schwerer Granatenwerfer 34 (81 mm Mortar)**



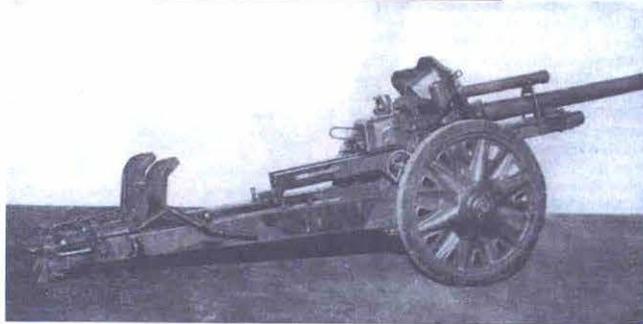
**Caliber** 81mm  
**Weight** 124 pounds  
**Range** 2625 yards maximum  
**Rate of Fire** 10-12 rpm

### Granatenwerfer 42 (120mm Mortar)



**Caliber** 120mm  
**Weight** 616 pounds  
**Range** 6600 yards maximum  
**Rate of Fire** Rate of fire and overall fire support comparable to 105mm howitzer

### Leichte Feld Haubitze 18



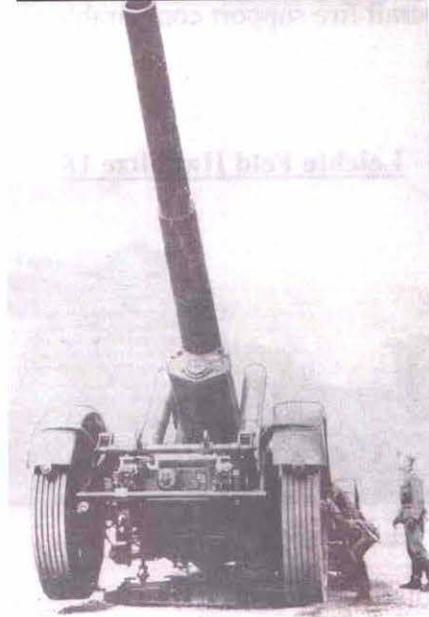
**Caliber** 10.5 cm  
**Weight** 4320 pounds  
**Range** 13,480 yards maximum  
**Ammunition** HE, smoke, sabot, incendiary, illuminating  
**Remarks** Standard divisional direct support artillery

**Feld Haubitze 18/40**



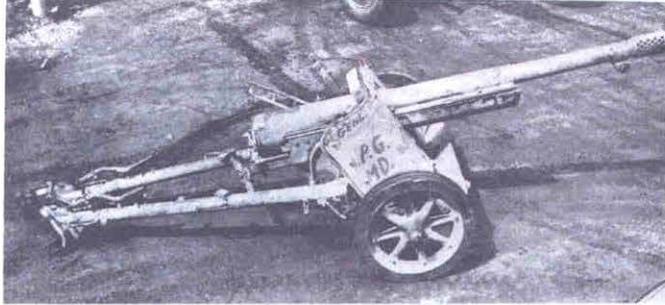
**Caliber** 15 cm  
**Weight** 12,096 pounds  
**Range** 14,630 yards maximum  
**Ammunition** HE, AP, smoke, anti-concrete  
**Remarks** Standard divisional general support artillery

**Mörser 18 (210mm Howitzer)**



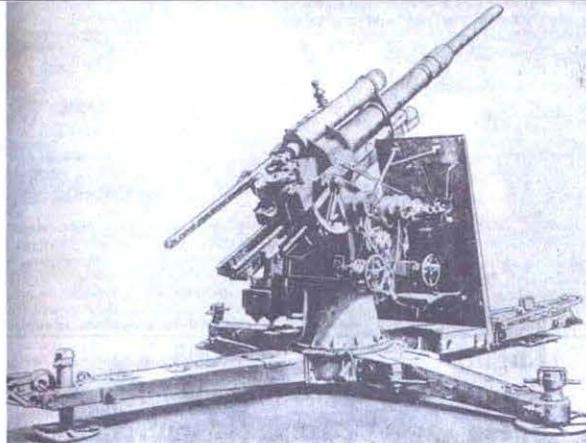
**Caliber** 21 cm  
**Weight** 36,740 pounds  
**Range** 18,300 yards maximum  
**Ammunition** HE, anti-concrete

### Panzerabwehrkanone 40 (PAK 40)



- Caliber** 75 mm
- Weight** 3136 pounds
- Range** 1000 yards maximum
- Ammunition** AP
- Remarks** Penetration at maximum effective range – 102mm of armor; pictured is the 97/38 variant with Solothurn muzzle brake

### Panzerabwehrkanone 43/41C (PAK 43/41C Antitank/Antiaircraft Gun)



- Caliber** 88 mm
- Weight** 9660 pounds
- Range** 16,200 yards horizontal
- Ammunition** AP, AA
- Rate of Fire** 15-20 rpm
- Remarks** Penetration at 1500 yards – 130mm of armor

### Nebelwerfer 41



**Caliber** 150mm  
**Weight** 1,195 pounds  
**Range** 7,330 yards maximum  
**Rate of Fire** 6 rounds/90 seconds

### Sturmgeschütz III (Stu.G. III)



<b>Weight</b>	26.35 tons	<b>Engine</b>	Maybach, 295
<b>Length</b>	22.5'	<b>Range</b>	124 miles (62 miles cross-country)
<b>Height</b>	7'	<b>Speed</b>	20 mph (15 mph cross-country)
<b>Width</b>	9'8"	<b>Crew</b>	4
<b>Armor</b>		<b>Main gun</b>	7.5 cm Stu.K.40 L/48 with 49 rounds
	<b>Maximum</b> 81 mm	<b>Secondary</b>	1 x MG34
	<b>Minimum</b> 20 mm	<b>Penetration</b>	84mm of armor at 500 yards; 72mm of armor at 1000 yards

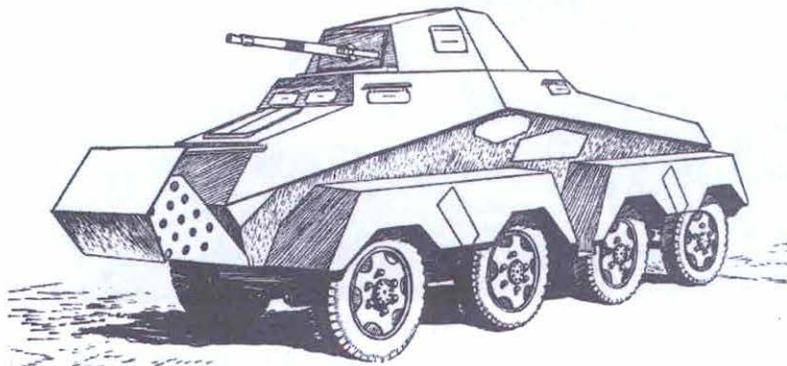
**Remarks** The vehicle was based on the PzKpfw. III chassis. The Stu.G.IV, also found in Normandy, was based on the PzKpfw. IV chassis, used the same gun and had a similar performance.

### Sturmgeschütz 38t (Stu.G. 38t)



<b>Weight</b>	16.65 tons	<b>Engine</b>	Czech EP4, 150 hp
<b>Length</b>	20.7'	<b>Range</b>	124 miles (62 miles cross-country)
<b>Height</b>	6'10.5"	<b>Speed</b>	23 mph (15 mph cross-country)
<b>Width</b>	8'7.5"	<b>Crew</b>	4
<b>Armor</b>		<b>Main gun</b>	7.5 cm Pak 39 L/48 with 41 rounds
<b>Maximum</b>	60 mm	<b>Secondary</b>	1 x MG34
<b>Minimum</b>	10 mm	<b>Penetration</b>	84mm of armor at 500 yards; 72mm of armor at 1000 yards
<b>Remarks</b>	The vehicle was based on the Czech 38t light tank chassis.		

### Schwerer Panzerspähwagen 8 Rad (Sd.Kfz. 231)



<b>Weight</b>	8.35 tons	<b>Engine</b>	8-cylinder, 155 hp
<b>Length</b>	19'1"	<b>Speed</b>	51 mph maximum
<b>Height</b>	7'10"	<b>Crew</b>	4
<b>Width</b>	7'3"	<b>Range</b>	110 miles cross country, 190 miles on roads
<b>Armor</b>		<b>Armament</b>	1 x 2cm KwK36; 1 MG 34 machine gun.
<b>Maximum</b>	15mm		
<b>Minimum</b>	8mm		
<b>Remarks</b>	This is typical of the variety of light armored fighting vehicles and reconnaissance vehicles used in German armored divisions.		

**PanzerKampfswagen IV, Ausf. G**



<b>Weight</b>	26 tons	<b>Engine</b>	Maybach, 295bhp
<b>Length</b>	19'4"	<b>Range</b>	130 miles (80 miles cross-country)
<b>Height</b>	8'6"	<b>Speed</b>	20 mph maximum (15 mph cross-country)
<b>Width</b>	9'7"	<b>Crew</b>	5
<b>Armor</b>		<b>Main gun</b>	7.5 cm KwK 40 L/43 with 79 rounds
<b>Maximum</b>	60 mm	<b>Secondary</b>	2 x 7.92 mm MG34
<b>Minimum</b>	20 mm		

**PzKpfw V, Ausf. D (Panther)**



<b>Weight</b>	43 tons	<b>Engine</b>	Maybach, 700 bhp
<b>Length</b>	22'	<b>Range</b>	124 miles (62 miles cross-country)
<b>Height</b>	9'4"	<b>Speed</b>	20 mph (15 mph cross-country)
<b>Width</b>	10'9"	<b>Crew</b>	5
<b>Armor</b>		<b>Main gun</b>	7.5 cm KwK 42 L/70 with 79 rounds
<b>Maximum</b>	100 mm	<b>Secondary</b>	2 x 7.92 mm MG34 or MG42 machine gun
<b>Minimum</b>	16 mm		

### PzKpfw VI (Tiger)



<b>Weight</b>	60 tons	<b>Engine</b>	Maybach 12-cyl gasoline, 700 bhp
<b>Length</b>	27'	<b>Range</b>	121 miles
<b>Width</b>	12'3"	<b>Speed</b>	24 mph (11 mph cross-country)
		<b>Crew</b>	5
<b>Main Gun</b>	88mm w/92 rounds	<b>Secondary</b>	2 x 7.92mm MG34
<b>Effective Range</b>	3000m AP, 5000 m HE		
<b>Produced</b>	1,350, July 1942 - August 1944		



KALL TRAIL, showing the Kommerscheidt side of the gorge in the background.

**1944**



***Ray Fleig, platoon leader in Company A, 707th Tank Battalion, in 1945, after his promotion to captain. Fleig led the first tanks across the Kall River early on 4 November.***



***Ray Fleig walking the Kall Trail, December 2000.***



***Kall Gorge – 2000***



# ***Suggestions for Further Reading***

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**Ambrose, Steven. *Citizen Soldiers*. New York: Simon and Schuster, 1997.**

Ambrose has collected thousands of oral histories from veterans of the Second World War. This was the second major book he wrote, using those oral histories as the vehicle for telling the story of the campaigns in Europe in 1944 and 1945. This is a good book, but it lacks the tight focus of his Normandy book. Use this to prepare vignettes for local actions during staff rides. It is not helpful for looking at the operational or strategic levels of war, and it makes it seem like officers, and especially generals, had little to do with the course of the campaigns and battles.

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**Astor, Gerald. *The Bloody Forest: Battle for the Huertgen: September 1944-January 1945*. Presidio, CA.: Presidio, 2000.**

Astor's book is the newest of the books on the subject. He has a definite axe or two to grind. He was an individual replacement in Europe during the Second World War, although he saw no combat. He feels that he was very poorly trained for his job as an infantryman, and he believes that the battles for the Huertgen Forest were major tactical and operational mistakes by our generals. His view of the generals, and especially from Hodges down is very negative. Thus, this book gives us issues to think about that deal with the tactical, operational, and strategic level of the campaign.

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**MacLean, French. *Quiet Flows the Rhine: German General Officer Casualties in World War Two*. Winnipeg, Ont.: J. J. Fedorowicz, 1996.**

This is a masterful study of the German Army's senior officer casualties in the war. There is nothing like it for our army since we suffered so few general officer casualties. Not surprisingly, most general officer deaths occurred on the Eastern Front, where most of the German generals served.

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**MacDonald, Charles B.. *The Siegfried Line Campaign*. Washington, D. C.: CMH, 1990.**

This is the absolutely essential source for the study of this campaign and for the development and conduct of staff rides dealing with the campaigns of the period September to December 1944 in northwestern Europe. MacDonald's research is impeccable. His tone is neutral. He covers the Arnhem operation as well as the operations undertaken to penetrate the Siegfried Line from Aachen to Wallendorf. This book provides the data needed for professional soldiers to draw their own conclusions about the Huertgen battles. The set of maps that accompany this book is terrific for the study of the strategic, operational, and tactical levels of warfare.

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**MacDonald, Charles B. and Sidney Mathews. *Three Battles: Arnaville, Altuzzo, and Schmidt*. Washington, D. C.: CMH, 1989.**

MacDonald and Mathews studied three tactical operations in detail and collected those studies in this volume. General Stofft made me read the account of the Battle of Schmidt when I was a CGSC student in 1980. I have always appreciated that opportunity to study generalship and leadership at the division level and below. The maps are superb and are a must for a study of the Huertgen operations of Norm Cota's 28<sup>th</sup> Infantry Division. The accounts treat both sides comprehensively and fairly and should be read along with Astor's book.

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**Mansoor, Peter. *The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941-45*. Lawrence, KS: University of Kansas Press, 1999.**

Peter Mansoor deals with many of the issues that so animate Astor's negative book on the campaign. Mansoor studies the US Army training and replacement system of the Second World War. He concludes that it worked, but that it also had flaws. Many of those flaws were a direct result of Marshall's decision to field only 89 divisions in the war. This forced a number of adverse things to occur, such as the cannibalization of newer divisions that were in training in the United States in 1943 and 1944 to provide trained infantry replacements for the divisions in combat overseas. Mansoor is judicious rather than just critical. He provides a superb account of how divisions were created, trained and shipped overseas.

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**Miller, Edward. *A Dark and Bloody Ground*. College Station: Texas A & M Press, 1995.**

Miller's book is somewhat like Astor's and Ambrose's books. It uses many first hand accounts that were gathered through the oral history process. Miller does not have as visible an axe to grind against general officers as does Astor, but the story he tells gives plenty of food for thought about the strategic and operational issues and decisions made by Ike, Bradley, Hodges, and Collins in September through November 1944. His maps are very poor, and you need to use MacDonald's maps to make sense of his detailed narrative. Nonetheless, he does a good job of portraying how difficult, frustrating, and costly the fighting in the Stolberg Corridor and the Huertgen was.

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**Ruppenthal, Roland. *Logistical Support of the Armies. Two Volumes*. Washington, D. C.: CMH, 1995. (Especially volume one).**

This two volume work is the best account of the history of logistical operations in Europe in World War Two. The old saying that 'professionals do logistics and amateurs do tactics' makes sense when one reads these volumes. As Eisenhower's memos to Marshall and the Combined Chiefs of Staff indicate, the logistical situation and requirements drove much of the strategic and operational thinking and decisions of the campaign. There probably would not have been a Huertgen Forest campaign in 1944-45 had the US Army not literally run out of supplies in September 1944. Ruppenthal explains why the corps' and divisions were running on empty at the end

of the rapid pursuit of the Germans across France, and he tells the very interesting story of how the logistical troops and their commanders rectified that situation in a remarkably short time. Alas, there is too little about coal here.

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**Votaw, John. *Blue Spaders, The 26<sup>th</sup> Infantry Regiment, 1917-1967.*  
Wheaton, Ill.: Cantigny First Division Foundation, 1996.**

The First Infantry Division Museum and association published this interesting account of the 26<sup>th</sup> Infantry in the two world wars. The Blue Spaders were in the thick of the fighting to take Aachen and the Stolberg Corridor. Later they helped turn the Huertgen Forest from the north. Finally, they destroyed the 12<sup>th</sup> SS Panzer Division in the Battle of the Bulge. Anyone in the First Infantry Division doing a staff ride of the Huertgen or of the Ardennes ought to use this book along with MacDonald's books.

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**Weigley, Russell, *Eisenhower's Lieutenants: The Campaign of France and Germany, 1944-1945.* Bloomington, In: Indiana University Press, 1990.**

Weigley's book about the relationships among Eisenhower and his major subordinates is terrific. Generals make a difference in a big way-- tactically, operationally, and strategically. Weigley describes how decisions were made in the European Theater of Operations, and he indicates how important personal relationships were to those decisions. You will get a new view of the perennial favorites, pro and con, by reading this book. It covers the entire campaign from Normandy to Germany and, therefore, is very useful for officer development staff rides at brigade and higher levels.

*Compiled by Scott Wheeler*



RIFLEMAN *in burning Aachen.*



# Glossary

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<b>AAA</b>	Antiaircraft Artillery
<b>AAF</b>	Army Air Forces (US)
<b>AAR</b>	After Action Report
<b>ABC</b>	American-British Conversations (January-March 1941)
<b>Abn</b>	Airborne
<b>ACofS</b>	Assistant Chief of Staff
<b>AD</b>	Armored Division
<b>Adm; Admin</b>	Administrative
<b>ADO</b>	Assistant Directorate of Organization (US)
<b>ADSEC</b>	Advance Section, Communications Zone
<b>AEAF</b>	Allied Expeditionary Air Force
<b>AEF</b>	Allied Expeditionary Force
<b>AF</b>	Air Force
<b>AFHQ</b>	Allied Force Headquarters
<b>AFSC</b>	Air Force Service Command
<b>AFV</b>	Armored Fighting Vehicle
<b>AG</b>	Adjutant General
<b>AGF</b>	Army Ground Forces (US)
<b>A Gp</b>	Army Group
<b>AIS</b>	Allied Information Service
<b>Ammo</b>	Ammunition
<b>AMSO</b>	Air Minister for Supply and Organization
<b>ANCXF</b>	Allied Naval Commander Expeditionary Force
<b>Anlage</b>	Appendix or Annex
<b>Anzio</b>	Site of Anglo-American amphibious assault, January 1944, on the West coast of Italy
<b>AP</b>	Armor piercing
<b>APC</b>	Armored Personnel Carrier
<b>Armd</b>	Armored
<b>Arty</b>	Artillery
<b>ASF</b>	Army Service Forces
<b>ASP</b>	Ammunition Supply Point
<b>ASW</b>	Anti-submarine warfare; Assistant Secretary of War
<b>AT</b>	Antitank
<b>ATS</b>	(Women's) Auxiliary Territorial Service
<b>Avgas</b>	Aviation Gasoline
<b>Axis, The</b>	Alliance of Germany and Italy, later including Japan and other nations, that opposed the Allies in World War II

<b>Bailey Bridging</b>	Military bridging designed by British engineers
<b>Bangalore</b>	Explosive charge used for clearing barbed wire and detonating land mines
<b>BAR</b>	Browning automatic rifle
<b>Bazooka</b>	American shoulder-fired antitank rocket launcher
<b>BBC</b>	British Broadcasting Corporation
<b>BC</b>	Bomber Command (British)
<b>BCC(L)</b>	BOLERO Combined Committee (London)
<b>BCC(W)</b>	BOLERO Combined Committee (Washington)
<b>Bd</b>	Board
<b>Bde</b>	Brigade
<b>Beachmaster</b>	Person who directed troop and equipment movements onto and off the beaches
<b>BEF</b>	British Expeditionary Forces
<b>Belgian Gates</b>	Steel gates used either as barricades or underwater beach obstacles. Constructed of steel angles and plates on concrete rollers. Also known as Element "C"
<b><i>Blitzkrieg</i></b>	German offensive operations characterized by rapid-moving tank attacks supported by dive bombers, artillery, and mounted infantry
<b>Bn</b>	Battalion
<b>Bocage</b>	Hedgerow country in Normandy characterized by small fields bounded by embankments overgrown with trees and shrubs
<b>Br</b>	Branch; British
<b>Br COS</b>	British Chiefs of Staff Committee
<b>BSCC</b>	BOLERO-SICKLE Combined Committee
<b>BUCO</b>	Buildup Control Organization
<b>CAO</b>	Chief Administrative Officer
<b>CAD</b>	Civil Affairs Division
<b>CATOR</b>	Combined Air Transport Operations Room
<b>Cav</b>	Cavalry
<b>Cbl</b>	Cable
<b>CCA, CCB, CCR</b>	Combat Command A, B, and Reserve in a US Armored Division
<b>CCS</b>	Combined Chiefs of Staff (US-British)
<b>CCAC</b>	Combined Civil Affairs Committee
<b>CG</b>	Commanding General
<b>Chespaling</b>	A wood and wire matting laid on beaches wherever needed to provide footing for vehicles
<b>CIGS</b>	Chief of the Imperial General Staff (British)
<b>CinC</b>	Commander in Chief
<b>C-in-C</b>	Commander-in-Chief (British usage)
<b>Cir</b>	Circular
<b>Classes of Supply</b>	
<b>I</b>	Rations
<b>III</b>	Fuels & lubricants such as gasoline & coal
<b>V</b>	Ammunition & Explosives

<b>II &amp; IV</b>	All other supplies and equipment for which allowances may (Class II) or may not (Class IV) be established, as, for example, clothing, weapons, construction, and fortification materials
<b>CNO</b>	Chief of Naval Operations
<b>CO</b>	Commanding Officer
<b>Co</b>	Company
<b>CofEngrs</b>	Chief of Engineers
<b>CofS</b>	Chief of Staff
<b>CofT</b>	Chief of Transportation
<b>Com</b>	Committee
<b>Combined</b>	Involving forces of more than one nation
<b>Comd</b>	Command
<b>Comdr</b>	Commander
<b>COMZ</b>	Communications Zone – that portion of a theater of operations behind the Combat Zone
<b>Conf</b>	Conference
<b>COS Com</b>	British Chiefs of Staff Committee
<b>COSSAC</b>	Chief of Staff to the Supreme Allied Commander (Designate)
<b>CP</b>	Command Post
<b>CPS</b>	Combined Staff Planners
<b>CWS</b>	Chemical Warfare Service
<b>DCofS</b>	Deputy Chief of Staff
<b>DD</b>	Duplex Drive (land and water propulsion) and flotation system fitted on various vehicles – especially tanks – in amphibious landings
<b>D-Day</b>	Exact day for the beginning of an operation
<b>Dieppe Raid</b>	Amphibious assault by British and Canadian troops on the coast of France in August 1942 – repelled with heavy losses
<b>Dir</b>	Directive; Director
<b>Div</b>	Division
<b>DOD</b>	Department of Defense (US)
<b>DQMG(L)</b>	Deputy Quartermaster General (Liaison) (British)
<b>DSC</b>	Distinguished Service Cross
<b>Dtd</b>	Dated
<b>DUKW</b>	2 ½ ton 6x6 Amphibian Truck (“Duck” in Army slang)
<b>Dumb Barge</b>	An unpowered barge that could be beached
<b>Dunkerque</b>	Seaport in northern France from which British and Allied forces were withdrawn in a last minute escape after defenses collapsed in the face of German attacks, May 1940
<b>DZ</b>	Drop zone for paratroopers and air-dropped supplies
<b>EACS</b>	European Allied Contact Section
<b>Ech</b>	Echelon
<b>EM</b>	Enlisted men
<b>Eng; Engr</b>	Engineer

<b>ETO</b>	European Theater of Operations
<b>ETOUSA</b>	European Theater of Operations, United States Army
<b>EUCOM</b>	European Command, successor to USFET
<b>Exec</b>	Executive; Executive Officer
<b>Ex O</b>	Executive Officer
<b>FA</b>	Field Artillery
<b>FAAA</b>	First Allied Airborne Army
<b>Falaise Gap</b>	Opening between US and British advances north and south of the town of Falaise (south of Caen) through which many German soldiers escaped in August 1944
<b>FCNL</b>	French Committee of National Liberation
<b>FECOMZ</b>	Forward Echelon, Communications Zone
<b>FFI</b>	<i>Forces Françaises de l'Intérieur</i> (French Forces of the Interior)
<b>Fifth column</b>	Subversive organization working in a country for an invading army
<b>Flail</b>	Tank fitted with heavy chains on a revolving drum that beat the ground in front of the tank to clear mines
<b>FLAK</b>	Antiaircraft artillery fire or gun
<b>FO</b>	Field Order
<b><i>Fuehrungsgruppe</i></b>	Operations Group
<b><i>Fuehrungsstab</i></b>	Operations Staff
<b>Funnies</b>	Special armored assault teams developed under Major General Sir Percy Hobart that operated unusual vehicles such as flail tanks (also "Hobart's Funnies")
<b>FUSA</b>	First US Army
<b>FUSAG</b>	1 <sup>st</sup> US Army Group
<b>G-1</b>	ACofS for personnel - the staff office responsible for personnel matters (US & Combined Headquarters)
<b>G-2</b>	ACofS for intelligence - the staff office responsible for intelligence on enemy operations and capabilities (US & Combined Headquarters)
<b>G-3</b>	ACofS for operations - the staff office responsible for plans and operations (US & Combined Headquarters)
<b>G-4</b>	ACofS for supply - The staff office responsible for logistics (US & Combined Headquarters)
<b>G-5</b>	ACofS for civil affairs - the staff office responsible for civil affairs (US and Combined Headquarters)
<b>G-6</b>	Short-lived division of SHAEF which dealt with public relations and psychological warfare
<b>Gen Bd Rpt</b>	General Board Report
<b><i>Gen. St. d. H.</i></b>	<i>Generalstab des Heeres</i> (General Staff of the Army)
<b>GFRS</b>	Ground Force Replacement System
<b>GHQ</b>	General Headquarters
<b>GO</b>	General Order
<b>Gooseberry</b>	Harbor constructed of sunken ships used to shelter small craft

<b>Gp</b>	Group
<b>GPA</b>	General Purchasing Agent
<b>Grand Alliance</b>	World War II coalition of the United States, Great Britain, and the Soviet Union
<b>Green Books</b>	Works in the official history of the U.S. Army in World War II
<b>HE</b>	High Explosive
<b>Hedgehog</b>	Portable obstacle, made of three crossed angle irons
<b>Heeresgruppe</b>	Army Group
<b>H-Hour</b>	Exact minute for the beginning of a military operation
<b>Hist</b>	Historical; Historian
<b>HQ; Hq</b>	Headquarters
<b>ID</b>	Infantry Division
<b>Incl</b>	Inclosure
<b>Ind</b>	Indorsement
<b>Inf</b>	Infantry
<b>Int; Intel</b>	Intelligence
<b>Interdiction</b>	Cutting an enemy's line of communication by firepower (including aerial bombardment) to impede enemy operations
<b>Interv</b>	Interview
<b>ISS</b>	Identification of Separate Shipments to Overseas Destinations
<b>Jabo</b>	German slang for <i>Jagdbomber</i> (fighter-bomber)
<b>Joint</b>	Including elements from more than one service.
<b>JCS</b>	Joint Chiefs of Staff; Leaders of all services meeting to resolve issues and make decisions affecting more than one service (US)
<b>Jedburgh Team</b>	Small, specially trained teams of Allied officers and men dropped behind enemy lines to aid resistance groups
<b>JIC</b>	Joint Intelligence Committee
<b>JPS</b>	Joint Staff Planners
<b>JSM</b>	Joint Staff Mission (British mission to Washington)
<b>Jt</b>	Joint
<b>Kampfgruppe</b>	German equivalent of task force; combat team
<b>KTB</b>	<i>Kriegstagebuch</i> (war diary)
<b>LBV</b>	Landing Barge, which was capable of carrying either supplies or vehicles and could be beached
<b>LCI(L)</b>	Landing Craft, Infantry (Light)
<b>LCM</b>	Landing Craft, Mechanized
<b>LCT</b>	Landing Craft, Tank
<b>LCVP</b>	Landing Craft, Vehicle & Personnel
<b>LD</b>	Line of Departure
<b>Lend-Lease</b>	Act passed March 1941 allowing President Roosevelt to sell, transfer title to, exchange, lease, lend, or otherwise dispose of

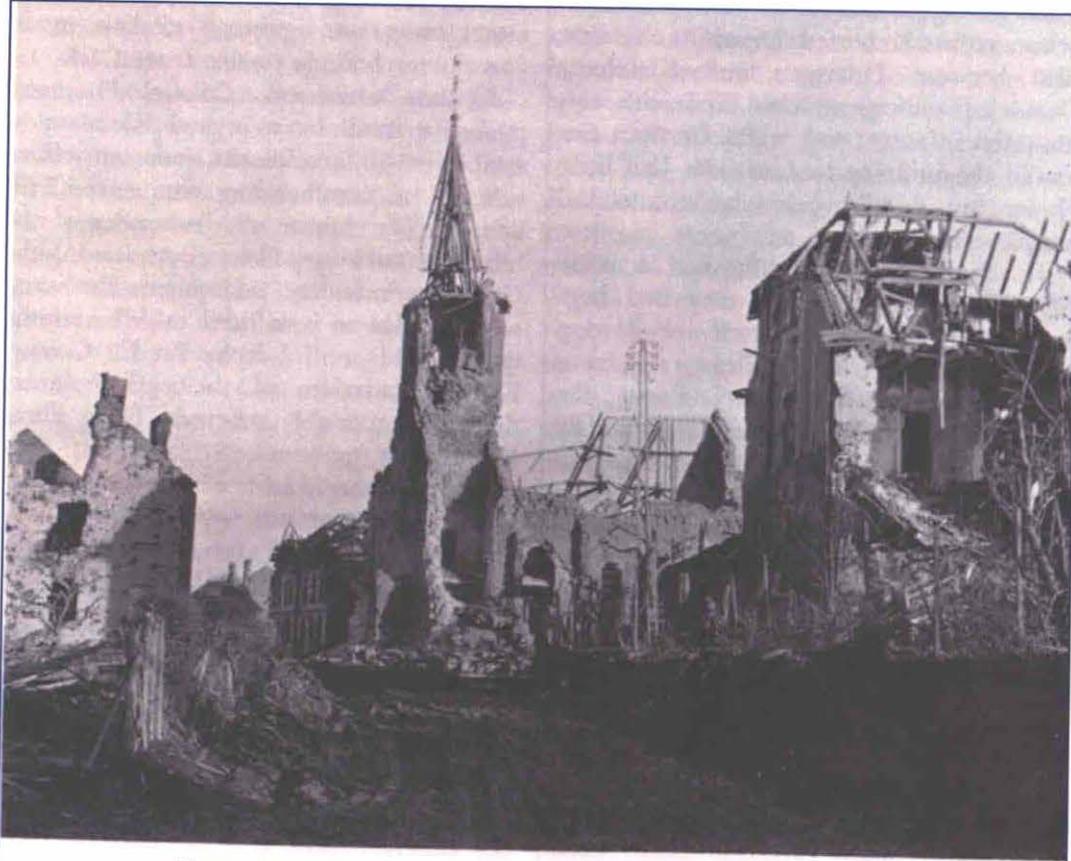
	equipment to any country on which US defense was thought to depend
<b>Liberty Ships</b>	Mass-produced US cargo vessels of approximately 10,000 tons which were designed for speedy construction early in the war and served as the work-horse in ocean shipping
<b>Ln</b>	Liaison
<b>Lobnitz pierheads</b>	Huge steel structures towed to the Normandy beaches to provide the unloading facilities for LCTs, LSTs and coasters in the Mulberries
<b>Log</b>	Logistical
<b>LSD</b>	Landing Ship, Dock
<b>LST</b>	Landing Ship, Tank
<b>Ltr of Instr</b>	Letter of Instructions
<b>Luftwaffe</b>	German air force
<b>LVT (1)</b>	Landing Vehicle, Tracked, Unarmored (Mark I) "Alligator"
<b>M1 (Garand)</b>	US Semiautomatic infantry rifle
<b>M4 (Sherman)</b>	US Medium Tank
<b>M5 (Stuart)</b>	US Light Tank
<b>M10</b>	US Tank Destroyer with 3-inch gun
<b>M29</b>	"Weasel" tracked cargo carrier
<b>Maquis</b>	Guerilla fighter in the French resistance
<b>MG</b>	Machine gun
<b>Midway</b>	Key naval battle between the US Pacific Fleet and Japan's Combined Fleet, 4 June 1942
<b>Mil Mission Moscow</b>	US Military Mission to Moscow
<b>Min</b>	Minutes
<b>(-) (Minus)</b>	Understrength, or with components detached
<b>MOI</b>	Ministry of Information (British)
<b>Mov &amp; Tn Br</b>	Movements & Transportation Branch
<b>MOVCO</b>	Movement Control
<b>MSR</b>	Main Supply Route
<b>MT Ship</b>	Liberty Ship converted for maximum vehicle-carrying purposes
<b>MT80</b>	Motor Transport gasoline, 80-octane
<b>MTB</b>	Motor Transport Brigade
<b>Mtg</b>	Meeting
<b>MTS</b>	Motor Transport Service
<b>Mulberry</b>	Artificial harbor built of sunken ships and concrete caissons, forming a breakwater within which floating docks were assembled
<b>NAAFI</b>	Navy Army Air Force Institute (British)
<b>NATO; NATOUSA</b>	North African Theater of Operations; North African Theater of Operations, US Army
<b>Naval Gruppe West</b>	German coastal artillery located in Normandy
<b>NCO</b>	Noncommissioned Officer
<b>Nebelwerfer</b>	German multiple rocket projector

<b>NOIC</b>	Naval Officer in Command
<b>NUSA</b>	Ninth US Army
<b>NYPOE</b>	New York Port of Embarkation
<b>OB</b>	Order of Battle--organization and composition of a military force
<b><i>Oberkommando</i></b>	Headquarters of an army or higher military organization
<b><i>OB WEST</i></b>	<i>Oberbefehlshaber West</i> (Headquarters, Commander in Chief West [France, Belgium, and the Netherlands]), highest German ground headquarters of the western front
<b>OCofEngrs</b>	Office, Chief of Engineers
<b>OCofT</b>	Office, Chief of Transportation
<b>OCMH</b>	Office, Chief of Military History
<b><i>OKH</i></b>	<i>Obercommando des Herres</i> (Army High Command)
<b><i>OKL</i></b>	<i>Obercommando der Luftwaffe</i> (Air Force High Command)
<b><i>OKM</i></b>	<i>Oberkommando der Kriegsmarine</i> (Navy High Command)
<b><i>OKW</i></b>	<i>Oberkommando der Wehrmacht</i> (Armed Force High Command)
<b>OP</b>	Observation Post
<b>OPD</b>	Operations Division, War Department
<b>Opn</b>	Operation
<b>OQMG</b>	Office of the Quartermaster General
<b>ORC</b>	Organized Reserve Corps
<b>Ord</b>	Ordnance
<b>OSS</b>	Office of Strategic Services, forerunner of the Central Intelligence Agency
<b><i>Ost battalions</i></b>	Non-German volunteer troops from east-European countries
<b>OWI</b>	Office of War Information
<b>P&amp;O</b>	Plans & Operations Division, War Department, successor to OPD
<b><i>Panzer</i></b>	Armor (German)
<b><i>Panzer Division</i></b>	German Armored Division
<b><i>Panzerfaust</i></b>	German handheld antitank rocket launcher
<b><i>Panzergranadier</i></b>	German mechanized or semi-armored organization, or infantry soldiers within such an organization
<b><i>Panzergruppe West</i></b>	Control headquarters for armored forces established by the Germans in November 1943 to control those decisive forces in any large-scale counterattack against Allied landings along the Channel coast
<b>PC&amp;R Gp</b>	Port Construction and Repair Group
<b>Pillbox</b>	Low-roofed concrete emplacement for machine gun or antitank gun
<b>Plng</b>	Planning
<b>(+) (Plus)</b>	Overstrength, or with attached units
<b>PLUTO</b>	From "pipeline under the ocean" – a cross-Channel underwater pipeline planned for bulk POL deliveries to the far shore
<b>PMS&amp;T</b>	Professor of Military Science & Tactics

<b>POINTBLANK</b>	Allied long-range bombing program (Combined Bomber Offensive) from Britain against Germany
<b>POL</b>	Petroleum (gasoline or diesel fuel), Oil, and Lubricants
<b>POW</b>	Prisoner of War
<b>POZIT</b>	US proximity fuze for artillery and antiaircraft
<b>Prcht</b>	Parachute
<b>PRD</b>	Public Relations Division, SHAEF
<b>Prep</b>	Prepared; preparation
<b>PROCO</b>	Projects for Continental Operations, as system of requisitioning supplies and equipment for special operations
<b>PSO</b>	Principal Staff Officers
<b>PWE</b>	Political Warfare Executive
<b>PzD</b>	Panzer Division – German Armored Division
<b>Q(L)</b>	Quartermaster (Liaison)
<b>QM</b>	Quartermaster
<b>RA</b>	Regular Army
<b>RAF</b>	Royal Air Force (UK)
<b>RAP</b>	ROUNDUP Administrative Planners
<b>Rations--C, D, K</b>	C was a balanced meal in a can; D was a fortified chocolate bar; K was a box meal more nourishing and palatable than C rations
<b>RCT</b>	Regimental Combat Team
<b>Rec</b>	Records
<b>Rgt</b>	Regiment
<b>Rhino ferry</b>	A barge constructed of bolted ponton units and propelled by an outboard motor
<b>RTO</b>	Rail Transportation Officer
<b>S1</b>	Personnel and administrative staff officer, or adjutant, of a brigade or smaller unit
<b>S2</b>	Intelligence staff officer of a brigade or smaller unit
<b>S3</b>	Operations staff officer of a brigade or smaller unit
<b>S4</b>	Logistics staff officer of a brigade or smaller unit
<b>SAC</b>	Supreme Allied Commander
<b>SACMED</b>	Supreme Allied Commander, Mediterranean Theater
<b>SCAEF</b>	Supreme Commander, Allied Expeditionary Force
<b>Second Front</b>	Invasion of Europe by Anglo-American forces to relieve the Eastern (first) Front
<b>SFHQ</b>	Special Force Headquarters
<b>SGS</b>	Secretary, General Staff
<b>SHAEF</b>	Supreme Headquarters Allied Expeditionary Force
<b>Sitrep</b>	Situation Report
<b>SO</b>	Special Operations
<b>SOE</b>	Special Operations Executive

<b>Sommerfeld track</b>	A matting made of wire netting reinforced with steel, used in the same manner as chespaling
<b>SOP</b>	Standard Operating Procedure
<b>SOS</b>	Services of Supply
<b>SP</b>	Self-propelled
<b>SPOBS</b>	Special Observer Group
<b>SS</b>	<i>Schutzstaffel</i> (Elite Guard) Nazi unit originally created to serve as Hitler's bodyguard; later expanded to oversee intelligence and security and to provide large combat organizations ( <i>Waffen-SS</i> ) that fought alongside German Army formations
<b>Stf</b>	Staff
<b>SUP</b>	Single Unit Pack, a method of crating vehicles
<b>Svc</b>	Service
<b>T</b>	Towed
<b>Tac</b>	Tactical
<b>TAC</b>	Tactical Air Command
<b>Tactical Air Force</b>	Generic name for the Allied ground support air forces and air commands
<b>T/BA</b>	Tables of Basic Allowance
<b>TC</b>	Transportation Corps
<b>TCC</b>	Troop Carrier Command
<b>TD</b>	Tank Destroyer
<b>T/E</b>	Tables of Equipment
<b>Tel</b>	Telegram; teletype
<b>Teller Mine</b>	A German land mine
<b>Tetrahedra</b>	Pyramid-shaped obstacles made of angle iron
<b>TF</b>	Task Force
<b>TIS</b>	Theater Intelligence Section
<b>TO&amp;E; T/O&amp;E</b>	Tables of Organization & Equipment
<b>Todt Organization</b>	German organization for military construction (e.g. the Atlantic Wall and West Wall defensive lines)
<b>TOT</b>	Time On Target; a method of timing artillery fire from various points to fall on a given target simultaneously
<b>TUP</b>	Twin Unit Pack, a method of crating vehicles
<b>TURCO</b>	Turn-Round Control
<b>TUSA</b>	Third US Army
<b>TWX</b>	Teletype message
<b>U-boat</b>	German submarine
<b>UNRRA</b>	United Nations Relief and Rehabilitation Administration
<b>USAAFUK</b>	US Army Air Forces in the United Kingdom
<b>USAFBI</b>	US Army Forces in the British Isles
<b>USANIF</b>	US Army Northern Ireland Force
<b>USFET</b>	US Forces in the European Theater, successor command to ETOUSA

<b>USSBS</b>	US Strategic Bombing Survey
<b>USSTAF</b>	US Strategic Air Forces
<b>VGD</b>	German Volksgrenadier Division
<b>VT</b>	US proximity (“variable time”) fuze
<b>V-weapons</b>	German secret weapons planned as revenge for the bombing of Germany--the V-1 “buzz bomb” was a primitive cruise missile; the V-2 was the first operational ballistic guided missile
<b><i>Wacht am Rhein</i></b>	“Watch on the Rhine”; German code name for 1944 Ardennes counteroffensive (Battle of the Bulge)
<b><i>Waffen-SS</i></b>	Combat arm of the SS ( <i>Schutzstaffel</i> , Elite Guard); Military formation of the Nazi Party, in effect a partial duplication of the German Army
<b>WD</b>	War Department
<b><i>Wehrmacht</i></b>	German Armed Forces – land, sea, and air – not including the <i>Waffen-SS</i>
<b>WO</b>	War Office
<b>WPD</b>	War Plans Division, War Department, predecessor of OPD



TANK ATTACHED TO THE 8TH DIVISION *moves through Huertgen.*



# Code Names

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<b>ABC-1</b>	The agreements resulting from the Anglo-American military staff conversations held in Washington in January – March 1941
<b>ABERDEEN</b>	Chindit stronghold near Manhton, Burma
<b>ACHSE</b>	German plan for the defense of northern Italy
<b>ALACRITY</b>	Plan for the entry of a British force into the Azores, October 1943
<b>ALAMO</b>	Code for US Sixth Army while operating as a special ground task force HQ directly under GHQ SWPA
<b>ALPHA</b>	US 3d Infantry Division force for Operation DRAGOON, and 3d Infantry Division landing beaches in the Cavalaire-St. Tropez area
<b>ALPHA</b>	Plan to defend Kunming and Chungking
<b>ANAKIM</b>	Plan for recapture of Burma
<b>ANVIL</b>	Plan for the Allied invasion of southern France, finally executed as Operation DRAGOON in August 1944
<b>ARCADIA</b>	First of the major US-British staff conferences following US entry into the war, held in Washington, December 1941-January 1942
<b>ARGONAUT</b>	Yalta Conference, February 1945
<b>ARGUMENT</b>	USSTAF air operations against German aircraft factories, Feb '44
<b>AVALANCHE</b>	Invasion of Italy at Salerno
<b>AXIOM</b>	Mission sent by SEAC to Washington and London in Feb '44 to urge CULVERIN
<b>BACKHANDER</b>	Task force for operations on Cape Gloucester, New Britain
<b>BARBAROSSA</b>	German offensive against USSR, 1941
<b>BARRISTER</b>	Plan for capture of Dakar (formerly BLACK and PICADOR)
<b>BAYTOWN</b>	British invasion of Italy on Calabrian coast
<b>BAZAAR</b>	Plan for American air support of USSR in event of Japanese attack on Soviet Union. Also code name for US survey project of air facilities in Siberia
<b>BEAVER</b>	Training exercise held in the Slapton Sands area in England in March 1944, employing elements of the VII Corps and simulating the later assault on UTAH beach
<b>BENEFICIARY</b>	Plan for breaking out of the Normandy lodgment by means of a combined airborne-amphibious attack on St. Malo
<b>BETA</b>	Plan to open port on coast of China
<b>BIGOT</b>	Special security category and procedure to protect the OVERLORD plan
<b>BIRCH</b>	Christmas Island
<b>BLACK</b>	Plan for capture of Dakar (later PICADOR and BARRISTER)
<b>BLACKCOCK</b>	British XII Corps operation to clear enemy salient between the Meuse and Roer-Wurm Rivers from Roermond southward
<b>BLACKPOOL</b>	Chindit roadblock on railroad near Namkwin, Burma

<b>BLEACHER</b>	Tongatabu
<b>BLOCKBUSTER</b>	Canadian II Corps offensive in Calcar-Udem-Xanten area
<b>BOBCAT</b>	Borabora
<b>BODYGUARD</b>	Allied deception plans designed to cloak the timing and location of OVERLORD while drawing German attention to the Pas de Calais
<b>BOLERO</b>	Buildup of US troops and supplies in the United Kingdom in preparation for the cross-Channel invasion
<b>Bombardons</b>	Cruciform structures designed for mooring off the Normandy beaches to provide floating breakwaters in deep water
<b>BRADDOCK II</b>	Dropping of small fuze incendiaries to European workers for use in sabotage operations
<b>BRAID</b>	Cover name for General Marshall during Casablanca Conference
<b>BRASSARD</b>	Operations against the island of Elba
<b>BREWER</b>	Operations in the Admiralties
<b>BRIMSTONE</b>	Plan for capture of Sardinia. Cancelled
<b>BROADWAY</b>	Drop site for Chindits, about 50 miles northwest of Indaw, Burma
<b>BUCCANEER</b>	Plan for amphibious operation in Andaman Islands. Cancelled
<b>BUFFALO</b>	VI US Corps breakout from Anzio beachhead, May 1944
<b>BULLFROG</b>	Plan for operation against Arakan (Burma) coast
<b>BUTTRESS</b>	British operation against toe of Italy
<b>CAMEL</b>	US 36 <sup>th</sup> Infantry Division force for Operation DRAGOON, and 36 <sup>th</sup> Infantry Division landing beaches in the Frejus-St. Raphael area
<b>CANNIBAL</b>	Unsuccessful British offensive against Akyab (Burma) in 1943
<b>CAPITAL</b>	Attack across the Chindwin River to Mandalay
<b>CARBONADO</b>	Revised BETA
<b>CARPETBAGGER</b>	Project to drop supplies and agents to the French resistance
<b>CARTWHEEL</b>	Converging drives on Rabaul by S. Pacific and SWPA forces
<b>CASANOVA</b>	US 95 <sup>th</sup> Infantry Division diversionary action during operations against Metz
<b>CATCHPOLE</b>	Operations against Eniwetok and Ujelang Atolls, Marshall Islands
<b>CAUSEWAY</b>	Operations against Formosa
<b>CHAMPION</b>	Late 1943 plan for general offensive in Burma
<b>CHATTANOOGA CHOO CHOO</b>	AEAF operations against enemy train movements in France and Germany
<b>CHARNWOOD</b>	British operation to seize Caen, launched 8 July 1944
<b>CHASTITY</b>	Plan for the construction of an artificial harbor in the Quiberon Bay area on the southern coast of Brittany
<b>CLEANSLATE</b>	Invasion of Russell Islands
<b>CLIPPER</b>	British XXX Corps offensive to reduce Geilenkirchen salient
<b>COBRA</b>	First US Army operation to break out of the Normandy lodgment, launched 25 July 1944
<b>COCKADE</b>	Diversionary operations in 1943 to pin down German forces in the west

<b>COMET</b>	British plan, not carried out, for an air drop on 7 September 1944 in the Arnhem-Nijmegen area
<b>CORKSCREW</b>	Conquest of Pantelleria
<b>COTTAGE</b>	Invasion of Kiska, 1943
<b>CRICKET</b>	Malta portion of ARGONAUT conference
<b>CROSSBOW</b>	A general term used by the Allies to refer to the German long-range weapons program and to Allied countermeasures against it
<b>CUDGEL</b>	Planned small scale operation on Arakan coast, Burma. Cancelled
<b>CULVERIN</b>	Plan for assault on Sumatra
<b>CYCLONE</b>	Task force for Noemfoor
<b>DELTA</b>	US 45 <sup>th</sup> Infantry Division force for Operation DRAGOON, and 45 <sup>th</sup> Infantry Division landing beaches in the Ste. Maxime area
<b>DEXTERITY</b>	Operations against Cape Gloucester, New Britain
<b>DIADEM</b>	Allied spring offensive and advance on Rome, May-June 1944
<b>DIRECTOR</b>	Task force for invasion of Arawe, New Britain
<b>DIXIE</b>	Mission of US observers to Chinese communists
<b>DRACULA</b>	Plan for attack on Rangoon, 1944
<b>DRAGOON</b>	The Allied invasion of southern France in August 1944. Name changed from ANVIL due to concern that the name had been compromised
<b>DUCK I, II, III</b>	First in the series of training exercises held in the Slapton Sands area in England, during January-February 1944, to test all aspects of amphibious operations, including mounting, assault, and logistic support. Involved mainly elements of the V Corps simulating the later assault on OMAHA beach
<b>ECLIPSE</b>	Name given in November 1944 to posthostilities plans for Germany
<b>ELKTON</b>	Plan for seizure of New Britain, New Guinea, and New Ireland area
<b>END RUN</b>	Task force of GALAHAD survivors used in drive on Myitkyina, Burma
<b>EUREKA</b>	Tehran conference, November – December 1943, where Western allies agreed to Stalin's appeal for a Channel crossing to open the 'second front' in the spring of 1944
<b>FABIUS I-VI</b>	A series of final rehearsals for the cross-Channel operation, involving the US V Corps and British forces, April-May 1944
<b>FANTAN</b>	Fiji Islands
<b>FIREBRAND</b>	Invasion of Corsica, 1943
<b>FISCHFANG</b>	February 1944 German counteroffensive against VI US Corps in Anzio beachhead
<b>FLAX</b>	Air operation to disrupt flow of German air transports from Italy to Sicily and Tunisia
<b>FLINTLOCK</b>	Operations in the Marshall Islands

<b>FORAGER</b>	Operations in the Marianas
<b>FOREARM</b>	Kavieng
<b>FORTITUDE</b>	Allied deception operations designed to convince the Germans of an invasion of Western Europe in the Pas de Calais area
<b>FORTUNE</b>	Planning group located in Algiers (July 1942)
<b>FOX</b>	Last major training exercises conducted by V Corps, March 1944
<b>FRANTIC</b>	Allied shuttle bombing of Axis-controlled Europe from bases in UK, Italy, and USSR
<b>FRY</b>	Occupation of four islands in Lake Comacchio, Italy
<b>GALAHAD</b>	American long range penetration groups (Burma)
<b>GALVANIC</b>	Operations in Gilbert Islands
<b>GARDEN</b>	see MARKET-GARDEN
<b>GOBLET</b>	Invasion of Italy at Cotrone. Cancelled
<b>GOLD</b>	Normandy beach assaulted by British 30 Corps, 6 June 1944
<b>GOLDFLAKE</b>	Movement of Canadian I Corps from Italy to ETO
<b>GOODWOOD</b>	British attack to break out of the Normandy lodgment in late July 1944, coinciding with US Operation COBRA
<b>Gooseberries</b>	Partial breakwaters formed off the Normandy beaches by the sinking of blockships known as <b>Corncocks</b> , to shelter small craft
<b>GRANITE</b>	Plan for operations in POA in 1944
<b>GRAY</b>	Plan for capture and occupation of the Azores
<b>GREENLIGHT</b>	One of the special OVERLORD supply procedures designed to expedite the delivery of ammunition and engineer fortification material in lieu of scheduled shipment of other supplies in the first phases of the cross-Channel operation
<b>GREIF</b>	German deception operation in support of the Ardennes counteroffensive, 1944
<b>GRENADE</b>	21 Army Group large-scale offensive from the Roer to the Rhine
<b>GRENADE</b>	Ninth Army supporting attack for Operation VERITABLE
<b>GYMNAST</b>	1941 plan for invasion of North Africa
<b>HABAKKUKS</b>	Artificial landing fields made of reinforced ice
<b>HALPRO</b>	Halvetrson Project – bombing detachment for China-Burma-India
<b>HANDS UP</b>	Plan for breaking out of the Normandy lodgment by means of a combined airborne-amphibious attack on Quiberon Bay
<b>HARDIHOOD II</b>	Aid to Turkey, Phase II
<b>HARLEQUIN</b>	British exercise in September 1943 to establish marshaling and embarkation procedures for a cross-Channel operation
<b>HERCULES</b>	German plan to invade Malta. Cancelled
<b>HOLLY</b>	Canton Island
<b>HURRICANE</b>	Assault force for Biak, New Guinea
<b>HUSKY</b>	Allied invasion of Sicily in July 1943
<b>ICEBERG</b>	Invasion of the Ryukyu Islands
<b>ICHIGO</b>	Japanese operation to take US air bases in east China

<b>INDEPENDENCE</b>	Plan for First French Army attack against German garrisons on French coasts, December 1944
<b>INDIGO</b>	Plan for movement of troops to Iceland
<b>INTERLUDE</b>	Rehearsal for Morotai operation
<b>JUNO</b>	Normandy beach assaulted by Canadian 3d Division, 6 June 1944
<b>JUPITER</b>	Plan for operations in northern Norway
<b>LEVER</b>	Operation to clear area between Reno and southwest shore of Lake Comacchio, Italy
<b>LIGHTFOOT</b>	British offensive operations in Libyan Desert, launched from El Alamein, October 1942
<b>LINNET I</b>	Planned airborne drop at Tournai, Belgium, September 1944
<b>LINNET II</b>	Planned airborne drop at Aachen-Maastricht Gap, September 1944
<b>LONDON</b>	XVIII Airborne Corps phase line near Wesel, Germany
<b>LUCKY STRIKE</b>	21 Army Group plan calling for an eastward drive and the capture of the Seine ports as an alternative to plans for the earlier capture of Brittany, considered by planning staffs in May and June 1944
<b>MAGNET</b>	Plan that superseded RAINBOW-5 after US entry into the war, providing for the shipment of American forces to Northern Ireland
<b>MAGNETO</b>	Yalta portion of ARGONAUT Conference
<b>MAILFIST</b>	Capture of Singapore, 1945
<b>MALLORY MAJOR</b>	Air offensive against Po River bridges, Italy
<b>MANNA</b>	British occupation of southern Greece
<b>MARKET-GARDEN</b>	Airborne & armored operation intended to establish a bridgehead across the Rhine in the Netherlands, September 1944. Operation MARKET involved seizure of bridges in the Nijmegen-Arnhem area, and Operation GARDEN was to open a corridor from Eindhoven northward toward Germany
<b>MARS</b>	US task force (5332d Brigade (Provisional)), CBI
<b>MATTERHORN</b>	Plan for operating B29s from Cheng-tu against Japan
<b>MERCANTILE</b>	Manus Island
<b>MICHAELMAS</b>	Task force for seizure of Saidor, New Guinea
<b>MILEPOST</b>	Project to build up stocks in the Far East in preparation for the entry of the USSR into the war against Japan
<b>MODICUM</b>	Party sent to London to present Marshall Memorandum, April 1942
<b>Mulberries</b>	The artificial harbors constructed off the Normandy beaches
<b>MUSKET</b>	Projected landing on heel of Italy near Taranto, 1943
<b>NABOB</b>	Northern Island
<b>NEPTUNE</b>	Operation to transport assault troops and equipment across the Channel to Normandy
<b>NEST EGG</b>	Plan for occupation of Channel Islands in case of German collapse or surrender

<b>NEW GALAHAD</b>	American long-range penetration groups (Burma)
<b>NEW YORK</b>	XVIII Airborne Corps phase line in Ringenberg-Krudenberg area, Germany
<b>NOBALL</b>	Term used by the air forces in referring to target sites in their attacks on long-range weapons
<b><i>NORDWIND</i></b>	German counterattack in Alsace, January 1945
<b>OCTAGON</b>	Second Quebec Conference, September 1944
<b>OLIVE</b>	Attack on Gothic Line, Italy
<b>OLYMPIC</b>	Plan for March 1946 invasion of Kyushu, Japan
<b>OMAHA</b>	Normandy beach assaulted by US V Corps, 6 June 1944
<b>ORANGE</b>	Prewar plan of operations in event of war with Japan
<b>OVERLORD</b>	The invasion of northwest Europe in the spring of 1944
<b>PANTHER</b>	British 10 Corps drive across the Garigliano River, Italy
<b>PARIS</b>	XVIII Airborne Corps phase line west of Erle, Germany
<b>PERSECUTION</b>	Assault force for Aitape operations, New Guinea
<b>Phoenixes</b>	Concrete caissons towed across the English Channel and sunk to form the main breakwaters for the artificial harbors
<b>PICADOR</b>	Plan for capture of Dakar (formerly BLACK, later BARRISTER)
<b>PICCADILLY</b>	Drop site for Chindits, Burma
<b>PIGSTICK</b>	Limited operation on south Mayu Peninsula. Cancelled
<b>PLOUGH, PLOUGH FORCE</b>	Project for training US and Canadian volunteers for snow operations in northern Norway
<b>PLUNDER</b>	Montgomery's northern crossing of the Rhine, March 1945
<b>POINTBLANK</b>	The Combined Bomber Offensive from Britain against Germany
<b>PRICELESS</b>	Post-HUSKY Mediterranean operations
<b>PROVIDENCE</b>	Occupation of Buna area, New Guinea, 1942. Cancelled
<b>PUGILIST</b>	Attack on Mareth Line, Tunisia, 1943
<b>QUADRANT</b>	The first Quebec Conference, August 1943
<b>QUEEN</b>	12 <sup>th</sup> Army Group operation on Roer Plain between Wurm and Roer Rivers
<b>RAINBOW</b>	Various plans prepared between 1939 and 1941 to meet Axis aggression involving more than one enemy
<b>RAINBOW-5</b>	US military plan designed to implement that portion of ABC-1 which applied to the UK in the event of US entry into the war
<b>RAINCOAT</b>	Assault on Camino hill mass, Italy
<b>RANKIN I, II, III</b>	Plans for return to the Continent in the event of deterioration of the German position
<b>RASHNESS</b>	Revised CARBONADO plan
<b>RAVENOUS</b>	IV Corps plan for recapture of northern Burma
<b>RECKLESS</b>	Assault force for Hollandia operation
<b>REDLINE</b>	Radio circuits set up in September 1944 for messages to and from the Supreme Commander

<b>RENO</b>	SWPA plans for operations in the Bismarck Archipelago, along northern coast of New Guinea and thence to Mindanao, P.I.
<b>RHUMBA</b>	Plan for reversing BOLERO and transferring US forces, supplies, and logistic structure from the United Kingdom to the Continent
<b>RO</b>	Japanese air operation to augment Rabaul air forces and delay Allied offensives
<b>ROAST</b>	Operation to clear Comacchio Spit, Italy
<b>ROGER</b>	Capture of Phuket Island, off Kra Isthmus, Burma
<b>ROMEO</b>	French commando force landing at Cap Nègre during Operation DRAGOON
<b>ROMULUS</b>	Arakan part of CAPITAL plan
<b>ROOSTER</b>	Operation to fly Chinese 22d Division to Chihchiang
<b>ROSE</b>	Ruhr pocket, April 1945
<b>ROSES</b>	Efate
<b>ROSIE</b>	French naval force landing southwest of Cannes, Operation DRAGOON
<b>ROUNDHAMMER</b>	Original codename for OVERLORD. Cross Channel operation intermediate in size between SLEDGEHAMMER and ROUNDUP
<b>ROUNDUP</b>	Various 1941-43 Anglo-American plans for a cross-Channel attack
<b>RUGBY</b>	Airborne force dropped to rear of southern France assault beaches in Operation DRAGOON
<b>SATIN</b>	Plan for US II Corps operation against Sfax, Tunisia. Cancelled
<b>SATURN</b>	Establishment of British forces in Turkey prior to Turkey's entry into the war
<b>SAUCY</b>	Limited offensive to reopen land route from Burma to China
<b>SEA LION</b>	Planned German invasion of UK. Cancelled
<b>SEXTANT</b>	The Cairo Conference of November 1943
<b>SHARPENER</b>	Supreme Commander's advance command post at Portsmouth, May 1944
<b>SHELLBURST</b>	SHAEF advance headquarters at Tournières
<b>SHINGLE</b>	Amphibious operation at Anzio, Italy
<b>SHIPMATE</b>	Enlarged SHAEF forward headquarters near Portsmouth, replacing SHARPENER
<b>SHO</b>	Japanese plan to counterattack US forces in western Pacific
<b>SICKLE</b>	Name which in 1943 was given to the US air force buildup in the United Kingdom to distinguish it from the ground and service force buildup, known as BOLERO
<b>SITKA</b>	Force taking islands of Levant and Port Cros, Operation DRAGOON
<b>SLAPSTICK</b>	Airborne drop at Taranto, Italy
<b>SLEDGEHAMMER</b>	Plan for a limited-objective attack across the Channel in 1942, designed either to take advantage of a German collapse or as a sacrifice operation to aid the Soviets
<b>SOAPSUDS</b>	Early code name for TIDAL WAVE
<b>SPOONER</b>	New Zealand

<b>SPRING</b>	Canadian attack, July 1944, coinciding with Operation COBRA
<b>STARKEY</b>	Threat directed in 1943 against the Pas de Calais
<b>STALEMATE</b>	Invasion of the Palaus
<b>STATESMAN</b>	Early code name for TIDAL WAVE
<b>STRANGLE</b>	Air operations to destroy German rail, road, and sea communications south of the Pisa-Rimini line, March-May 1944
<b>SUMAC</b>	Australia
<b>SUPERCARGE</b>	British 30 Corps breakout, Egypt, 1942
<b>SUPERCARGE</b>	Revised plan of assault on Mereth Line, March 1943
<b>SUPER-GYMNAST</b>	Plan for Anglo-American invasion of French North Africa, combining US and British plans and often used interchangeably with GYMNAST
<b>SWORD</b>	Normandy beach assaulted by troops of British 3d Division, 6 June 1944
<b>SWORDHILT</b>	Plan for a combined airborne-amphibious operation to seize the area east of Brest, August 1944
<b>SYMBOL</b>	Casablanca Conference, January 1943
<b>TALISMAN</b>	Early name for posthostilities plans for Germany
<b>TALON</b>	Akyab part of CAPITAL plan
<b>TARZAN</b>	India-based portion of general offensive in Burma
<b>TED</b>	Task force in Aitape area, New Guinea
<b>TERMINAL</b>	Potsdam Conference, July 1945
<b>THUNDERBOLT</b>	Offensive in Metz area
<b>TIDALWAVE</b>	Low-level heavy bomber attack on Ploesti, Romania, 1943
<b>TIGER</b>	The final rehearsal for the UTAH Beach assault by units of the VII Corps
<b>TINDALL</b>	Threat directed against Norway in 1943
<b>TOGO</b>	Second phase of <i>ICHIGO</i> operation
<b>Tombola</b>	A flexible 6-inch underwater pipeline designed to discharge POL tankers anchored offshore at Ste. Honorine-des-Pertes
<b>TOPFLIGHT</b>	Signal for release of press information on D-Day in Normandy
<b>TORCH</b>	The Allied invasion operation in North Africa, November 1942
<b>TOREADOR</b>	Airborne assault on Mandalay
<b>TORNADO</b>	Assault force for Wakde-Sarmi area, New Guinea
<b>TOTALIZE</b>	Post-COBRA attack in France
<b>TRACTABLE</b>	Post-COBRA attack in France
<b>TRADEWIND</b>	Force for Morotai
<b>TRANSFIGURE</b>	Plan for airborne operation to capture and control important road nets in Paris-Orléans area, 16-17 August 1944
<b>TRIDENT</b>	Washington Conference, May 1943
<b>TULSA</b>	First outline plan for operations directed at the capture of Rabaul
<b>TWILIGHT</b>	Plan to base B-29s in CBI
<b>TYPHOON</b>	Task force for Sansapor-Mar operation, New Guinea

<b>ULTRA</b>	British operation to intercept and decrypt German radio communications (ENIGMA)
<b>UNDERTONE</b>	Seventh Army operation to breach the West Wall and establish a bridgehead over the Rhine in the Worms area, March – April 1945
<b>UTAH</b>	Normandy beach assaulted by US VII Corps, 6 June 1944
<b>VARSITY</b>	FAAA operation in support of Operation PLUNDER
<b>VERITABLE</b>	21 Army Group plan for a Canadian attack between the Maas and the Rhine, January – February 1945
<b>VICTOR I</b>	Panay and Negros Occidental operation
<b>VICTOR II</b>	Cebu, Bohol, and Negros Oriental operation
<b>VICTOR III</b>	US Eighth Army operations against Palawan
<b>VICTOR IV</b>	US Eighth Army operations against Sulu Archipelago and Zamboanga area of Mindanao
<b>VICTOR V</b>	US Eighth Army operations against western Mindanao
<b>VULCAN</b>	Final ground offensive to clear Tunisia, 1943
<i>Wacht am Rhein</i>	“Watch on the Rhine”; German 1944 Ardennes counteroffensive (Battle of the Bulge)
<b>WADHAM</b>	Threat directed against the Cotentin Peninsula in 1943
<b>WEBFOOT</b>	Rehearsal for SHINGLE
<b>Whale</b>	Flexible steel roadway, made of bridge spans and resting on pontoons, forming the piers for the artificial harbors
<b>WHITE POPPY</b>	Nouméa, New Caledonia
<b>WIDEWING</b>	SHAEF headquarters at Bushy Park, near London
<b>X</b>	Australia
<b>YOKE</b>	All US organizations working with Y-Force, CBI
<b>ZEBRA</b>	US-sponsored Chinese divisions in east China
<b>ZIPPER</b>	Plan for assault on Malaya, 1945



REST PERIOD BEHIND THE LINES



## Notes

## Notes

## Notes

## Notes

## Notes

## A Time For Healing

### An incident during the Battle of the Huertgen Forest, November, 1944

The Huertgen Forest, roughly 70 square miles of densely wooded and rugged terrain, begins about five miles south and east of Aachen, Germany and falls into a triangle outlined by Aachen, Duren and Monschau. Beginning close to the German-Belgian border, portions of the battle field were part of the West Wall or Siegfried Line, complete with pill boxes. It consists of high marshland of volcanic origin cut by streams and rivers; deep gorges run generally northeast to southwest. The plateaus are cleared farm land. The dense forest, mostly of fir 75 to 100 feet high, form a canopy making the forest floor dark, damp and forbidding.

In the Huertgen Forest weather, terrain and a determined German defense produced tremendous losses to veteran American divisions from September to December 1944. Interrupted by the "Battle of the Bulge," the objectives of clearing the forest, capturing the Roer River dams and crossing the Roer River were not accomplished until February 1945. Combat in the forest was a repeat of World War I, a bloody battle of attrition. Mines, artillery, tree bursts and cold, wet weather all took a toll. The U.S. 1st, 2nd, 4th, 8th, 9th, 28th, 78th and 83rd Infantry; the 82nd Airborne and the 3rd, 5th and 7th Armored Divisions and the 2nd Ranger Battalion lost more than 25,000 killed, wounded, captured or missing. Another 9,000 fell to trench foot, combat exhaustion or respiratory illness. This represents a 25% loss rate. Major German elements were the 12th, 47th, 272nd and 277th Volksgrenadier; the 85th, 89th, 275th, 344th and 353rd Infantry; the 3rd Parachute and 116th Panzer Divisions.

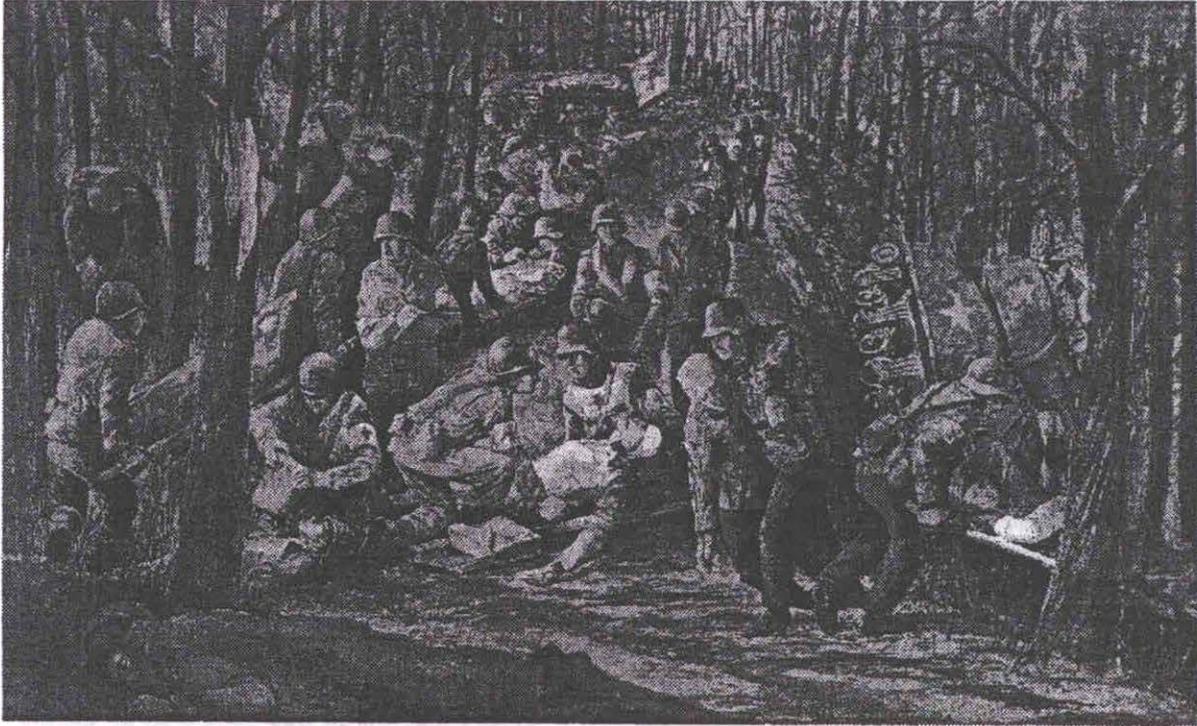
During the first two weeks of November 1944 control of the Kall River Gorge was contested by German troops consisting of elements of the 275th Infantry Division and the 1056th Infantry Regiment of the 89th Infantry Division, supported by elements of the 116th Panzer Division. The United States forces were the 1st and 3rd Battalions, 112th Infantry, the 3rd Battalion, 110th Infantry and the 3rd Battalion, 109th Infantry Regiments supported by elements of the 707th Tank Battalions, 893rd Tank Destroyer Battalion and the 1171st Engineer Combat Group.

The print is from the original acrylic painting by Robert M. Nisley and is a composite of at least three temporary humanitarian truces arranged on the Kall Trail by German and American medical personnel during the period of November 7 to 9, 1944, to treat and evacuate the wounded of both sides. The scene shows the Kall Trail on the west side about 250 yards above the Kall River Bridge. The trail was steep, narrow and muddy. Other parts of the trail consist of sharp curves and switchbacks. American and German medics are recovering and treating casualties. It is cold, not quite freezing, with mist and intermittent rain. To the rear center is the Kall Trail Aid Station, a log dugout which served both the 1st and 3rd Battalions of the 112th Infantry Regiment. To the right are two M4A1 Sherman tanks of A Company, 707th Tank Battalion which blocked the trail due to thrown tracks and had been finally pushed off the trail on November 4.



The truces allowed the evacuation of at least 200 American casualties. Some of the medical personnel represented in the print have signed the print.

This print is dedicated to the universal spirit of the combat medic and the brave German and American soldiers who fought and fell in the Huertgen Forest.



**World War II 50<sup>th</sup> Anniversary Limited Edition  
Commemorative Print**

**A Time For Healing**

Robert M. Nisley

In November 1944, the United States 28<sup>th</sup> Division and German 89<sup>th</sup> Division halted their savage and costly Huertgen Forest fighting in the Kall River Gorge, Germany, in a humanitarian truce to treat and evacuate their casualties.

**About the Artist**

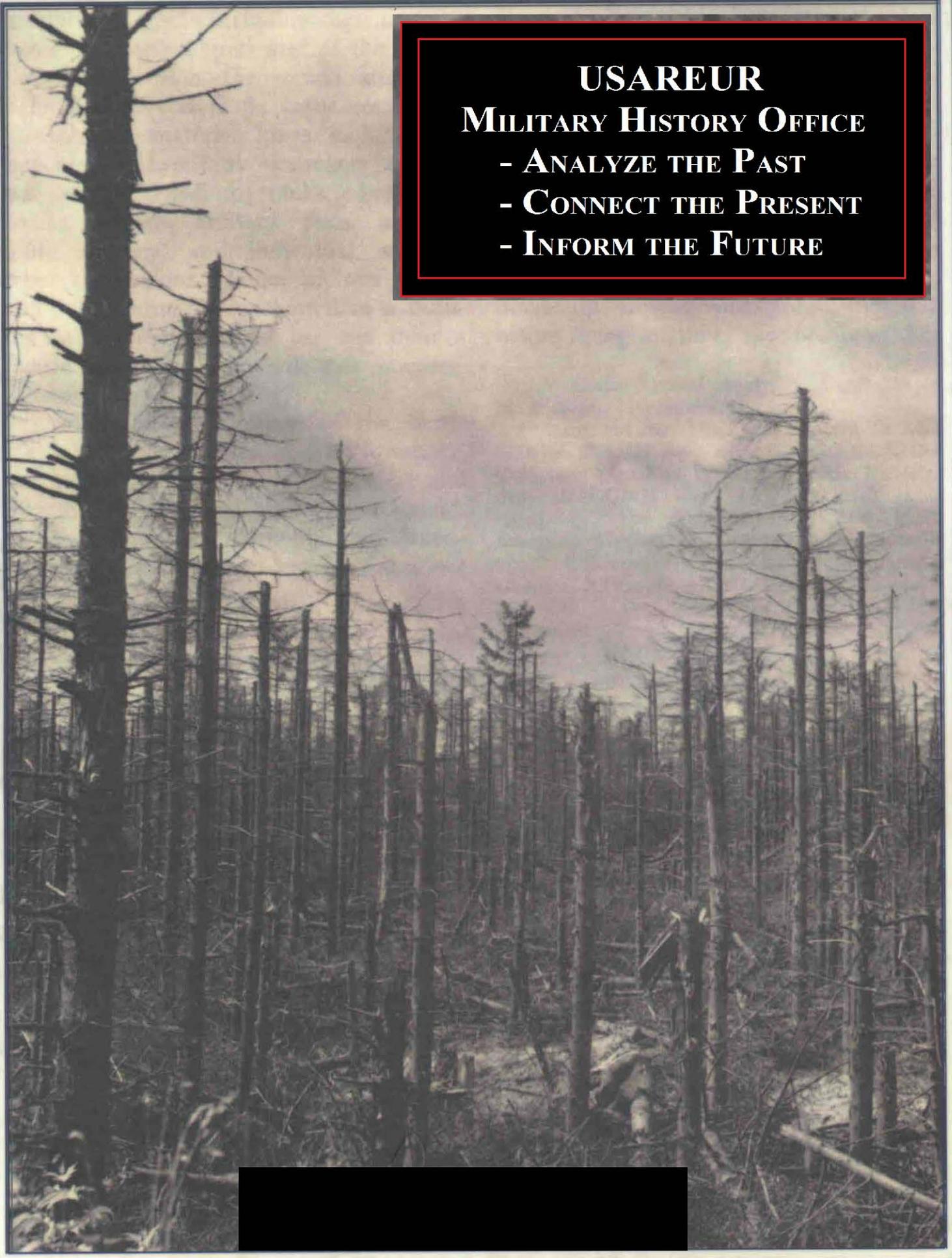
Artist Robert M. Nisley of Hummelstown, Pennsylvania is a veteran of World War II and served in the area of the Battle of the Huertgen Forest in November 1944. He was a member of the 23<sup>rd</sup> Headquarters Special Troops, which was a highly classified unit working in the psychological warfare and disinformation areas.

Like many American soldiers, he returned from World War II and attended Kutztown State College, Kutztown, Pennsylvania, on the GI Bill; he received a Bachelor of Science degree in Art Education. While there, he had a showing of combat paintings he had done while in Europe.

He continued his education with a Master of Science degree in Fine Arts from Temple University and taught art for 35 years in the Steelton-Highspire School District.

Nisley is a signature member of the Pennsylvania Watercolor Society, winner of the Honor Award in the WITF-TV public television auction, and an exhibitor in many arts and crafts festivals. He was chosen to create the first arts poster for the Hummelstown Arts Festival. He is well known in Central Pennsylvania for his watercolor rural landscapes. "A Time for Healing" marks his first return to a military subject since serving in Europe in World War II.

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