

**TWO GERMAN INFANTRY DIVISIONS OF 1928**

As is the case with most military organizations, the structure of the German infantry division of 1928 was a compromise between what current thinking deemed desirable and what current resources permitted. During the interwar period, the restrictions of the Versailles Treaty placed an additional obstacle in the path of those who wished to put their ideas in practice. We are thus fortunate that Friedrich von Cochenhausen, one of the most prolific military writers of the two decades between the World Wars, took the time to sketch out his ideal infantry division for 1928 and compare it with the infantry divisions that were available to Germany in that year.

Throughout the 1920s, the tiny German regular army could not hope to win a fair fight against the armies of such large states as France, Poland, and Italy or even those of medium sized countries such as Czechoslovakia. It lacked the numbers to either launch a traditional offensive or erect a continuous defensive barrier. The Germans therefore adopted a strategy that they called "delaying resistance" (*hinhaltender Widerstand*) or the "delaying fight" (*hinhaltendes Gefecht*.) Essentially a more elegant version of the slow withdrawal that their predecessors had executed in the second half of 1918, "delaying resistance" would depend for its success on the ability of the small German field army to inflict a number of small but sharp defeats. That is to say, individual formations and units would be carrying out limited offensive actions within the framework of an overall strategy of avoiding decisive combat.

The German infantry division of 1928 was well designed for such a strategy. Because the division would be spread out over a frontage far greater than those associated with either trench warfare or the mobile campaigns of World War I, infantry regiments and artillery battalions were designed to operate with a greater degree of independence than had been the case before 1919. Because a portion of its units were to be held as a mobile counterattack reserve while the other part maintained contact with enemy, the division was provided with both horse-drawn and motor transport. And because the division was expected to cooperate with cavalry divisions that were, as a whole, far more mobile than it was, the division had

sufficient support units to be able to provide the relatively modest amounts of food and ammunition (as well as the considerable amounts of fodder) needed by a cavalry division.

The German infantry division of 1928 (depicted on page 2) was, like its predecessor of the second half of World War I, triangular. Its major subordinate combat units were three infantry regiments and an artillery regiment of three battalions. In addition, there was a pioneer battalion, a cavalry squadron, a communications battalion (*Nachrichten Abteilung* - abbreviated as Div. Nachrichten Abt.), a medical battalion (*Sanitäts Abteilung* - abbreviated as *Sanitäts-Abt.*), and a motorized transport battalion (*Kraftfahr Abteilung*), and a horse-drawn transport battalion (*Fahrende Abteilung*.)

The infantry regiments were similar to those of the last year of World War I, with three battalions (each of three rifle companies and a machine gun company) and a trench mortar (*Minenwerfer*) battalion. (The abbreviation for Infanterie Regiment was I.R. followed by the regiment's number. The battalions are represented by the boxes surmounted by Roman numerals. The *Minenwerfer* battalions are represented by the smaller boxes with the "bent stovepipes." The abbreviation I. Inf. Kol. surmounting two parallel lines represents the regimental ammunition column, a train of horse-drawn wagons known as a *leichte Infanterie Kolonne*.)

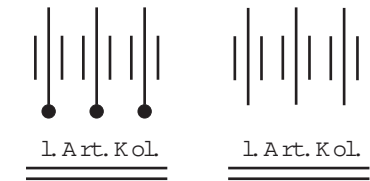
Another holdover from World War I was the infantry brigadier that stood between the regimental and the division commanders. Now called the "infantry leader" (*Infanterie-Führer*), this officer had played an active part in the command of German infantry units during World War I, playing a role analogous to the "assistant division commander for maneuver" of a modern-day U.S. Army division.

Though there was only one artillery regiment, it was also subordinated to a brigade commander. Called the "artillery leader" (*Artillerie-Führer*), this officer provided an extra degree of flexibility and (as can be seen in the "ideal" organization as well as German practice in both world wars) expansibility to the artillery force at the disposal of the division commander. Thanks to the Versailles Treaty ban on heavy artil-

Mixed Battalion of 1928



105mm Howitzer Battalion of WW I      77mm Field Gun Battalion of WWI



lery, the additional batteries needed for such expansion would have to have been taken from other divisions or improvised on mobilization from spare personnel (instructors, remobilized veterans of World War I, etc.) and (often surreptitiously) stockpiled weapons.

Like the standard field artillery regiment of 1917 and 1918, the artillery regiment of the 1928 division consisted of nine batteries - three of which were equipped with light field howitzers and six of which were armed with light field guns. Whereas the World War I batteries tended to be organized into one howitzer battalion and two field gun battalions, the 1928 batteries were assembled into three mixed battalions. These mixed battalions consisted of two batteries of light field guns and one of light field howitzers.<sup>1</sup> (All three types of battalions were provided with an organic ammunition column - known as a *leichte Artillerie Kolonne* and abbreviated as l. Art. Kol. - made up of horse-drawn wagons.)

Though this made it more difficult for the regiment to participate in huge "hurricane" bombardments of the type perfected by George Bruchmüller, it ensured that far flung detachments had a better chance of

<sup>1</sup> The German light field guns of World War I were of 77mm caliber. In the interwar period, this was changed to 75mm. The German light field howitzers of both periods were 105mm pieces. All batteries discussed in this article were of four pieces each.

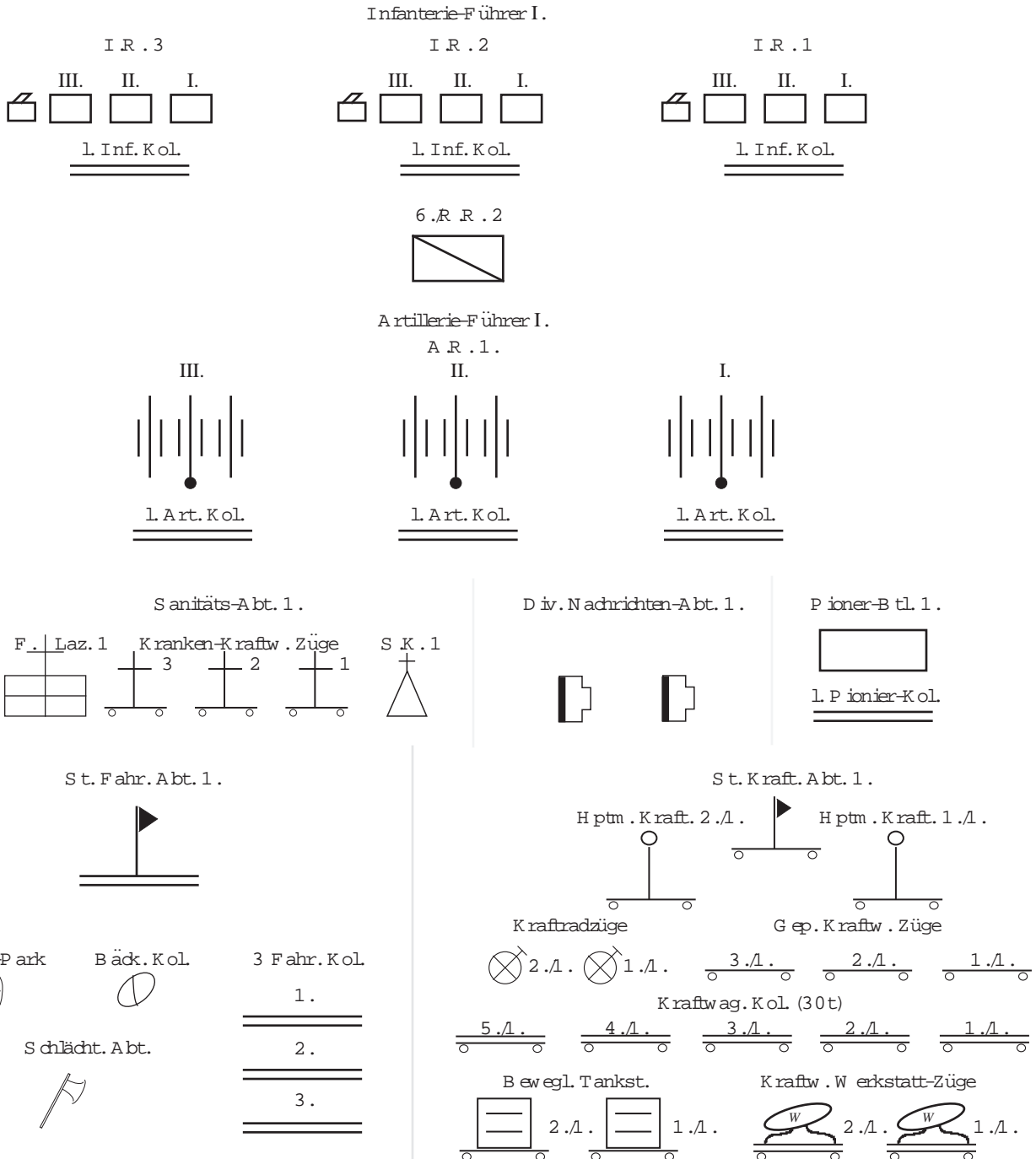
being armed with both of the basic field artillery weapons of the period. (It is interesting to note that Polish light artillery battalions of this period had an identical organization.)

Like the one regiment artillery brigade, the single squadron of horse cavalry was a

framework for expansion rather than a complete organization capable of fulfilling most of the division's reconnaissance needs. (This squadron is represented on the chart as 6./RR 2, an abbreviation for the 6. Escadron/Reiter Regiment 2, the 6th Squadron of the 2nd Cavalry Regiment. At this time, the first four squadrons of each cav-

alry regiment and the regimental headquarters joined a cavalry division. The higher numbered squadrons were either used to provide divisional squadrons to the infantry divisions or left behind as training and replacement units.

GERMAN 1ST INFANTRY DIVISION OF 1928



## Two German Infantry Divisions of 1928

(Continued)

Ideally, the Germans preferred a division reconnaissance organization composed of bicyclists, infantry and pioneers in trucks and horse-drawn wagons, machine gun units, artillery, and armored fighting vehicles, as well as one or more squadrons of horse cavalry. Because of the Versailles Treaty, tanks were out of the question. Nonetheless, even with the reduced means allowed it by that treaty, the German Army of 1928 could be expected to reinforce its divisional squadrons with some of the aforementioned means in order to provide the division with a proper "Truppenkavallerie." (The Germans made a sharp distinction between *Truppenkavallerie* - cavalry which served infantry brigades, divisions or corps- an *Heereskavallerie* - cavalry which went to war as part of cavalry formations.)

The division cavalry squadron itself was somewhat different from the squadrons that in ones, twos, threes, or fours, made up the divisional cavalry detachments of World War I. Trained primarily to fight on foot and equipped with a small (four per squadron) number of light machine guns, the 1928 squadron was, with about 180 men, somewhat larger than the 1914 squadron of about 150 men.

The definitive divisional maneuver of the delaying fight was a defensive arrangement in which the divisional was divided into two portions, one of which was powered by the muscles of men and horses and the other of which was transported in motor vehicles. The muscle-powered part of the division would be spread out over a large front, using deception and long range fire to force the enemy into a premature deployment. The motor-powered elements would form a highly mobile reserve that served to exploit opportunities as well as to extricate forward units that had got themselves into trouble.

The organization of the supply and transport columns of the division reflected this dichotomy. The horse-drawn transport battalion (*Fahrende Abteilung*) was a relatively modest organization, with a staff (*Stab Fahrende Abteilung*) and three wagon trains (*Fahrenden Kolonnen*.) Each wagon train was a sizeable unit of roughly 120 men and 130 horses that was, for administrative pur-

poses, organized as a "transport squadron" (*Fahr Eskadron*.) Largely because they, too, traveled at the speed of a walking horse, the divisional bakery, butcher unit, and horse park (for extra and convalescing horses) were attached to the horse drawn transport column.

The motor transport battalion consisted of five platoon-sized truck columns (*Kraftwagen Kolonnen* - abbreviated as *Kraftwagen Kol. 30t*), three armored truck platoons (*gepanzerten Kraftwagen Zügen* - abbreviated as *Gep. Kraftw. Züge*), two motorcycle platoons (*Kraftfahradzüge*), two mobile fuel depots (*beweglichen Tankstellen* - abbreviated as *Bewegl. Tanst.*) and two mobile workshop platoons (*Kraftwagen-Werkstatt-Züge* - abbreviated as *Kraftw. Werkstatt. Züge*) The provision of two "flying" company headquarters, each named for the captain who commanded it (*Hauptmann Kraftfahrer* - abbreviated as *Hptm. Kraft.*), permitted the task organization of these motorized elements into two independent units, each of which could be provided with its own refueling and repair units. Each truck column was able, with its fifteen or so trucks, to carry one infantry company. Thus, in a retrograde operation (in which the division would be retreating onto its own supply depots and would thus have little need for extensive transport of supplies), the division could motorize no more than two infantry battalions.

One of the more surprising changes that von Cochenhausen would have liked to have made to the German infantry division of 1928 was a decrease in the amount of motor transport assigned. (A complete graphical depiction of this ideal division is presented on page 4 of this article.)

His plan was to do away entirely with the armored truck platoons and the workshop platoons, to reduce the unarmored truck columns from eight to three, get rid of one of motorcycle platoons and transfer to other to the division headquarters, and convert one of the mobile fuel depots into a column of tanker trucks. Cochenhausen also proposed doing away with the two "flying" company staffs. (Indeed, the motor transport battalion that he proposed would have been slightly smaller than a transport company provided with half of the assets of the actual motor transport battalion of 1928.)

To make up for this reduction in motor

transport, Cochenhausen advocated an increase in the number of horse-drawn columns from three to eight. In other words, he cut the motor transport battalion by more than half while more than doubling the horse drawn transport battalion.

Cochenhausen is silent on his reasons for wanting to increase the infantry division's dependence on horse-drawn transport. Though an articulate explainer of the "delaying battle", he clearly would have preferred to fight in a more decisive manner. The bigger divisions that Cochenhausen proposed would, it was assumed, be part of a larger army. This larger army would be better able to conduct more conventional operations. As such, its reserves would be closer to the front and, at the same time, would have to respond to crises on a far more narrow front.

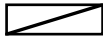
Though richer in most resources, a larger German army would have access to no more gasoline than the 100,000 man army permitted by the Versailles Treaty. Germany had no domestic sources of oil and was thus heavily dependent on imports. Its principle supplier, Romania, was both closely allied to France and easily overawed by Poland. These facts may have made Cochenhausen chary of making the German Army too dependent on gasoline.

Some of the trucks made available by the "de-motorization" of the division's transport organization would be used to motorized the division bakery (expanded to two companies) and the division butcher detachment. The majority, however, would be used to help create a second artillery regiment.

The second artillery regiment in Cochenhausen's ideal division would have consisted of three different battalions. (Readers should note that the Germans numbered units from the right to the left. Thus the first battalion is the one furthest to the right.) The first would be a heavy field howitzer battalion of three batteries of horse-drawn 150mm howitzers. The second would be a motorized heavy battalion of three batteries of 100mm guns. The third would be a motorized light battalion with three batteries of 105mm light field howitzers. The ammunition columns of the motorized battalions would be motorized, the columns of the horse-drawn battalion would be horse-drawn.

COCHENHAUSEN'S IDEAL INFANTRY DIVISION OF 1928

Feldgend. Trupp 1.



Infanterie-Führer I.

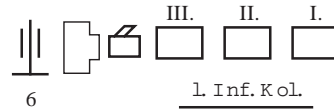
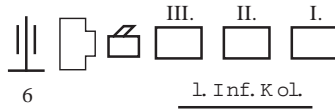
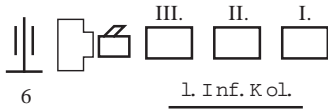
Kraftrad Z. 1



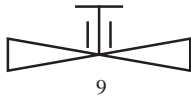
I R . 3

I R . 2

I R . 1



B eob. F l. S taffel (D.) 1.



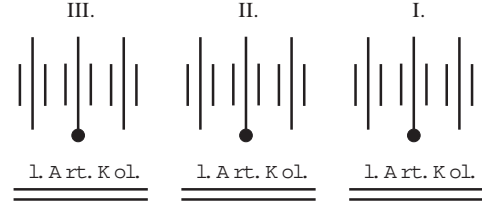
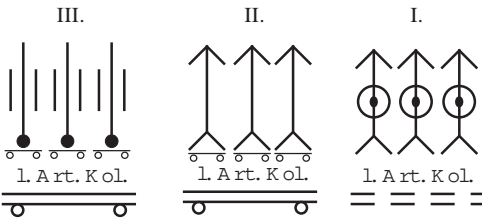
D iv. A ufl. A bt. 1.



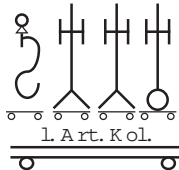
Artillerie-Führer I.

A R . 2.

A R . 1.



F l a k. A bt. 1.



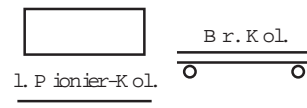
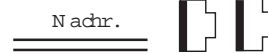
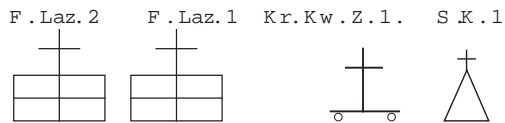
B eob. A bt. 1



S a n i t ä t s - A b t. 1.

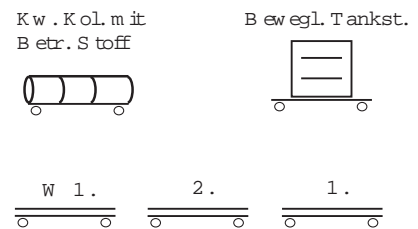
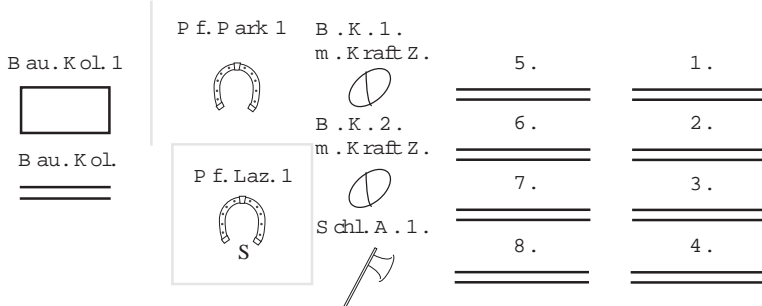
D iv. N a c h r i c h t e n - A b t. 1.

P i o n i e r - B t l. 1.



F a h r a b t e i l u n g 1

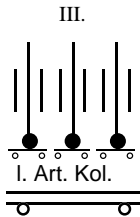
K r a f t - A b t e i l u n g 1



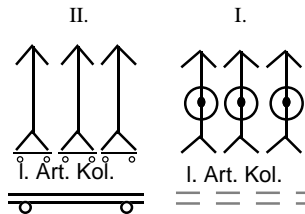
**Two German Infantry Divisions of 1928**

(Continued)

If the contemporary German literature on field artillery is any indication the motorized light field howitzer battalion would be used as an artillery “fire brigade” - a mobile force to exploit opportunities at a critical point (*Schwerpunkt*) or prevent disaster at dangerous points (*Brennpunkte*).



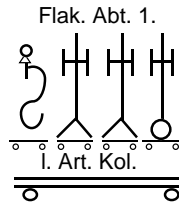
The 100mm guns and 150mm howitzers would be used primarily for long range fire from a central position - interdiction fire and counter-battery fire were typical missions for this sort of unit in both World War I and World War II.



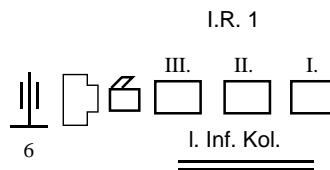
(For a concrete example of the employment of this sort of regiment, see Generalleutnant a. D. Spemann, “Artilleristische Führungsfragen”, *Wehr und Wissen*, 1931, pp. 78-84. This article is summarized and illustrated in “The Focus of Efforts, Part II”, *Tactical Notebook*, November, 1991.)

Cochenhause’s artillery brigade would be completed by two independent battalions . The antiaircraft battalion (Flak-Abt.) would be completely motorized, with four firing batteries (two 75mm, one 88mm, and one 37mm) and a target acquisition unit with a searchlight platoon. The observation battalion (*Beobachtungs Abteilung* - abbreviated as *Beob. Abt.*) would have a sound and flash ranging group, a survey group, a weather section, and bal-

loon section, and a map section. This latter organization would allow the division artillery brigade to fulfill the full range of artillery missions associated with mobile and position warfare. Indeed, with the attachment of additional firing batteries, a division organized in this way would be able to employ the artillery tactics perfected by George Bruchmüller during World War I.



Cochenhause’s infantry brigade would be altered primarily by the addition of an infantry gun company (of six guns) and a communications platoon to each of the three infantry regiments. Cochenhause expected the infantry gun company to double as an antitank company. He fails to say, however, whether he expected the six guns of this company to be weapons of field gun (approximately 75mm) caliber that would fire high explosive at both tanks and infantry targets, an Austrian-style weapon of 47mm or so, or one of the many dual-purpose guns equipped with interchangeable barrels then offered by Swedish, Czech, Dutch, and Danish arms manufacturers. (One of the barrels would be for small-caliber, high velocity anti-tank projectiles. The other would be for larger caliber, medium velocity high explosive shells.)



The cavalry unit recommend by Cochenhause was composed of a pair of armored cars, a bicycle company, and two squadrons of cavalry, it looked a lot like the division reconnaissance battalions that went to war with most German infantry divisions in 1939. (The latter tended to have more cyclists and fewer horsemen.) With a few more armored cars and some heavy weapons, this organization would also bear a certain resemblance to a French infantry

divisional reconnaissance unit (“*groupe de reconnaissance de division d’infanterie*” - G.R.D.I..) of the late 1930s.



Cochenhause proposed minor differences to pioneer battalion (an increase from two to three pioneer companies and the motorization of the bridging column) and the communications battalion ( the addition of a communications supply column.) To permit the pioneers to concentrate on their more demanding tasks, he recommended the formation of a separate “building battalion” (*Bau Bataillon*.)

Cochenhause also reorganized the reorganization of the medical battalion, decreasing the number of ambulances while doubling the number of field hospitals. (For a nation as well supplied with doctors as Germany, moving doctors to the wounded rather than the wounded to the doctors made a lot of sense. The reduction in the need for ambulances may also reflect the assumption of a reduction in division frontages.)

Cochenhause’s most radical proposal was for the addition of a squadron of nine observation aircraft. These, like the famous *Storch* aircraft of World War II, could fulfill a variety of duties. They could give commanders a view of the battlefield, perform liaison duties, and spot for the division artillery.

Many of Cochenhause’s proposals found their way into the plans for the expansion of the German army that were hatched in the mid-1930s. If we take the trench mortar company as the direct ancestor of the infantry gun companies of 1939 and the infantry gun company as the direct ancestor of the later antitank companies, Cochenhause’s proposals for the infantry can be said to have been adopted. The same can be said for the transport units, the reconnaissance unit, the medical unit, and the engineers. (Though not provided for in the mobilization plans of the mid-1930s, “building battalions” like the ones Cochenhause proposed were raised during World War II.)

Cochenhause’s proposals for a two regiment artillery brigade in each division seem to have been incorporated into some of the

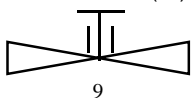
German mobilization plans of the mid-1930s. In 1935, after the German Army had raised the 36 field artillery regiments needed by the 36 infantry divisions then being organized, it began to raise a second series of 36 artillery regiments. Raised under the auspices of the 36 original regiments (with one old regiment “sponsoring” the formation of one new regiment), these new regiments consisted of two of the sort of heavy battalions recommended by Cochenhausen. That is to say, the first battalion was a horse-drawn 150mm howitzer battalion, the second a motorized battalion equipped with 100mm guns. (Due to a shortage of 100mm guns, 150mm howitzers were sometimes used as substitutes.)

As the German Army went beyond the initial goal of 36 infantry divisions, it became clear that it would be impossible to provide each division with a heavy artillery regiment of its own. The heavy battalions were thus separated from divisions and used to build a general headquarters pool. The regimental headquarters became “floating” headquarters, used to connect independent battalions into *ad hoc* groupments.

A similar fate awaited the observation battalions and the artillery brigade commanders. Too few in number to serve as divisional assets, these organizations also found their way into the general headquarters pool. (The artillery brigade commanders and their staffs became “floating” headquarters known as “*Artilleriekommandeure*”, abbreviated as “*Arkos*.”)

Cochenhausen’s proposals for providing

Beob. Fl. Staffel (D.) 1.



each division with its own air force were made moot by the formation of the *Luftwaffe*. Though less influenced by the “Douhet disease” than the U.S. Army Air Corps and (in particular) the R.A.F., the *Luftwaffe* was sufficiently particularistic to want to prevent the other services from having aircraft of their own.

Source: Ludwig von Cochenhausen, *Die Truppenführung, Ein Handbuch für den Truppenführer und seine Gehilfen*, (Berlin: E.S. Mittler & Sohn, 1928.)

### "The Delaying Fight" an extract from Ludwig von Cochenhausen *Die Truppenführung*

“Any fight that, *without leading to a decision*, aims to maintain contact with or deceive the enemy by means of weakening him systematically and *locally* or by holding him back for a certain period of *time* is called a delaying fight. For the most part, this will consist of defensive operations. When the opportunity presents itself, attacks will be carried out. The delaying fight one always requires efforts to preserve one’s own forces, because it is carried out within a context of local or temporary inferiority vis à vis the enemy.”

“The units [*die Truppe*] should make no distinction between delaying and decision-seeking [*entscheidensuchend*] attacks, between delaying and decision seeking defensive operations. For them, there is only attack and defense. It belongs to the leadership to determine, by means of the distribution of missions [*Auftragserteilung*], to use the units in one way or another. If it [the leadership] wishes to attack in a delaying fashion, it will place a forward limit on the attack objective [*Angriffsziel*.] If it wishes to defend in a delaying fashion, it places the main line of resistance [*Hauptkampflinie*] in such a manner that a smooth, casualty-free withdrawal from it is possible”

“In the delaying fight, infantry is sent into combat sparingly and with deliberation. It fights at *long distances*, fully using the *heavy machine guns* assigned to it for that purpose. In order to do this with a little bit of infantry, the infantry in the delaying fight spreads itself out over frontages that are far greater than those needed for decision-seeking attacks or defensive operations aimed at retaining control of terrain. Individual squads, making use of favorable terrain, seek to *deceive* the enemy.

*Early opening of fire* with great expenditure of ammunition forces the enemy to deploy prematurely, assists this process. Heavy machine guns are employed in large numbers and in great depth. Their positions are chosen so that they can be quickly withdrawn, preferably without the enemy taking notice of that fact. Frequent changes of positions are made in order to deceive the enemy about our true strength. Light trench mortars [*Minenwerfer*] are employed along similar lines. *Strong reserves* are kept far

back, their organization in depth and the distances that separate them from the battle front are useful to keep the reserves from being employed prematurely and in order to deal with the changes that take place from time to time in the delaying battle. Sending small detachments forward of one’s own front lines can be of use to hold back the enemy and thus avoid a decisive engagement. These avoid serious fighting along the main line of resistance.

During the delaying fight, the infantry will naturally make extensive use of their *spades* for the purpose of deceiving the enemy. In order to effectively deceive the enemy, special attention must be paid to enemy ground and air observation “

“Because of its great mobility, great reach, and defiladed positions artillery is of particular utility to leaders conducting the delaying fight. Through heavy use of artillery and great expenditure of ammunition during the early opening of fire the [enemy’s] achievement of a decision can be impeded. The enemy infantry will be forced to [attempt to] outflank and envelope to early and will thus be prevented from coming into contact with our own infantry and thus from inflicting a decisive defeat. Artillery will be employed as platoons [of two pieces] or as single pieces in order to deceive the enemy about our own strength.

Artillery will often, even in the case of long range weapons and at the beginning of the fight, chose positions right behind the infantry in order to engage the enemy as soon as possible. At the same time the artillery should be deeply echeloned in order to easily follow the [rearward] movement of the battle. Use [should be made] of *dummy positions* and changes of position to confuse the enemy.

Rearward positions should be selected with a view to the possibility that [the German] infantry might be forced into a decisive struggle. Forward positions should be reconnoitered in case the delaying fight takes on an offensive character. Limbers and teams should be kept close [to the guns] in order to improve mobility.”