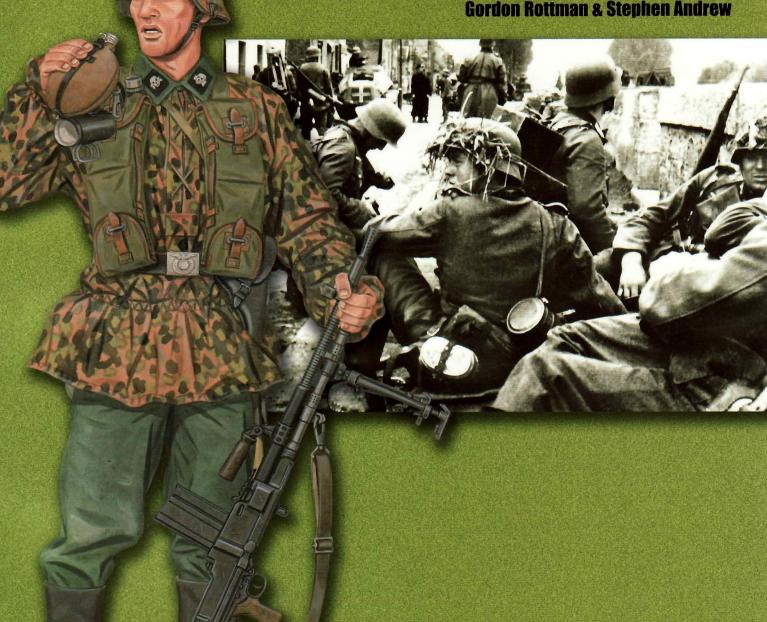


## March to the West

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GONGOBD PUBLICATIONS COMPANY

## Morch to the West The German Invasion of France & the Low Countries

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## Introduction

World War II began with the 1 September 1939 invasion of Poland, a campaign that started the world when the German Army crushed the larger Polish Army in just 27 days. Fighting continued for a few more days and the last significant Polish forces had surrendered by 3 October. Germany now turned to the west. The idea that a similar event could occur in the West was not even considered by the Allies. Poland's Army was considered second-rate and the German was admittedly modern. The speed at which the Blitzkrieg was executed and its integration of airpower is what startled the world.

The Western Allies prepared for a German invasion of France and the Low Countries, but instead, little happened through the winter of 1939/40 and the following spring. The French Army and the British Expeditionary Force faced the German Army across the Rhine. The British called it the Phony War; the Germans called it the Sitting War (Sitzkrieg).

This phase of the war ended on 9 April 1940 when German forces invaded Denmark and Norway. Demark fell in 12 hours after offering virtually no resistance. Norway turned into a disjointed battle as British and some French and Free Polish troops were landed some days later and others later in the month. Many of the Allied forces were evacuated in early May, but fighting continued in the far north. By early June the Allied had evacuated Norway and the fled King of Norway ordered his remaining forces to cease hostilities on 9 June.

In western Europe there was little doubt on the Allied side that the massive French Army, the largest in Europe, could the halt the Germans. It was Churchill who had said in 1933 after the Nazi takeover, "Thank God for the French Army." The much vaulted French Army an impressive force with 2,235 tanks, more than the Germans possessed and many of these were more heavily armored and better armed than the German's. The main problem with French armor was that they dispersed it to support infantry units rather than retaining them as massed counterattack and exploitation forces. Besides the three armored and three light mechanized divisions, some 50 separate tank battalions were parceled out to support corps and armies. The French had 10,700 artillery pieces and 3,500 aircraft. The German's had almost as many aircraft, most of which were better than the French, but only 7,300 artillery pieces.

From north (on the North Sea and facing the Belgium border) to the south anchored on Switzerland, were 78 French divisions. The French 7th Army on the North Sea had four infantry, one light mechanized, and two motorized divisions. Adjacent to it was the small British Expeditionary Force (discussed below). The 1st Army Group fielded 17 infantry, three motorized, and two light mechanized divisions, also on the Belgium border. Covering the short border with Luxemburg and the German border was the heavily fortified Maginot Line in which much faith had been placed, were the 2nd Army Group with 35 infantry, alpine, and fortress divisions, one of which was British, and the 3rd Army Group with 14 divisions. These two army groups had no mobile divisions. In reserve were three groups of forces, each assigned a different mission. Five infantry and two armored divisions were

to support 1st Army Group, five infantry divisions were to protect from an outflanking attack through Switzerland, and one armored and nine infantry divisions were held in a general reserve. The Netherlands fielded only 10 moderately equipped divisions and Belgium 22. The British Expeditionary Force consisted of three corps, nine infantry divisions, and a tank brigade backed by a Royal Air Force contingent with 500 aircraft. They could be backed by bombers from across the Channel.

Most of the German Army, das deutsche Heer, was deployed on its borders facing the Netherlands, Belgium, and France in three army groups. On the Netherlands border was Army Group B under Bock with 29 infantry, two motorized infantry, and three Panzer divisions. Rundstedt's Army Group A, the main strike force, was arrayed on the Belgium and Luxemburg borders with 45 infantry, three motorized infantry, and seven Panzer divisions. Leeb's Army Group C was positioned facing the Maginot Line with 19 infantry divisions. Its mission was simply to hold the Line's defenders in-place behind their steel and concrete fortifications. The German's had 42 infantry divisions in reserve, although some of these were tied up for coastal defense and in the east. Among the infantry divisions were a few mountain and light infantry. All ten of Germany's Panzer divisions were committed to Case Yellow "Fall Gelb", the plan to invade France and the Low Countries. These divisions though were not as powerful as those that had swept through Poland less than a year before. Basically those divisions had been split to double the number of Panzer divisions.

It is instructional to compare the German and French infantry divisions of 1940. In some ways they were equally matched and in others one or the other held an advantage over the other. Both divisions had three infantry regiments with three battalions of three rifle companies each. Both armies used a bolt-action, fireround magazine-fed rifle. The French infantry had one automatic rifle per section (squad), a bipod mounted weapon using a 25round box magazine. The German group (squad) though was armed with a belt-fed light machine gun with a quick-change barrel. The German rifle company had three 5cm mortars and three 7.92mm antitank rifles while the French company had no antitank rifles, but three 60mm mortars. The machine gun company of a German rifle battalion had 12 heavy machine guns and six 8cm mortars, licensed versions of the French 81mm. The French had an accompanying weapons company with two 81mm mortars, two 25mm antitank guns, and 16 Hotchkiss heavy machine guns. The German regimental antitank company had nine 3.7cm antitank guns. These were modern weapons and while fast approaching obsolescence, they were effective enough against most French tanks. Many regiments had an infantry gun company with six 7.5cm and two 15cm infantry guns. Some regiments had fewer or none owing to their low production rate and the rapid expansion of the army. The regimental antitank guns were backed by another 27 3.7cm guns in the divisional antitank battalion. The French division had a similar number of antitank guns, 52, but they were near important 25mm pieces. The French regiment had only six such guns in the weapons company along with two more 81mm mortars.

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There was a major difference in artillery. A German division's artillery regiment had three battalions each with 12 10.5cm light howitzers plus a battalion with eight 15cm heavy howitzers and four 10cm guns for long-range counterbattery fire. The French division had two artillery regiments, one with 36 105mm guns and the other with 24 155mm howitzers. The German division held advantages in various combat multipliers. It had a reconnaissance battalion as opposed to the French division's company-size squadron. Likewise the German division had a pioneer battalion while the French fielded only two companies.

The French light mechanized divisions were armored formations with two brigades of tanks and motorized infantry plus reconnaissance and artillery regiments. The French also fielded three armored divisions and a fourth was organized during the fighting. Two each light and medium tank battalion-size regiments, a single infantry battalion in tracked carriers, a light artillery regiment, and numerous antitank guns. The German Panzer divisions had a motorized rifle regiment, a Panzer regiment, and a motorized artillery regiment. The rifle and Panzer regiments exchanged battalions to form two combined arms Kampfgruppen with its own artillery and pioneers.

Spearheaded by armor and motorized rifle divisions the attacking German army groups were directly supported by the Luftwaffe, which basically served as an extension of the artillery. Luftwaffe liaison officers were attached to units to coordinate air support. The French Air Force did not even co-locate its higher headquarters with ground headquarters. The Germans organized into self-contained and flexible battle groups (Kampfgruppen) and commanders were expected above all else to advance ignoring their exposed flanks. They were expected to take the initiative and make decisions on their own. Another advantage the Germans possessed in the coming fast-paced battle was their extensive use of radios. These provided for more timely support and offered much more flexibility in the coordination of their actions. The French command structure was slow, complex, and unresponsive. Their doctrine was based on a strong, determined defense—they had learned the wrong lessons from the last war.

The German attack is launched in the early morning hours of 10 May 1940. In the north Army Group B enveloped the Netherlands supported by airborne forces. On the 15th the Royal Netherlands Army surrenders after a savage bombardment of Rotterdam. Army Group A thrusts into southern Belgium and Luxemburg. With the invasion, French and British forces move into western Belgium to establish a line to meet the invaders. They are soon withdrawing back to France. The Germans unexpectedly push through Belgium's Ardennes Forest. Brussels falls on 17 May. The day before, Panzer entered France and the French suffered a major defeat at Sedan. On the 19th the Germans pause to regroup. On the same day discussions begin on the possibility of evacuating the British Expeditionary Force. The next day, after sweeping across northern France, the Germans reach the English Channel. The planned Allied counterattack to cut the German supply lines is cancelled owing to continued German advances and the retreat of key Allied units on the 23rd.

Some German units halt on the 24th, but a few press on. The

Allies though are unable to exploit this opportunity. The remnants of the Belgium Army cannot stay in the fight much longer and some British units are already pulling back to Dunkirk. In the south Army Group A had driven into France to the south of the Panzer trust and was holding French forces at bay. Eight Panzer divisions to their north swung north to attack the French, British, and Belgium forces in northern France and Flanders. On the 26th the decision is made to evacuate the British Expeditionary Force and what French and Belgium forces they can from Dunkirk. Göring assures Hitler that his Luftwaffe can prevent the Allied evacuation and the Panzer divisions are ordered to halt. The Belgium Army is ordered to surrender on 28 May. The Dunkirk evacuation begins. There is confusion and disagreement within the German command, but Panzer forces begin redeploying south for the next phase of the Battle for France. The evacuation continues as the Germans press in. There are more troops in the beachhead than originally believed. The last evacuation ship departs in the early morning of 4 June and some 40,000 troops are left behind. Over 338,000 men were evacuated, of which 112,000 were French.

The next day, 5 June, sees the Germans turn south and commence attacks on the Somme River line. French forces are disorganized and lack prepared positions. In some sectors though they manage to hold their positions, but the Germans reach the Seine west of Paris. On 10 June Mussolini declares war on France and Britain. On the same day the last Allied troops are evacuated from northern Norway. The next day Paris is declared an open city and French forces are in retreat. Additional British troops are evacuated from Channel ports. The German advance to the south continues and more British troops are captured. On the 13th the British abandon any plans of rebuilding the British Expeditionary Force in France and began evacuating what British and Canadian troops remained. The Germans entered Paris on 14 June. The Panzer continue to advance south and two German corps are sent east to block any retreat of Maginot Line defenders. Elements of Army Group C punch through the Maginot Line from the east proving it weaker than many thought. Thousands more Allied troops continue to be evacuated. On the 16th the French ask to be released from its agreement not to make a separate peace. Armistice talks begin on 17 June, but the Germans continue to push south against little resistance. On the 21st Italian forces attack through Alpine passes, but are halted by weak French forces. The armistice is signed on 22 June. France is allowed to retain a 100,000-man army and a new French puppet government is established in Vichy. This government retains control of roughly one-third of the country.

Continental Europe is now under total German domination for all practical purposes. A battered Britain stands alone. The Germans lost 27,000 dead, over 18,000 missing, and just over 111,000 wounded. French losses were 90,000 dead, 200,000 wounded, and 1,800,000 taken prisoner. Britain lost 68,000, Belgium just over 23,000, the Netherlands almost 10,000, and Polish troops in France about 6,000.

A Landser looks westward, perhaps considering the invasion of France to be a completion of the war his father had fought or he may have considered it retribution for the Versailles Diktat (Versailles Dictate), the Nazi term for the "unreasonably harsh" Treaty of Versailles.

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er in A German antitank unit crosses the frontier into France. Originally Czechoslovakian-made, the steel hedgehog antitank obstacles were placed on the French-German border and later collected and used as beach obstacles on the Atlantic Wall. The Germans called the steel hedgehog (Stahligel).



A bicycle unit crosses the frontier. The masonry wall in the background indicates the French put up some resistance. The two motorcyclists in the foreground are armed with 7.92mm Kar98b carbines. These were reworked World War I Gew98 rifles. Even though now designated carbines, they were no shorter than the old rifle.



A column passes through an antitank barrier built of Belgium semi-portable obstacles known as "C" elements. There were later used as underwater obstacles on the Atlantic Wall and known to the Allies as "Belgium gates." The twisted damage suffered by the "C" elements on either side of the staff car indicates they were blown open by demolition charges.



The rapid tempo of the Blitzkrieg and the extensive logistical and combat support needed by advancing units saw every available road jammed with traffic. It was not uncommon for unit columns to become intermixed as they pushed forward.

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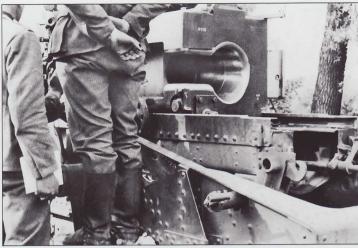
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This mobile command post truck has a German national flag secured to the top for air-to-ground recognition, a standard procedure to include it being displayed on armored fighting vehicles. A 15cm sFH18 heavy howitzer is ahead of the command post truck. Commandeered civilian automobiles are also in the column. In the lower right of the photograph is the diver's compartment of a halftrack, towing another howitzer. Its lowered windshield is covered with canvas to prevent reflection from revealing its position to aircraft.



A 15cm sFH 18 heavy field howitzer is towed by a 8-ton SdKfz 7 medium halftrack. This artillery piece had a range of 14,630 yards (13,377 meters). The rate of fire was four rounds per minute. This same carriage was used by the 10cm K18 gun, which was actually 10.5cm.



The crew of the this 15cm sFH 18 heavy field howitzer stand ready beside its massive horizontal sliding breechblock; open here. A divisional artillery regiment's 4th battalion had two four-tube batteries armed with this weapon and a single battery with four 10cm K18 guns. Some battalions had three batteries of the 15cm pieces and no 10cm guns.



A rifle company marches down a country lane deeper into France. A courier rides a troop bicycle (Truppenfahrrad), which soldiers simply called a bike (Rad)—short for bicycle (Fahrrad). An Hf 7 field wagon can be seen in the column. This was a modern four-wheel wagon with a steel body and rubber tires



A 95.7-pound (44.226-kilogram) 15cm high-explosive projectile. The 15cm sFH 18 heavy field howitzer was also provided armor-piercing, anti-concrete, and smoke projectiles. The projectiles were shipped in wicker containers.



Refugees flee from the front as bicycle troops move forward. These refugees are fortunate in that they were still allowed to travel on roads. More often they were restricted from roads as it hampered military traffic. Note the two 250-round machine gun ammunition cans strapped on the rear rack of the nearest bicycle.



A Krupp-Protze LKW Kfz 69 truck tows a 3.7mm PaK 35/37 antitank gun. Protze translates to "limber." Another version, the Kfz 81, towed the 2cm antiaircraft gun.



While some infantry regiment's 3.7cm PaK 35/36 antitank guns were drawn by a two-horse team using an If 12I limber, other units had the antitank company's nine guns towed by Krupp-Protze LKW Kfz 69 trucks. This applied to the divisional antitank battalion as well.



A rifle company (Schützen-Kompanie) marches through a captured town with the company chief (Kompaniechef) in the lead. He is possibly a captain (Hauptmann), but is more than likely a senior lieutenant (Oberstleutnant). He wears standard company officer's equipment, a 9mm Luger P08 or Walther P38 pistol, 6x30 binoculars, and a leather report/map case.

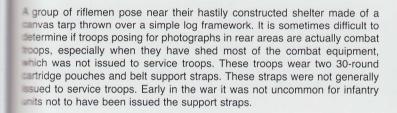


Company officers relax from the march during a lunch break. The Leutnant to the left wears the officer's old type field cap (Offiziersfeldmütze älterer Art), similar in design to the service cap (Schirmmütze). It lacked silver chin cord, the crown stiffener, and the insignia were embroidered rather than metal. The other officers wear the officer's new type field cap (Offiziersfeldmütze neuer Art). A rifle company typically had only three officers, the company chief, the 1st platoon leader, and the heavy (weapons) platoon leader if it possessed one. If not he commanded the 2nd platoon. The other rifle platoons were led by NCOs, usually a Feldwebel.

Outside of a regimental headquarters German and enemy equipment collected from casualties has been stacked. These weapons (7.92mm Kar98k carbines and MG34 machine guns) would be cleaned and refurbished as required and reissued along with the equipment. The infantry regiment command pennant is black, white, black, the white being the Waffenfarbe (branch of service color) of the infantry.



An officer surveys a housing development, probably where its unit will be billeted. His Unteroffizier orderly stands by. Their spurs, breeches, and the NCO's riding crop (possibly the officer's) indicate they are assigned to a mounted unit, which could mean reconnaissance, artillery, supply transport, or other types.





Mounted troopers pass through a rifle company on a country track. The Germans frequently made use of secondary avenues of approach out flanking or entirely by-passing unexpecting enemy units. These troops though, owing to the lack of weapons and field equipment on themselves or strapped to their horses, appear to be from a service unit.





A group of Unteroffizieren survey a forward area using a 6x30 Sf.14Z scissors periscope (Scherenfernrohr). It is obvious why soldiers nicknamed the Eselsohren (donkey ears). These are possibly gun commanders of an artillery battery.



A column passes over a heavy pontoon bridge (Brückengerät B). An infantry division was assigned a fully motorized pioneer bridge column. The pontoon boats were 50 feet (15.24 meters) in length. So many rivers had to be crossed by so many different divisions that the Germans were running out of bridging equipment.



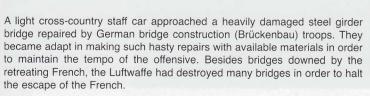
Combination motorcycles cross over a heavy pontoon bridge (Brückengerät B). Most of the 50-foot long pontoon boats are fitted with large outboard motors to hold the bridge in-place against the current.



A bridge section is floated into position on two 50-foot pontoon boats. Once the bridging equipment was at the crossing site a bridge could be erected in a surprisingly short time. Note that on the far shore the pioneers preparing the approach ramp to the bridge. Finding a site with suitable egress and exit routes was the main factor in selecting a bridging site.



A separate outboard passageway has been laid on this pontoon bridge using treadway sections and planks for foot, bicycle, and motorcycle traffic. Note the V-shaped linkage bars connecting the pontoon boats to hold them inplace.







Whenever a bridge had been downed German pioneers would erect a pontoon bridge or establish a ferry-crossing site. Here three light bridge (Brückengerät C) pontoon boats have been configured into a ferry. Three pontoon boats could carry 5.9 tons and two 4.5 tons. Four-meter aluminum light assault bridge sections span the gap between shore and the ferry. The 15cm sFH18 heavy field howitzer has a "D" painted on the recoil cylinder. Each howitzer in a battery was designated by a phonetic alphabet letter: Anton, Bertha, Cäsar, and Dora.



A 15cm sFH 18 heavy field howitzer towed by an 8-ton SdKfz 7 medium halftrack crosses over a light pontoon bridge (Brückengerät C). The pontoon boats could be fastened together endto-end and bridging deck sections secured over them to be employed as ferries using two or three boats. The howitzer and halftrack are camouflaged. Obviously a moving bush would fool no one. The idea though was to pull over to the edge of a road near trees in hopes that a fast moving fighter would fail to see it.



This 8-ton SdKfz 7 medium halftrack has just cross a pontoon bridge. This vehicle was normally used as a prime-mover for 15cm field howitzers, 10cm guns, and 8.8cm Flak guns. The canvas cover has been incompletely folded down.



A traffic control point on the approach to a pontoon bridge. The hastily rendered sign directs traffic to a 16-tonne capacity bridge.



Up and over. A battle-damaged truck is rolled off a road. Supply lines had to be kept open. The infantrymen wear typical combat equipment: entrenching tools, sidearms (bayonets), gasmask cases, bread bags, water bottles with cups, mess kits, and rolled camouflage shelter-quarters. Two 30-round cartridge pouches were worn on the front and an anti-gas sheet in a pouch on the chest secured to the gasmask case's shoulder strap.



French prisoners are marched into confinement. Judging by their age they are in all probability reservists; many appear to be World War I veterans.



A 10.5cm leFK 18 howitzer battery moves forward. Two Junkers Ju 52/3m three-engine transports appear to be making an approach to a nearby airfield. These principal transports of the Luftwaffe were known as the Tante Ju (Aunt Ju), alte eiserne Tante (Old Iron Aunt), or Judula (Julia).



German supply transport troops look over surrendered French soldiers as they pass through a town.



These motorcycle troops, probably from a motorcycle rifle or reconnaissance battalion wear the Schutzmantel für Kraftradfahrer (protective suit for motorcyclists), a gray-green, one-piece rubberized waterproof and windproof suit. The troops just called it a Kradmantel. French prisoners are marched past to the rear.



This infantry unit appears to be composed of recalled reservists. Large numbers of reservists, who had previously undertaken two years active duty training, were mobilized to serve as cadres for new units or to expand existing units.



A 10.5cm howitzer battery moves through a burning village, the fires ignited by their battalion or perhaps even by themselves. The limber and caisson to the right both carried ammunition as well as gun equipment. A limber and caisson were assigned to each of the four howitzers in the battery.



Medical personnel (Sanitätspersonal) walk through a village as a convoy passes. Medical personal habitually wore the red cross on white armband on the left upper sleeve. They also wore cornflower blue Waffenfarbe and on their shoulder straps they wore the Aesculapius staff, a snake entwined staff, silver-colored for senior NCOs, and generals, gold-colored for other officers, and embroidered in Waffenfarbe for junior NCOs and enlistedmen. Since the cornflower blue Waffenfarbe was so dark it could barely be seen on dark bottle green shoulder straps and was outlined in light blue.



While the French certainly did not welcome the invaders, this one individual appears to be out to sell wine to German troops passing through his village.



A burned out town. Where ever the enemy resisted the Germans showed no reluctance to bombard civilian population centers with artillery and bombers. The gasmask case was worn in this manner by horse-handlers.

It was a common technique to advance a 3.7cm PaK 35/36 antiarmor gun by pushing it down a street with the crew using it for cover. This allowed it to be employed to knockout defended buildings in support of the infantry. Highexplosive rounds could be fired through doors and windows while armor-piercing rounds would penetrate lighter masonry. The Landser called it the Türklopfer (doorknocker), not because of this role, but because by 1940 it was obsolete and largely impotent against newer tanks. The ammunition cans slung on the shield each contain 12 rounds.



Note that at least three riflemen have Stg.24 stick hand grenades at the ready. They sometimes called the stick grenade a doorknocker (Türklopfer) being thrown through a door into a room thus "announcing" one's wish to enter.

A rifle squad (Schützen-Gruppe) prepares to search a hair stylist's parlor.

Staff officers take a breath of fresh air outside of a garage used as a command post. Couriers report, an unending process. Note that the NCO with the helmet and goggles to the right wears abbreviated 9mm wide collar braid, which would normally continue around the collar's back edge. This may have been in an effort to make it less conspicuous to snipers.

Troops maintain order in an occupied town. This was probably during a registration to obtain identity cards or for the issue of the ration cards.



Solo and combination motorcycles of a motorcycle rifle battalion (Kradschützen-Bataillon) await orders to advance. This unit appears to have its motorcycles' numbered in sequence through the unit. Note the white 24 through 27 on the front fenders and the bow of the sidecars. A six-wheeled SdKfz 231 armored scout car (Panzerspähwagen) moves down the road. This is the weapons car (Waffenwagen) version armed with a 2cm automatic cannon and a 7.92mm machine gun. Following it is an SdKfz 221 light armored scout car (leichter Panzerspähwagen) armed with a single 7.92mm machine gun, the machinegun car (Maschinengewehrwagen) version.



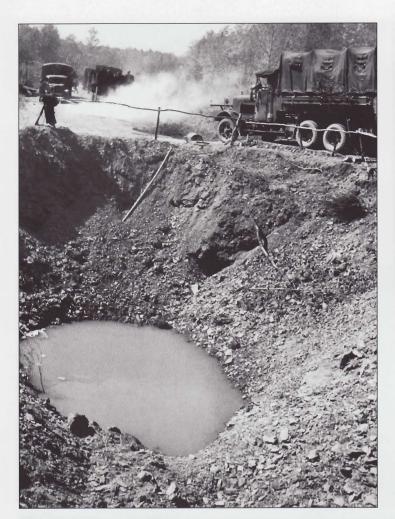
This SdKfz 222 light armored scout car (leichter Panzerspähwagen) is armed with a 2cm automatic cannon and a 7.92mm machine gun making it the cannon car version (Kanonenwagen). Some were later fitted with a 2.8cm sPzB 41 heavy antiarmor gun (schweren Panzerbüchse 42), a tapered or squeeze-bore weapon.





Pioneer bridge construction troops erect a fixed-type bridge over a swiftly flowing river. This type of bridge was better suited in swift, shallow rivers than pontoon bridges. It can be seen that the water level is sufficiently low and the gravel bottom solid enough for trucks to ford the river. A bridge is needed though as constant traffic would soon churn up the bottom making it impassable. The water level could rise after any rains.





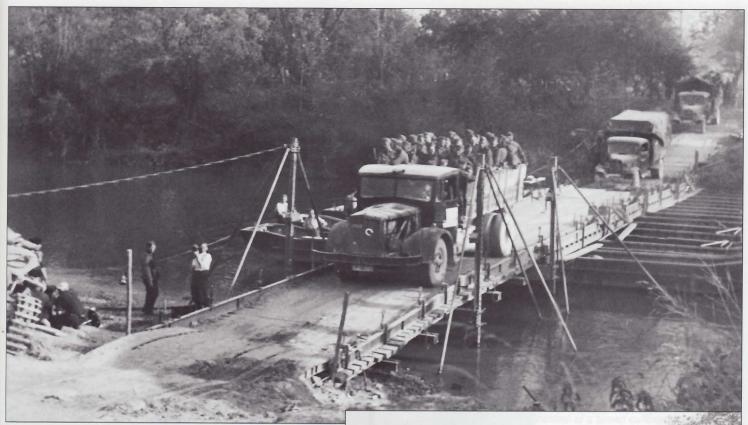


This fixed-type bridge saw little use as it required more time to erect than pontoon bridges. They often replaced pontoon bridges in rear areas so that they could be moved forward. The burnt-out buildings attest the extent of French resistance in this area. A Bussing-NAG medium cargo truck towing a 5-ton E5 standard trailer crosses the bridge.

This massive crater was probably created by a Luftwaffen 1,000-kilogram (2,400-pound) bomb. Bombs are relatively ineffective for interdicting and preventing the use of dirt roads. Three things happen when a bomb hits a road. It makes a big hole, it blows away adjacent vegetation, and it scatters a lot of loose dirt around. Two things are needed to by-pass a big hole in a road. The adjacent brush needs to be cleared away and some loose dirt is needed to build up the by-pass route. A pioneer truck III (PiKw III) drives past the crater.



A 2cm FlaK 30 antiaircraft gun has been set-up on a canal bridge to give it a clear field of fire within a town. To the right of the gun is its two-wheel SdAh 51 carriage trailer. This same trailer was used for the 2cm Flak 38 and with minor modifications for the 600mm antiaircraft searchlight.



A combination fixed-type and pontoon bridge. This combination was employed when the bottom was too shallow to float pontoon boats. It is difficult to identify specific types of trucks as there were so many different makes and models employed to include commercial models and vehicles commandeered or purchased before the war from Czechoslovakia, Austria, Poland, etc. Truck "45" passing through this burning town was built by Ford Werke of Cologne.





Troops cover a Späher (scout) as he swims a river to reconnoiter the far side and no doubt return with the beached boat. The soldier, using a bullet-scared bridge pillar for cover, in the foreground may be a pioneer as he carries a long-handled shovel as issued to pioneer troops.



Soldiers inflate six-meter medium pneumatic boats in preparation for a stream crossing. Note the foot-operated inflation pump. In the background is an SdKfz 250/1 halftrack. Note the white or yellow panel painted on its rear. This served as air-to-ground recognition. Often orange fabric panels were used for this purpose. Partly obscured is the white oak leaf insignia of 1.Panzer-Division. Inflated the boat weighed 330 pounds (150 kilograms). Here, because of the stream's swift current and narrow width a simple hand-over-hand line has been installed for boat crews to pull themselves across.





## Reiter, 1.Kavallerie-Division, Holland, May 1940

Even in the mechanised war of 'blitzkrieg' German cavalry units had an important role to fill as horse-mounted infantry. Their function was patrolling and covering inaccessible areas that were impenetrable to all other types of mechanised formations. Additionally reconnaissance, quickly exploiting gaps in the enemy line and outflanking. A component of the German cavalry were mounted on bicycles.

This Reiter (cavalry private) wears the standard army uniform, the M35 steel helmet, the M34 field cap and the M36 field blouse with its dark-green facing collar. The insignia on the 'feldbluse' is the (all branches of service) M38 'Litzen' collar patches and the national eagle and swastika emblem situated on the right breast. The branch color 'Waffenfarbe' is golden yellow and was displayed on the M34 field cap as a soutache around the national cockade and on the edging of his shoulder straps.

He is issued with certain cavalry uniform items that sets him apart from his infantry counterparts; stone grey colored riding breeches with a grey leather reinforcement seat (these were issued to all cavalrymen regardless of rank) and the cavalry riding boots with buckled on steel spurs (note the lip at the back of the heel to prevent the spur from slipping down). Other equipment includes the cavalry belt support straps officially introduced in February 1940, but in use since World War 1 and also by the Reichswehr. They differed from the M1939 infantry type by having narrower leather straps and no auxiliary straps and D-rings. Attached to the back of the belt was a carbine holding sling loop, this item was impractical in combat conditions. Moreover it was easier for the carbine just to be slung over the back without using this device.

The rest is standard equipment, enlisted man's army leather belt, a pair of rifle ammunition pouches, M1931 bread bag, M1931 field flask with drinking cup, S84/98 bayonet with leather frog and M1938 gasmask in its metal canister. He is issued with the Kar98k carbine. Other field equipment would be carried in the saddlebags.









A 3.7cm PaK 35/36 antitank gun is hand-hauled via a rope across a stream aboard a six-meter medium pneumatic boat. Other heavy weapons such as 8cm mortars, 7.5cm infantry guns, and 2cm antiaircraft guns could also be loaded on these boats. The nine-meter boat was provided with six paddles.



A motorcycle unit crosses a river aboard a ferry made from three-meter pneumatic boats, normally used to transport three men. These boats could also be used as pontoons for footbridges.



An artillery caisson is floated across a narrow river on a larger pontoon ferry using four six-meter medium pneumatic boats. They could be configured as 2.25-ton (two boats), 4.5-ton (four boats), and 9-ton ferries (six boats in tandem).

This reconnaissance patrol has returned to its lines. They wear white cloth bands on their left arms as friend-or-foe recognition.

Using six-meter medium pneumatic boats, a light treadway vehicle bridge is installed. Four-meter light assault bridging sections are installed to bridge the gap to shore. One boat could support 1.35 tons. The boat required six troops with paddles and one to steer. It could carry up to a dozen troops though including the paddlers.



This Landser wears a non-issue raincoat. His anti-gas sheet pouch is strapped to his gasmask case. The pouch was normally attached to the gasmask case's shoulder strap on the chest. When running the pouch would bounce, so many soldiers strapped it to their gasmask case. This though could damage the anti-gas sheet as the tightened securing straps damaged the fabric. The wagons in the background may be captured French as they used different sized front and rear wheels. Commandeered civilian wagons usually had smaller front wheels too.

rifle group (squad) (Schützengruppe) moves forward. The machine gunner, a Gefreiter, wears the Infantry Assault Badge (Infantriesturmabzeichen). The man in the right front has a Stg 24 stick hand grenade stuck in his belt, a common carrying method. They were sometime stuck in a jackboot, but except for moving a short distance, that was a rather uncomfortable carrying method.





Owing to the rapid expansion of the German Army some artillery units were equipped with obsolescent weapons. This unit is armed with 10.5cm leFH 16 field howitzers, World War I weapons. Most were soon replaced by the standard 10.5cm leFH 18 and the older pieces were used by training units and for Atlantic Wall defenses. The trucks are Kw III light cross-country pioneer trucks, which could carry 1,500 kilograms of cargo.

This may be the part of the service troops of a motorized infantry or Panzer division. Infantry divisions, while possessing some motorized transport, relied largely on horse-drawn support units. The equipment trailer in the left foreground has five 20-liter fuel cans mounted. It appears one soldier has pitched a shelter-quarter beside the trailer.



Halftracks of a Panzer division's rifle regiment advance across a wheat field. In the foreground are one-ton SdKfz 10 halftracks and in the background SdKfz 251/1 Schützenpanzerwagen (rifle armored carriers) conspicuously marked by painted air-to-ground recognition panels.



These Gebirgsjäger (Mountain Infantrymen) have replaced their usual Bergmützen (mountain caps) with steel helmets as they are operating in a more conventional environment. The Gebirgstruppen badge can faintly be seen on this machine gunner's sleeve. They have rolled up their tunic sleeves and unbuttoned their collars because of the summer heat.



The 10.5cm howitzer battery has secured camouflage shelter-quarters over the gun shield. This splinter camouflage pattern is comprised of three colors: dark brown, dark green, and light green. The shelter-quarters were reversible with a darker shade pattern on one side and a lighter shade on the other.



A 3.7cm PaK 35/36 antitank gun provides covering fire as a PzKpfw IV advances toward a treeline. The PzKpfw IV was at the time considered to be an infantry support tank. It was the heaviest tank in the German inventory and few in number, less than 300, but it was not thought of as a tank-fighter. It had a short 7.5cm KwK 37 L/24 gun intended for knocking out field fortifications. The tanks were not to advance no more than 100 meters ahead of the infantry. They were also to act as artillery forward observers to direct artillery fire in support of the infantry when other observers were unavailable. The short bar below the barrel served to deflect the radio antenna with the turret traversed.



A village burns as a unit of 1.Panzer-Division awaits orders to resume the advance. The village may have been shelled, bombed, or both. In the center foreground is an SdKfz 10 light halftrack. These equipped the rifle regiments (Schützen-Regimenter) of some Panzer divisions.



A burning building generates a great deal of smoke. This was sometimes used to tactical advantage by one side of or the other. In might screen the defender's withdrawal or screen the advance of the attacker. Generalmajor Erwin Rommel, commanding 7.Panzer-Division, used his artillery to ignite houses on an opposite river back. They lacked smoke rounds so the buildings were ignited to screen his infantry crossing the river aboard pneumatic boats.



A forward command post. Officer's privately purchased their own uniforms. The variations in the shades of field gray are most noticeable.





A scarce photograph of a rifle group engaged in a firefight against French holdouts. The soldier to the right is preparing to throw a stick grenade.



German mounted troops examine an abandoned Hotchkiss H39 tank. It was armed with a 37mm gun and a 7.5mm machine gun. This light tank was manned by a two-man crew. The Germans pressed these into service as the PzKpfw 38H(f) mainly assigning them to security and coastal defense units in occupied countries. Other models of captured French tanks were employed in the same manner.



An abandoned Renault Char D1 heavy tank is inspected by two German NCOs. This tank, produced in only small numbers (160), was armed with a short 47mm gun and two 7.5mm machine guns. It had a three-man crew. The triangular framework on the right rear deck is the radio antenna. The assembly fitted to the tank's rear is to assist it when crossing ditches and gullies.

Signals troops string a field telephone line with the aid of a lineman's pole to bridge a road. Friendly vehicle traffic caused more telephone line breaks than enemy fire. On the roadside sits a French Chenillette Mle 1931R tractor and its little full-tracked limber (mostly unseen in the ditch) used to tow 25mm Mle 1934 and Mle 1937 antitank guns, which proved to be totally inadequate weapons even in 1940.



Unit officers assemble to receive orders and discuss the situation. Officer's double collar were rather bars conspicuous being heavily embroidered in silver on a Waffenfarbe backing. For infantry this was white making it even more prominent. Motorized rifle units of Panzer division wore the grass green Waffenfarbe.



This Oberst (colonel) had most likely seen service in Poland owning to the Iron Crosses 1st and 2nd Class he wears. The Iron Cross 2nd Class ribbon, worn through the tunic closure button hole, is topped by a 1939 clasp (the spread-winged eagle and swastika device) indicates he had previously won the award in World War I. The Iron Cross 1st Class worn on the breast pocket, lacks a similar devise indicating he was awarded it in World War I and has since not yet been awarded the World War II decoration.



A wounded soldier receives a great deal of attention. Owing to the setting and the fact that so many are crowded around him his wounds were probably inflicted by artillery. Snipers appear to be a problem. Several men have removed their rank shoulder straps. The man in the foreground has turned his shoulder straps over to conceal the NCO braid, a common practice. The helmeted Unteroffizier to the left still wears the 1936-38 pointed-end field shoulder straps. This type of shoulder strap lacked Waffenfarbe edge piping.



This 7.92mm MG34 heavy machine gun group has its gun set-up its tripod with an antiaircraft adapter. They play a hand of Skat, a popular game involving three or four players. A game could be completed in a short time making it ideal for playing during short rest breaks.



The grave marker of a fallen Landser. The soldier's oval identify tag (Erkennungsmarke) could be broken in half. His personal data was stamped on both. One half was turned in to his unit and the other buried with him. The Landser called this a dog tag (Hundemarke).

A rifle company rests on its way to the front. The early-war issue white shirts were extremely conspicuous when tunics were removed for work details in the summer heat. Soon after the campaign in the west in 1941 reed green shirts began to be issued and gray-green in 1943.



Ancient assists modern. A horse-drawn infantry wagon gives a motorcycle an assist by pulling it out of the mud at a stream crossing. Note the spare wheel on the back of the wagon. That is one reason German military wagon wheels were the same size, only one size spare wheel was necessary. Most of the many different types of wagons used by the German Army used a standard-sized wheel.



These Panzertruppen clown around during a pause in the fighting; note the derby worn by one man. They wear the distinctive black Panzer uniform with silver death head devices on the pink-edged (the Panzer Waffenfarbe) black collar patches. Note the silver Panzerkampfabzeichen (Armor Battle Badge) on their left chests.



German units we're well supplied with 1:50,000 scale maps of France and the Low Countries. They would not be so fortunate when Russia was invaded the next year.



This Tornisterfunkgerät has been set-up on the edge of a slit trench sitting on the power supply and accessory case. The right half is the transmitter and the left is the receiver. The carrying cases were field gray (dark green), but were sometimes painted a green, brown, and sand camouflage pattern. The radio's front panels were field gray with the labeled plates light green with black markings. With voice it had about a six-mile range and 12 miles using continuous wave (Morse code).



A general, a Knight's Cross of the Iron Cross winner, reviews his unit's operation plan assembled in a binder with all orders, directives, maps and overlays. General officers were identifiable by a number of distinctions including the stylized gold oak leaves on red collar tabs, elaborate gold and silver-colored shoulder cords with silver stars (pips), gold-colored adornments on headgear, red collar facings on the greatcoat, gold tunic and greatcoat buttons, and wide double red stripes on the trouser's seams.





A motorcycle courier picks up a message for delivery from a Leutnant in a light signals car. Over half-a-dozen different makes of motorcycles were employed in many different models.

German pioneer assault troops demolish a French machine gun bunker. Besides conducting minor road and bridge repairs, constructing obstacles and laying minefields, divisional pioneer battalions would augment infantry regiments as specialized assault troops. They were armed much like rifle units, carbines and machine guns, but were also equipped with flamethrowers. The man on the left end of the pioneer group carries a Flammenwerfer 35. The 79-pound (36-kilogram) flamethrower had a 10-second flame duration and a range of no more than 30 meters.

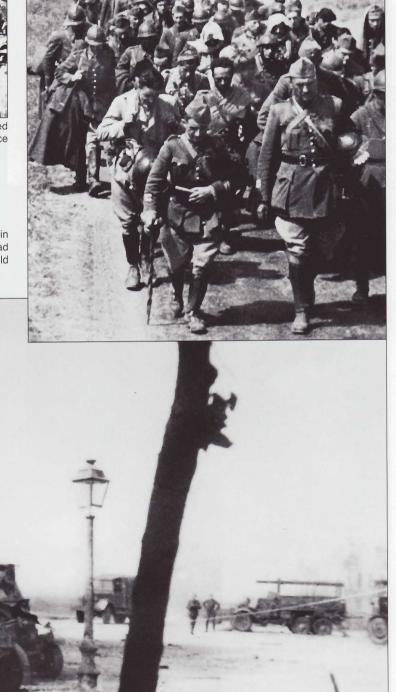


A rifle platoon waits beside a road as French prisoners pass. The second soldier from the left, a Leutnant with a stick grenade in his belt, is armed with a 9mm MP28/II machine pistol. These and other obsolescent machine pistols such as the MP34/I were used as there were insufficient numbers of the standard MP38 available. Note he has no magazine pouches for the weapon, which were often scarce.



More French prisoners are marched to the rear. The Germans were prepared for large numbers of prisoners after their experiences in Poland. Order Police (Ordnungspolizei) units sometimes assisted with the effort.

A column of French prisoners march into captivity. The fact that France fell in just 44 days was a severe blow to the nation, especially since they had resisted the German invasion for almost five years in the last war and held out only slightly over twice as long as had Poland the year before.



A German column halts to look at the results of dive-bombing attack on a French convoy. Dive-bombers and fighters would attack any vehicle columns found ahead of advancing German units. Whether troop units or service units, the destruction of a column usually signaled an end to local resistance, either because of troop loses or the loss of their logistical support. The Germans viewed the Luftwaffe as an extension of the artillery and in fact fielded fewer heavy artillery units than they should have because of this.



French prisoners pass a platoon of SdKfz 251/1 halftracks. The French to the left is a tank crewman. The white parallelogram-shaped unit tactical symbol on the halftrack's rear identifies it as belonging to a Panzer unit. Vehicle tactical symbols were based on unit map symbols, but were not necessarily identical.



This Renault R35 tank was knocked out by a heavy antitank mine destroying the track and running gear. A passing German tank probably inflicted the two 3.7cm holes in the hull side "just in case." The R35 was armed with a 37mm short gun and a 7.5mm machine gun and crewed by two men. A dud 75mm artillery round, which had nothing to do with the tank's demise, has been set on the hull.



A Panzer officer, note the black field cap, samples some of the local wine provided by another officer of the unit's train. The officer's style Panzermütze bore silver piping on the front edge and a pink chevron on the front.



The SdKfz 251/1 halftrack was a scarce vehicle in 1940. Ahead of it are unarmored SdKfz 10 light halftracks used as troop carriers.

Two Landsers examine a British Vickers Mk VI light tank. One of its two 4-inch smoke projectors can be seen on the turret side. This obsolescent tank was armed with a 0.5-inch and a .303 Vickers machine gun.





Another Vickers Mk VI burns (Its turnet is turned to the rear.) Some 550 were deployed to France with the British Expeditionary Force. Only six were evacuated to Britain.



A German medic, a Sanitäter (known simply as a Sani to Landsers), treats British prisoners of war at a collection point. The Landser referred to the English Soldat simply as a Tommie or occasionally as a Beefsteak.



A camouflaged Kfz 21 heavy cross-country car passes a French World War I memorial in a bombed-out town.



The attack often continued at night. Even if troops were unable to advance at night, the enemy would continue to be pounded by artillery.





In a heavily bombed town two officers board their staff car, a commandeered civilian automobile. A hand-painted Wehrmacht Heer (WH) registration number plate is fitted on the car's rear fender.

The Luftwaffe did not hesitate to deliver devastating bombing attacks on any resistance. Civilian targets were just as frequently struck as military as a means of destroying the will to resist through simple terror.



Another bombed French town. The burned-out truck is probably a civilian vehicle.



An Oberfeldwebel searches French prisoners of war. The Germans referred to the French as Franzmann or Franzose. On the NCO's sidearm (Seitengewehr (sidearm or bayonet) is a silver-colored Portepee, a sidearm knot worn by senior NCOs (Feldwebel and up and ensigns [Fähnriche]—officer cadets). This was a sign of office for senior NCOs. This was not supposed to be worn in the field, but obviously sometimes was.





French troops surrender amid scattered discarded equipment. Prisoners were usually allowed to retain their helmets and gasmasks while in transit to the rear for protection from either sides' possible attacks.



A downed Royal Air Force fighter. Some 500 RAF aircraft accompanied the British Expeditionary Force, a large number of which were destroyed.

A 2cm FlaK 30 antiaircraft gun crew scans the sky for enemy aircraft. The Flak 30 was being replaced, or rather supplemented, by the similar FlaK 38. Even in a dark silhouette picture like this two weapons can be differentiated. The FlaK 30 had a spherical gas expansion chamber as part of the tubular muzzle break. The FlaK 38 had a cone-shaped muzzle break.

Assault troops march through a destroyed town. One man carries a tube charge (Rohrladung)—a bangalore torpedo, and two men carry a plank, which may be used as a plank change (Gestreckteladung) to which 500-gram demolition blocks were wired as a substitute for the tube charge. Both charges were pushed under bared wire to blast gaps. They could also be shoved into firing embrasures of fortifications.





It required two signalmen (Funker) to carry either the Torn.Fu.b1 or Tron.Fu.f (Tornisterfunkgerät) backpacked radio equipment, the main type used at company and battalion levels. The difference between the two models (b1 and f) was the frequency range they covered. One of the two cases held the transmitter and receiver and the other the power supply and accessories, which included the disassembled antennas. They could not be operated on the move, but had to be set up with pole or wire antennas.

A company reporting NCO, der Spieß, reports to his company chief on a bombed street. The reporting NCO was equivalent to a US company first sergeant or a Commonwealth company sergeant major. In the German Army the company chief was thought of as the "Father of the company" (Vater) and der Spieß as the "Mother" (Mutter). Spieß means pike and refers to the time when NCOs carried pikes to keep men in position in formations advancing into enemy fire.



Two Wehrmachtsbeamte (Defense Forces officials) inspect a burned out PzKpfw 35(t) tank. This was a former Czechoslovak Lt zv35 employed by the Germans. It was armed with a 3.7cm gun and two 7.92mm vz37 machine guns, redesignated by the Germans as the MG37(t). Some 220 were taken into German service with most assigned to 6.Panzer-Division. They campaigned in Poland, France, and Russia until withdrawn from frontline service in 1942 and most survivors were converted to self-propelled guns.

These unfused French artillery rounds are protected by wire-bound slats intended for shipping. Such stocks of abandoned ammunition were eventually collected for use in the many French artillery pieces allotted to the Atlantic Wall.



Some 1,800,000 French prisoners were taken. Most were transported to Germany in August 1940 for forced labor. A large number of the wounded and ill prisoners were parolled though. Of the British Expeditionary Force, about 50,000 were captured.

An Unteroffizier chats with a Swiss soldier wearing the distinctive M18 helmet and armed with a Schmidt Rubin 7.5mm M1911 rifle on the French-Swiss border. German was the principal Swiss language.







Soldiers are presented the Iron Cross 2nd Class. The grades of German awards did not indicate the degree of valor. Instead, they simply meant the order in which the acts of valor had been accomplished. The act of valor earning a soldier the Iron Cross 1st Class may have been for a lesser deed than that entitling him the 2nd Class.



A rifle company rests beside a café with their carbines stacked and their machine guns resting on bipods. Standard march rates called for a 10-minute rest halt every hour. Civilian patrons still frequent the café.



Reichsmarschall Hermann Göring and his entourage visited Paris soon after its fall. His Luftwaffe had contributed much to the defeat of France and the Low Countries, but they had failed to prevent the evacuation of the British, France, and other Allied forces from Dunkirk and other Channel ports. Note the white double trousers stripes worn by Luftwaffen generals, similar to the red stripes worn by Army generals.



A German checkpoint established in the center of Paris. Gasoline was immediately rationed and it was not long before virtually none was available for private civilian use.



Adolph Hitler arrives for the victory parade.



An officer poses for a photograph before the victory parade. He wears the officer's M1934 belt with shoulder strap, a Sam Browne-type belt. Full decorations were not normally worn with the field blouse, but in the case of the victory parade, special orders were issued authorizing their wear.



A Hauptfeldwebel (chief field sergeant), the reporting NCO or der Spieß, equivalent to a US company first sergeant or Commonwealth company sergeant major. While officially titled a Hauptfeldwebel, he could hold the rank of Unteroffizier (corporal) to Oberfeldwebel (senior field sergeant). He is identifiable by the two 9mm bands of silver-colored braid on his tunic cuffs. These were known to soldiers as Kolbenringe (piston rings).



A rifle company marches smartly toward the main parade route.



Units with their color guards in the lead move to the parade assembly area. A Hornist plays a marching tune on his trumpet to keep the troops in step. Note the "swallow's nest" on his shoulder identifying him as a musician.



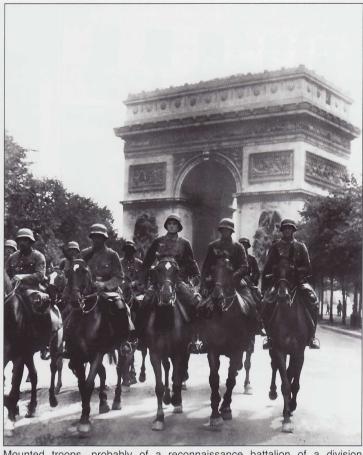
The 3rd platoon brings up the rear of a rifle company. The platoon leader (Zugführer), a Feldwebel, marches to the right of his platoon. The three groups (squads) are led by Unteroffizier Gruppenführern (group leaders). At this time few group leaders were armed 9mm MP38 machine pistols, but rather with carbines like the rest of their groups. The der Spieß marches in his usual position to the right rear of the last platoon.



Light cross-country cars of an antiarmor unit in the victory parade as indicated by the wedge-shaped tactical symbol on the right fender. The car to the right is a Krupp LKW with an MG34 machine gun mounted for antiaircraft protection and for ground targets. This vehicle was commonly used to tow 3.7cm antitank guns and 2cm antiaircraft guns.



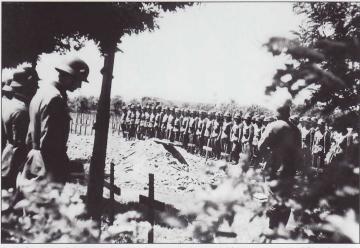
A horse-drawn light artillery battalion is formed up to participate in the Paris victory parade. The officers wear their silver cord aiguillettes (Achselbänder) and the enlistedmen their marksman insignia (Schützen Abzeichen), dull aluminum cords. The battalion's red flag can be seen to the right.



Mounted troops, probably of a reconnaissance battalion of a division (Aufklärungs-Abteilung der Division), participate in the victory parade through Paris. In the background is the Arch of Triumph (L'Arc de Triomphe de l'Etoile). Completed in 1836, France's Unknown Soldier of the Great War was interned there in 1920.

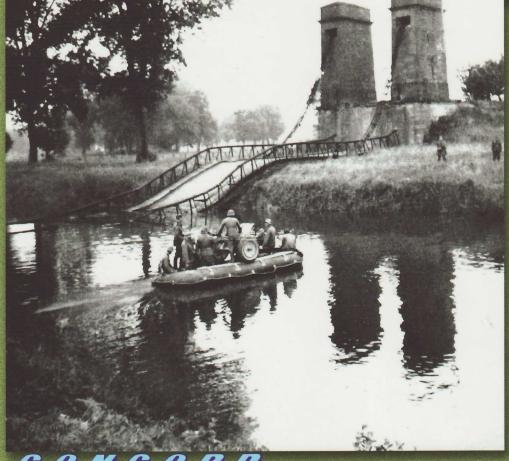


A soldier brands the name of a comrade, a Feldwebel, into a wooden cross using a heated screwdriver. This was a standard design for a field grave marker.



An infantry unit honors its dead recently interned in a cemetery. After the war the dead were disinterred and reburied in separate cemeteries inside France and maintained by their respective governments.





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