

- I. THE AUTHORS
- II. FOREWORD
- III. THE BRITISH SIDE

- i. The Attack Comes

Alam Halfa

- IV. THE GERMAN SIDE

- i. Now or Never—Alam el Halfa
 - ii. The Attack
 - iii. Conclusions

- V. CRITIQUE

- i. Summing Up



EDITOR'S NOTE

When professional soldiers think in terms of future concepts, it is natural that they should seek to find some of their guide lines in the military actions of the past. It was with this in mind that the idea was conceived of presenting the report of a combat action as seen by two opposing commanders. To be of any value, the report had to shed some light on the problems of today: fluid actions of mobile forces operating over widely separated areas; the logistic problems incumbent in such action; the effect of terrain on the conduct of the operation and, most important, the employment of air elements operating in conjunction with the ground forces.

The campaigns which were fought in the Western Desert during WW II seemed to fit the requirements more so than those of any other theater. Here, unencumbered by the problems which normally beset military operations in more populated areas, the opposing forces were free to engage each other in a classic form of war involving the combatants only. A project to present such a report was begun in the spring of 1955. Through the assistance of Col R. T. Vance, then the Marine Corps staff representative at CINCNELM in London, B. H. Liddell Hart was reached and several actions were examined to select the one best suited to the purpose.

At first it was considered that the operations at El Alamein might be most rewarding since there the elements of offense, stand and retreat were executed by both sides. Because of the length and complexity of this whole campaign, however, Liddell Hart recommended that the narrative be limited to the battle of Alam Haifa, the second phase of the campaign. Here, the opposing forces were about equal (although the logistical advantage lay with the British) whereas the first battle (retreat from Tobruk) and the third battle (British counteroffensive) were too one-sided.

It was also Liddell Hart who recommended the authors best suited to do the job. Bayerlein commanded the spearhead of Rommel's primary thrust and Roberts commanded the unit which blocked it-each was instrumental in the conduct of the action and both saw the battle from the same level. The authors wrote their portions independently and neither has seen the other's manuscript; thus a true picture, as each saw it, is presented. Liddell Hart has tied the two accounts together and placed the action in perspective. The translation, from the original German, of Gen Bayerlein's article was done by Capt H. W. Henzel, USMC.

The pictures bearing the authors' credit lines are from their own personal collections and the captions identify the actual points concerned.

Discrepancies in the order of battle will be noticed in comparing one account with the other. These, presumably, are the results of erroneous intelligence information on both sides. Although perhaps confusing, these errors will give the reader a picture of the amount of information each side had available. Further, it shows how the fog of battle

obscures the field commander's perception of his opponent and firmly substantiates the axiom, that war is truly an art.

the Authors



Acclaimed as one of the great military minds of the century, **B. H. Liddell Hart** was born in France in October 1895. He received his education in England at Corpus Christi College, Cambridge University. With the outbreak of World War I he entered the King's Own Light Yorkshire Infantry and embarked for France in 1915. As a captain he saw action in the battles of Ypres and later participated in the fierce fighting of the battle of the Somme, where the British used

tanks for the first time at Cambrai.

Using his experiences during these actions in conjunction with a great deal of research, he prepared a study of infantry tactics in 1917. He later revised this study for its publication by the British Army as an Infantry Training Manual in 1920.

The opportunity to further his active military career was denied him when he was invalided out of the service in 1924 as a result of the wounds received during the war. Appointed military correspondent for the *Daily Telegraph* in 1925, he assumed the role of tactical analyst and military critic while at the same time editing the military articles for the *Encyclopedia Britannica*.

Appointed permanent military critic and correspondent of *The Times* in 1935, he at once made full use of this position to conduct a campaign for a more effective co-ordination of the efforts being made in matters of National Defense, a campaign which led to the creation of a "Ministry for the Co-ordination of National Defense." Unfortunately, the results achieved were far from being what Liddell Hart was asking for in the columns of *The Times*.

In 1937 he became personal adviser to Hore-Belisha, then Minister for War, and was instrumental in the modernization of the British Army and the redistribution of the Imperial Forces. Among many of his proposals that led to a modernized British Army was the creation of an armored division for the Middle East. It was in this organization that a number of officers such as LtCol (later Field Marshal Viscount) Montgomery, and Capt (later General) de Guingand, who became Montgomery's Chief of Staff, received their desert training. His faith in the importance of armor led him to advocate the concept of deep penetration to cut the enemy's communications far in the rear of the front.

The author of no less than 27 volumes dealing with military tactics, history, strategy and the doctrines of national defense, his works can be considered the texts that educated the youthful officers of both the Allied and Axis armies prior to WWII. A sharp example of this fact is borne out by Fritz Bayerlein's comments on Field Marshal Rommel's

personal journal of the campaign in North Africa. He credits Liddell Hart with being the "military author who made the greatest impression on the Field Marshal and highly influenced his tactical and strategical conceptions." General Guderian, creator of the German Panzer units, maintains in his memoirs that the Panzer unit was based on Hart's concept of an armored division combining tanks with mechanized infantry. His influence on the other side of the ledger can be seen in Montgomery's effective use of night tactics in the desert after 1942, and Patton's use of his deep penetration concept in his drive toward the Rhine.



The military career of **Generalleutnant Fritz Bayerlein, a.D.**, began when he served as a private of infantry on the Western Front in 1917. He was commissioned in 1922, when the military restrictions of the Versailles Treaty limited the Officer Corps of the *Reichswehr* to a small select group. His talents and abilities soon came to the attention of his superiors and he was assigned to the *Kriegsschule* in Dresden, from 1927-30, as an instructor. It was during this period that he came to know another officer with whom he was to be closely associated in years to come – Erwin Rommel. With the conclusion of his tour as an instructor at the *Kriegsschule*, he reported to the General Staff School in Berlin, as a student. He remained there until 1935. The intervening years until 1939 found him serving as a general staff officer with various Panzer units. When the invasion of Poland was launched, Bayerlein was with the 10th Pz Div. For the campaign in France, he was with *Panzerkorps Guderian* which, as a part of Army Group A, was instrumental in executing the Manstein Plan in smashing through to the Channel coast behind the mass of the Franco-British armies. Remaining with Guderian when his command was expanded and redesignated *Panzergruppe Guderian*. Bayerlein participated in the lightning drive of that unit through Minsk and Smolensk to the outskirts of Moscow.

He first came to the public attention of the Allies as Chief of Staff of the Afrika Korps under Rommel in the Western Desert. His long association with Erwin Rommel and his part in the campaigns in Africa have made him one of the few living authorities on this period. He has collaborated with many military writers in reconstructing the operational history of WWII – Liddell Hart's *The Rommel Papers* probably being the most familiar.

As the war in North Africa was drawing to a close, with the collapse of the Axis forces there, Bayerlein was transferred to the Russian Front, where he took command of the 3d Panzer Div, one of the oldest and best German armored units. In 1944 he moved back to the Western Front with Rommel and took command of the *Panzerlehr Div*. He led this division against the invasion forces in Normandy, at Caen, Tilly and St. Lo. Then, in the last German effort of the war, he had command of that division in the Ardennes offensive, spearheading the forces that hit the American forces in the Bastogne area in the Battle of the Bulge. As the tottering walls around the Third Reich began to crumble he took command of the LIII Panzer Korps during the last ditch defense of his homeland, in the struggle for the Rhine (Remagen) and the Ruhr.

In presenting the German version of the Battle of Alam Haifa in this narrative, Gen Bayerlein can report with accuracy, since he was in actual command of the Afrika Korps at the height of the battle. One of his achievements in preparing this narrative is the manner in which he clears up the still popular misconception that the war in the desert was a duel between the Afrika Korps and the British Eighth Army. In reality, that highly effective unit, the Afrika Korps, was merely a component of the combined Italo-German forces in which the preponderance of troops were Italian.

He now lives in Wuerzburg-Heidingsfeld, Germany.



Major General G. P. B. Roberts, CB, DSO, MC, at the time of his retirement, had one of the most successful careers in recent British military history. Born in the days of the Empire at Quetta, India in 1906, he saw that Empire through some of its most troubled days and played a vital part in the maintenance of the Commonwealth position in North Africa, by his leadership of the British units he commanded there. His career interestingly coincided with that of his opponent in the battle here described. Both were associated with the development and execution of the theories of armored warfare which their respective services formulated in the decade prior to the outbreak of WWII.

After attending Marlborough College and being graduated from Sandhurst, he was commissioned and posted to regimental duty with the Royal Tank Regiment. He served with his regiment, first in England, then in Egypt from 1928 to 1932. Returning then to England, he became an instructor at the Tank Schools in Bovington. In 1938 he was again posted to duty in Egypt where he was to see so much action in the next few years. In Egypt he was Adjutant of the 6th Royal Tank Regt, and after the war broke out he remained in that area serving with the Eighth Army in the Western Desert until the fall of Tripoli. During this period he served in various staff billets with the 7th Armored Division and the XXX Corps, and then commanded the 3d Royal Tank Regt and the 22d Armored Brigade. After the fall of Tripoli, Gen Roberts, then Brigadier, was moved over to the First Army in Tunisia. For a short time, immediately following his arrival there, he was attached to the US 2d Armored Division under Gen Orlando Ward. This was just after the battle at Kasserine Pass. Until Tunisia was cleared he commanded the 26th Armored Brigade of the 6th Armored Division. Leaving Africa, he returned to England, was promoted to major general and given command of the 11th Armored Division. Gen Roberts trained this division for the coming invasion and landed with it at Normandy. He led this same division throughout the campaigns on the Continent and once again encountered his old opponent of the clays in the Desert, Fritz Bayerlein.

Gen Roberts' achievements on the field of battle were recognized by his being awarded the rank of Companion of the Bath, the Distinguished Service Order (2 bars) and the Military Cross. Further, he was mentioned in Despatches 3 times and the French Government awarded him the Legion of Honor and the Croix de Guerre.

After the war, in 1946, he was named Commanding General of the 7th Armored Div and in 1948 was appointed Director, Royal Armored Corps. Gen Roberts retired in September 1949, and now resides at "Postillions," Pembury, Kent.

FOREWORD

By Capt B. H. Liddell Hart

THE BATTLE OF ALAM HALFA IN 1942, fought as August turned into September, was a turning point of the war in the Mediterranean-indeed, more truly a turning point than the more celebrated "Battle of Alamein" that followed, in the fall. For by the time this started, late in October, the British build-up of strength in North Africa so vastly exceeded that of the German and Italian forces under Rommel as to ensure the frustration of his attempt to overrun Egypt-leaving only the question of how long he could cling on to the door, and whether he could escape destruction. In the clearer light of postwar knowledge, of the respective forces and resources, it can be seen that Rommel's eventual defeat became probable from the moment his dash into Egypt was originally checked, in the July battle at Alamein, and this accordingly may be considered the effective turning point. Nevertheless, he still looked a great menace when he launched his renewed and reinforced attack at the end of August. And as the strength of the two sides was nearer to an even balance than it was either before or later, he still had a possibility of victory-and might have achieved it if his opponents had faltered or fumbled as they had done on several previous occasions when their advantage had seemed more sure. But in the event, that possibility vanished beyond possibility of recovery. The crucial significance of "Alam Halfa" is symbolized in the fact that although it was fought out in the same area as the other battles of Alamein, it has been given a separate and distinctive name.



Marshal Rudolfo Graziani

At the start of the battle Gen Bayerlein was Chief of Staff of the Afrika Korps, Rommel's main striking force, and took over command when Gen Nehring was disabled by a bomb splinter during the initial phase. Gen Roberts commanded the armored brigade which covered the keypoint of the British position, and thus played the principal combat role in the issue of the battle. These two outstanding leaders of "armor" confronted each other again, though not so directly, two years later in Normandy—when Fritz Bayerlein commanded the *Panzerlehr* Division and "Pip" Roberts the British 11th Armored Division—being then, at 37 years of age, the youngest divisional commander of the invading armies. These two armored divisions won general recognition as the best on each side.

As the Editor has asked me to write a foreword to these accounts from different "sides of the hill," the best way to help an understanding of their significance may be to fill in the historical and strategic background to the battle, while summarizing the course of events.

* * * *

The war in the Mediterranean, and on the African continent, started in June 1940 when Mussolini, seeing that France was obviously collapsing under the German blitzkrieg, plunged into the war on Hitler's side to reap some of the spoils of France's conquest, and to take advantage of the weakness of the British position in Africa. At that moment there were only 50,000 British troops in Africa facing 10 times as many Italians—over 200,000 in Italian East Africa and nearly 300,000 in Libya. But the Italian Army was ill-prepared for war and short of motor vehicles. Marshal Graziani's advance from Libya into Egypt did not begin until 3 months later in September, and after a 70-mile advance through the desert it halted at Sidi Barrani, and there stuck for 2 months.



**General Sir
Archibald
Wavell**

The British Commander-in-Chief in the Middle East, Gen Wavell, decided to try the effect of an upsetting stroke by the Western Desert Force—the embryo of the Eighth Army—under Gen O'Connor. It was visualized as in the nature of a powerful raid rather than an offensive—for Wavell had only 2 divisions. But the "raid" turned into a decisive victory, owing to the demoralizing effect of the heavily armored British "Matilda" tanks—coupled with that of the 7th Armd Div's swoop through the desert onto the Italians' rear. This sudden blow was delivered on 9 December. A large part of Graziani's army was cut off and 35,000 captured, while the remainder only regained the shelter of their own frontier after a panic retreat that reduced them to a disorderly rabble. Then Bardia was captured, on 3 January, with 40,000 prisoners. Tobruk fell on the 22d, with a further 25,000.

The surviving part of Graziani's army retreated past Benghazi towards Tripoli, but was intercepted by an indirect approach in pursuit that proved one of the most brilliant and daring strokes of the war. The 7th Armd Div made a dash through the desert interior to reach the sea south of Benghazi; on 5 February. Its leading elements covered 170 miles in 36 hours over difficult and unknown country. They amounted to only 3,000 men, yet by their audacity in thrusting across the path of a vastly superior enemy they secured a bag of 21,000 prisoners.

Small as were the forces which had achieved this astonishing conquest of Cyrenaica, there was at the moment little to stop them driving on to Tripoli. But a halt was called by the British Government in order to provide the means of dispatching the ill-starred expedition to Greece. Wavell was instructed to leave only a minimum to hold Cyrenaica. At this juncture, also, the leading part of the German Afrika Korps, under Rommel, arrived in Tripoli. Too late to save the Italians from disaster, this German help came in time to prolong the North Africa campaign for over 2 years, during which Britain's position in Egypt was brought into imminent danger.



**General Sir
Claude
Auchinleck**

A rapid counterstroke launched by Rommel at the end of March took the weak British holding forces by surprise and threw them into disorder. Within a fortnight he had swept the British out of the whole of Cyrenaica, save for an isolated portion which withdrew into Tobruk—and there remained as a thorn in his side. By the time he reached the frontier, however, he had overstretched his supply lines and was thus compelled to halt.

The Commander-in-Chief of the German Navy, Adm Raeder, had urged, and continued to urge, the importance of seizing the keys of the Mediterranean, and shutting the British out of that area. But Hitler showed little interest in such projects, being too intent on his plans of overthrowing Russia, as a way of making Britain yield. The heads of the Army agreed with him on military grounds—they were averse to the detachment of forces to Africa and disliked the idea of committing troops across the sea, where the British Navy could powerfully interfere. While the Italian collapse had driven Hitler to send some help there, both he and his military chiefs shrank from giving Rommel the scale of reinforcements he needed to capture Egypt.

On the other hand, strategic minds in Britain conceived the idea immediately after the fall of France of developing a countermove by way of North Africa against the southern flank of Hitler's position in Europe. Having been frustrated in his premature attempt to develop such a threat by landing in Greece, Churchill ardently embraced the idea of clearing North Africa—as an avenue into Europe.

After an abortive attack (Operation "Battleaxe") on Rommel's position, the British launched a much bigger offensive ("Operation Crusader") in November, with the large reinforcements that Churchill had sent out to Egypt. By this time Wavell had been

replaced by Gen Auchinleck as Commander-in-Chief, while the forces on the Libyan frontier had been constituted as the Eighth Army, under Gen. Cunningham. The offensive opened well, after a wide outflanking move through the desert, but the attacking forces then became disjointed, so that Rommel was able to defeat them in fragments, throw them back temporarily, and almost produce a retreat to Egypt. This whirling battle of tanks continued for nearly 3 weeks, shifting to and fro with repeated turns of fortune, but in the end, Rommel's tank strength was exhausted and he was forced to retreat—right back to his February starting position near Agheila, on the frontier of Tripolitania.



To Rommel's British opponents his most disconcerting characteristic was the way he reacted to pressure like a recoil-spring, and changed from a far-reaching retreat to an equally far-reaching riposte. He had hardly withdrawn from Cyrenaica before he was back there again.

At the beginning of 1942, just as he had reached the shelter of saltmarsh bottleneck on the Tripolitanian frontier, a small convoy arrived with reinforcements. Thereupon he promptly planned to take advantage of the way that the British had become overstretched in their advance. By a surprise counterstroke, when they imagined him as still exhausted, he dislocated their front, then exploited their disorder by an indirect thrust from the desert flank against the Benghazi base, and tumbled them back to Gazala—recapturing more than half their gains.

Churchill again built up the strength of the Eighth Army for a renewed effort to throw Rommel out of Cyrenaica and out of Africa. But Rommel struck first. By a wide flanking maneuver with his armor in the night of 26 May he threw the Eighth Army off its balance. He was checked, however, before he could reach the coast and cut off the British forces holding the Gazala Line. Thereupon he took up a defensive position with his back against the British minefields—which led the British to feel that he was

cornered, and bound to surrender. But their countermoves were too direct and they fell into the defensive trap which Rommel had quickly improvised when he was checked.

With its reserves entangled and expended, the Eighth Army was unable to meet Rommel's next flanking move, and was beaten piecemeal. While one portion was falling back to the frontier, another portion withdrew into Tobruk. Rommel's armored forces swept past Tobruk, as if heading for the frontier, then suddenly switched around and struck at Tobruk in reverse, before the Forces there had settled down. Penetrating the defenses at a weak point, the Germans overran the garrison and captured almost the whole of it—together with such an abundance of supplies and transport as to provide the means for a prolonged advance on their own part.

Rommel then chased the remains of the Eighth Army helter-skelter through the Western Desert, and came dangerously close to reaching the Nile Valley, the main artery of Egypt. If that had been secured, and with it the Suez Canal, Britain's whole position in the Middle East would have been wrecked.

On 30 June 1942, Rommel reached Alamein after defeating the British Eighth Army at Gazala-Tobruk, and chasing its tattered remains 350 miles through the desert. That morning he had written home exultantly: "Only 100 more miles to Alexandria!" By evening he was barely 60 miles distant from his goal and the keys of Egypt seemed within his grasp. Hitler was telegraphing congratulations and Mussolini had flown to Africa ready for a triumphal ride into Cairo. On the other side, Auchinleck, the C-in-C Middle East, had gone forward from Cairo into the desert to take personal command of what was left of the Eighth Army, in an effort to stem the tide. The situation looked desperately black. The British Fleet had hastily evacuated Alexandria. Clouds of smoke rose from the chimneys of the military offices in Cairo as their records were hastily burnt. The world outside naturally interpreted the snowstorm of charred paper as a sign that the British were fleeing from Egypt.

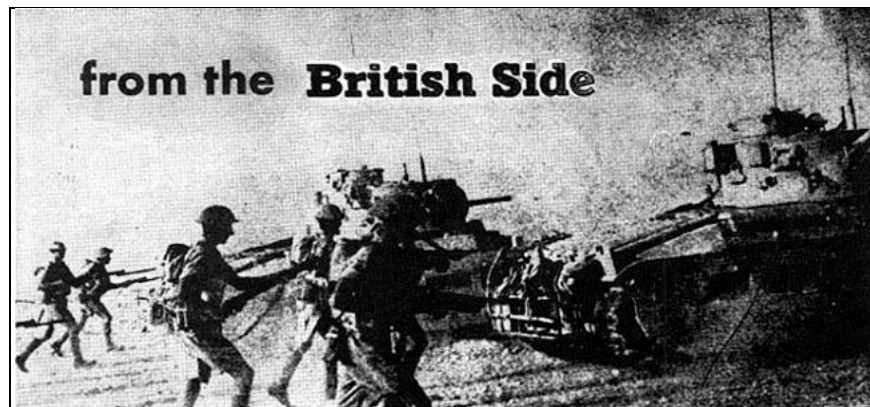
But a vital change had now come at the front. On July 4th, Rommel, still at Alamein, wrote home: "Things are, unfortunately, not going as we should like. The resistance is too great, and our strength is exhausted." His thrusts had not only been parried but answered by upsetting ripostes. His troops were too tired as well as too few to be capable of making a fresh effort for the moment. He was forced to break off the attack and give them a breather, even though it meant giving Auchinleck time to bring up reinforcements.

Auchinleck was not content with stopping Rommel, but sought to turn the tables decisively. How near he came to succeeding is shown by a letter that Rommel wrote on 18 July, "Yesterday was a particularly hard and critical day. We pulled through again. But it must not go on like that for long, otherwise the front will crack. Militarily, this is the most difficult period that I have been through."

Fortunately for Rommel, the British troops were as exhausted as his own, and soon afterward Auchinleck in turn had to suspend his attacks. But Rommel's closing reflection

was: "Although the British losses were higher than ours, yet the price which Auchinleck had to pay was not excessive. What mattered to him was to hold up our advance and that, unfortunately, he had done."

Soon, reinforcements arrived from England. Churchill wanted the British to take the offensive without delay, but Auchinleck, more wisely, insisted on waiting until the fresh troops had become tactically acclimatized to desert conditions. In the sequel, Auchinleck was replaced by Alexander as Commander-in-Chief, Middle East, and Montgomery took over command of the Eighth Army.



THE BEGINNING OF AUGUST 1942 had the makings of a very trying month in the Western Desert. It was a period of disorganization and reorganization, of dust and flies, of orders and counterorders, and of heat and 'gyppy tummy' [amoebic dysentery].

The Eighth Army was licking its wounds and sorting itself out; pulling out as many units as possible to reform and maintaining as much strength in the Alamein line as its equipment and weapons would permit.

As far as the armor was concerned, the majority of the tanks that would run at all were grouped into one Armored Brigade—the 22d, to which, at the end of July, I was posted to command. Individual units had had heavy casualties so that all the armored regiments of the Brigade, with one exception, were composite units.

The order of battle of the Brigade was:

Royal Scots Greys (Greys)
1st/6th Royal Tank Regiment (1 RTR)
5th Royal Tank Regiment/Royal
Gloucestershire Hussars (5 RTR)
3rd/4th County of London Yeomanry (4 CLY)
1st Royal Horse Artillery Regiment (1 RHA)
1st Battalion, Rifle Brigade (1 RB)

Each Armored Regiment consisted of two squadrons of 12 Gen Grant tanks and one light squadron of either Crusader or Stuart tanks, with the exception of CLY which had only one Grant squadron of 15 tanks. In addition, it should be mentioned that there were 6 American tank crews dispersed throughout the Brigade who had come over for battle experience. They were the first American soldiers to fight on African soil. They certainly got their battle experience in a somewhat unorthodox battle and I am glad to say without serious casualties, though one or two had to bail out of burning tanks.



The author with Gen Montgomery during a visit to the 22d Armored Brigade

The other armored formations left in the Eighth Army were: a weak brigade of Valentine tanks (23d Armored Brigade) and the 4th Light Armored Brigade consisting of a regiment of Stuart tanks, 2 regiments of armored cars, a motor battalion and one artillery regiment. Being the main armored force available, many were the ideas of how 22d Armored Brigade should be employed. We spent our time reconnoitering different positions which we should occupy in varying tactical circumstances. It was all rather reminiscent of the situation in the Gazala line some 3 months earlier in May; then we had reconnoitered and planned our defensive positions in many areas which we might be required to occupy in a variety of circumstances. In any event, we had not been given sufficient time to occupy the one selected to deal with the German advance round Bit Hachiem and so were defeated in detail. Certainly on that occasion we recovered our balance and had the remainder of the battle been handled differently, might well have wrested the initiative from Rommel.

However, at Alam Halfa at the end of July 1942, the multiplicity of plans as far as the 22d Armored Brigade was concerned did not inspire the greatest confidence.

Early in August the Prime Minister, the Chief of the Imperial General Staff and others visited the Western Desert. As a result of their visit certain changes in the higher command were made. By August 13th, Gen Alexander was the new G-in-C Middle East and Gen Montgomery the new Eighth Army Commander.



Gen Montgomery (center) is briefed at Alam Haifa by Gen Horrocks (left) and Brigadier Roberts.

These changes were to have a marked effect within a few days on our plans, on our life and on our outlook generally. Within two days of his arrival Gen Montgomery had toured the whole front and visited all the units in it. I well remember my first meeting with him; he and the new Corps Commander, Gen Horrocks, were to meet me at a certain point on the Alam Haifa ridge at 0845 hours. At 0830 being afflicted with guppy-tummy I felt there was just time to disappear over the nearest ridge with a spade, and plodding my way back a few minutes later complete with spade I saw a large cortege arriving at the appointed spot and some 5 minutes ahead of schedule. There was Gen Horrocks, XIII Corps Commander, whom I saluted, there were Bobbie Erskine, Brigadier General Staff, XIII Corps,

and Freddie de Guingand, Chief of Staff, Eighth Army and several other characters including a little man with white knobby knees, an Australian hat and no badges of rank who I took to be a newly arrived war correspondent. Monty, whom I had not previously met was obviously going to arrive later. I was just about to ask Freddie de Guingand from which direction the Army Commander might be expected when the gentleman in the Australian hat said to me "Do you know who I am?"—"Yes, Sir," was the prompt reply. It was quite clear that whoever he was it was better to know! And, of course, it was Monty.

Very soon Montgomery appreciated that Alam Halfa was the cornerstone of the defensive position. He ordered up 44 Division from the Delta to occupy the high ground itself, and within the perimeter of that Division's defenses were to be located the 44th Divisional Artillery and certain Corps artillery units. The 22d Armored Brigade, then an independent armored brigade directly under XIII Corps, was ordered to select and to prepare static defensive positions on the southern and eastern slopes of Alam Halfa. It was considered, and quite rightly, that the Brigade was short of training as a Brigade and its mechanical condition, as a result of the mileage already done by the tanks, precarious, and therefore unsuited to mobile operations. In fact this Brigade, with its same equipment, took part in the battle of Alamein and at one time led the pursuit of the German army to Tobruk.

Gone were all the other plans and we gladly destroyed the mass of traces with different code names which had been prepared with laborious staff work to indicate the alternative positions. There was one rum plan and one position to occupy and we all felt better. (See sketch map No. 2.)

It would be relevant here to describe these positions and indicate the factors affecting their selection. First and foremost, it must be borne in mind that these were to be firm defensive positions and that the battle would be fought to a preconceived plan; there was to be little possibility of maneuver, so normal in armored tactics, to meet swiftly changing situations. The second important factor was the qualities and peculiarities of the Grant tank which was the mainstay of the defense. Its main armament was a '15 mm gun in a side front mounting. This prevented good, natural "bull down" positions being selected, and since the gun had only a very limited traverse only limited areas of fire were available for each tank. The tank was very high which increased the difficulty of concealment in anything but very broken ground. Thirdly, a very wide area had to be covered to deal with attack from the east, southeast and south; consequently there were no troops available purely as a reserve.

Very briefly these matters were resolved as follows. The 6 pounder AT guns of 1 Rifle Brigade and of an antitank battery from an artillery regiment, put under my command specifically for this operation, were given the area of flat and unbroken ground to cover; their concealment in such terrain being obviously easier than for Grant tanks. The Grant tanks were put into the broken foothills, and where suitable positions could not be found these were achieved by bulldozing. Finally, the Greys, being equipped with the newest Grant tanks were placed on the eastern slopes, from which direction attack was

considered least likely, so that they would be the most likely to be available as a mobile reserve and were at the same time the most mechanically reliable.



The detailed positions having been decided upon, a careful artillery program was planned with SOS tasks, particularly some tasks close in front of the antitank guns.



Touring the front with the Prime Minister. L-R, Alexander, Roberts, Churchill, Horrocks

It should be pointed out here that the Grant tank, in spite of the disadvantages already mentioned, was the only tank then in the Desert of any real value against the German PzKw III and IV. With its short-barrelled 75 mm gun in the side mounting it could be very effective against these German tanks at about 1,000 yards range. The other tanks, Valentine, Stuart and Crusader with 2 pdr or equivalent guns were of value in a harassing role, but no use in a "slugging match."

This was, at any rate, the impression we gained in those days, but careful tests carried out after the war have shown that we were unduly pessimistic regarding the performances of our own tanks. At Alam Halfa, however, there was a surprise in store for us as will be seen later.

About this time the Prime Minister returned to the Desert on his way back to England from Moscow after seeing the gentleman he described as the "Old Bear." Having spent the night in Monty's caravan, the next day, 20 August, he toured the battlefield. It was with great pride that I squeezed myself into the cut-down station wagon in which he was traveling with several senior officers, and showed him the 22d Armored Brigade concealed in their defensive positions which we had occupied as a rehearsal that morning. Ten days later the battle was fought over the very ground on which the plan was described to him, and which he remembered in some detail when I saw him again in Tripoli, 5 months later.

The day after Winston's visit we had a "telephone battle" organized by Gen Horrocks and based on Monty's conception of the lines the battle would take. A "telephone battle" is the same thing as an American CPX. Information maps were kept and, in accordance

with the normal custom of those days, the enemy movements and positions were shown in blue and our own movements and positions in red. It may be thought that this telephone battle has not much bearing on a study of the actual battle, but suffice to say that on the day of the battle itself, the blue lines of the enemy's movements—as put on the maps during the exercise—required little alteration to conform to fact. The timing was different, but the general idea was there.

It must be explained that all this time 22d Armored Brigade was in what was called "leager areas" some one to two miles south of the selected defensive positions. Vehicles were in "air dispersion" and covering a wide area. Time was spent in improving the defensive positions by hand-digging, bulldozing and maintaining tanks and guns.

Meanwhile, in order to strengthen the armored situation, every effort was being made by the higher command to get forward the 10th Armored Division under General Gatehouse, with 8th Armored Brigade which was being re-equipped with 3 regiments of new or reconditioned Grant tanks. 10th Armored Division Headquarters arrived in the Alam Halfa area on about 27 August and 22d Armored Brigade was put under its command. Advance parties of 8th Armored Brigade arrived on 29 August, but main bodies of this brigade didn't arrive until 30 August.

At this time the positions of Eighth Army were as shown in sketch map No. 1. At the southern end of our line the 7th Armored Division, consisting of the 4th Light Armored Brigade and the 7th Motor Brigade held the line of the minefield from the left of the 3d New Zealand Division to the southern edge of Deir el Munassib with 7th Motor Brigade. They guarded the remainder of the minefield and the open flank back as far as Himeimat with 4th Light Armored Brigade. This part of the front was therefore rather lightly held.

Rommel's attack was expected any night towards the end of the month. In the 22d Armored Brigade, elaborate preparations were made for alerting the Brigade and moving to our defensive positions during the night in "wireless silence."

On 30 August I was personally not feeling my best; nothing serious, but just the effects of heat, sand and flies on top of the long summer battles and being slightly wounded during June. Being anxious to be as fresh as possible, I had got up a spare ambulance truck which could be made fly-proof and was a little cooler than a bivouac tent. I had a nap after lunch and went to bed early. Shortly after midnight I was awakened by gunfire in the distance and it was quite clearly more than some little affair.

The Attack Comes

I look outside and the sky is lit up by flashes, so I get up and stroll over to my ACV (Armored Command Vehicle) to find that the staff have not, as yet, had any reports; I go out into the cool night air again. To the northwest the shelling seems to be dying down a bit, but in the southwest the noise continues, German Vercors lights lob forward and an occasional tracer tears across the sky. I am called into the ACV and find that information has come through. It seems that there is a very determined attack

against 7th Mot Brigade towards the south of the minefields and we are ordered to our defensive position—to be ready there by 0400 hours.



Montgomery, with Gatehouse (L) and Roberts (R) compares the new German long 75mm with other tank ammunition

The code word is sent round the units, the move to start at 0130 hours—it is now 0100 hours. Bivouacs are pulled down, signalers roll in the cable, and navigator's tank moves into position. At the appointed time we move off and since we are in "wireless silence" I can only hope that all the units are moving too.

As dawn breaks and we are all in our defensive positions, the tactical situation becomes a little clearer. It appears that there had been a small attack in the north which has been completely held; fighting is still going on in the center, but the situation seems in hand; in the south, however, on the front of 7th Motor Brigade the Germans appear to be penetrating our minefields in spite of heavy casualties. It is quite clear that our part in the battle is some hours away, so we all get down to breakfast.

The morning is an anxious period of waiting; there are two Stuka dive bombing attacks, a fairly heavy one on the Alam Halfa ridge itself and a lesser one on the 1 RTR—the latter with no casualties. It does not seem that our defensive position has been located.

About 1100 hours it is clear that strong enemy tank columns have penetrated our minefields in the south. The 4th Light Armd Brigade is withdrawing; it is not clear what 7th Motor Brigade is doing.

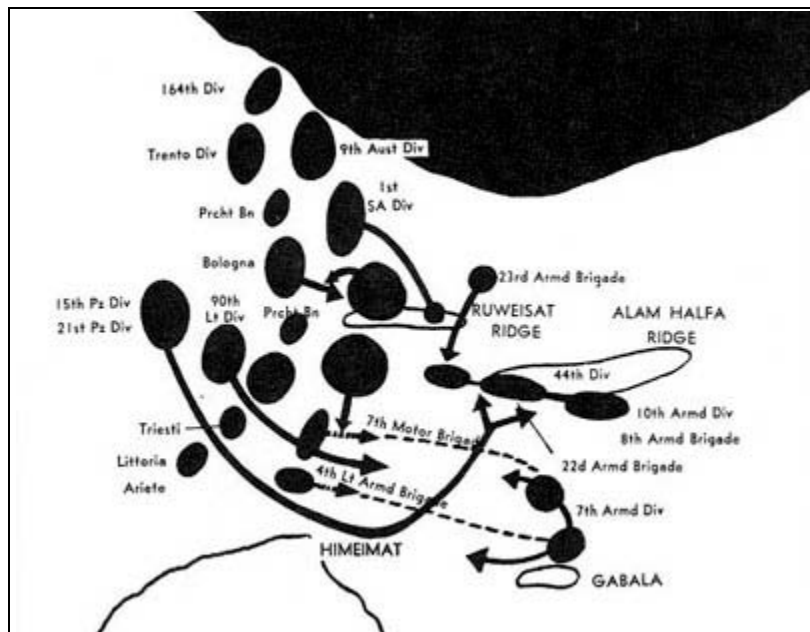


In the morning the Stukas attack Alam Haifa ridge

As the morning wears on, the blue marks on our maps indicating enemy positions, continue to move eastwards. What was 40 tanks moving north has become 90 tanks moving east; there are 3,500 mechanized transports and guns reported; another 50 tanks are joining those moving east. This is quite obviously a large-scale affair. In the early afternoon I feel the need of my own direct information so I order out two of the light squadrons to go up to 5 miles south and southwest of our positions and, without getting involved, to report on any enemy movement. At about 1530 hours reports from the right of the two squadrons begin to come in—"Strong force of enemy tanks moving northeast. Head of column at figures so-and-so." A little later "Column consists of 180 enemy tanks. Direction the same." They are coming straight toward us. And then at that moment there is another Stuka attack and this time on 4 CLY. There do not seem

to be any casualties, but has the enemy become aware of our complete position?

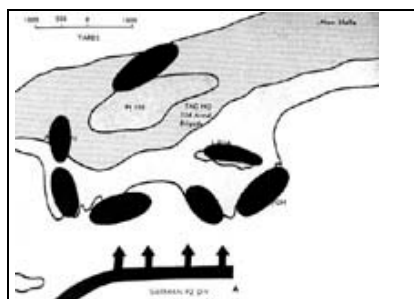
Now I can see the enemy myself through my glasses. They are coming straight up the line of the telegraph posts which lead in front of our position. There is some firing by their leading tanks, presumably at our light squadrons, so I instruct these squadrons to come back but to take it wide so as not to give our position away.



Sketch Map No. 1—deployment of the Eighth Army at the time of the attack

On they come, a most impressive array. And now they are swinging cast and look like passing us about 1,200 yards from our more forward positions. I had given strict instructions that we would not open fire until the enemy tanks were at under 1,000 yards range. Here was something of a dilemma. All our information has been passed back to Divisional Headquarters and I believe that at this time Gen Gatehouse is with Gen Horrocks on Alam Halfa itself and a bit further east than we are; it seems that he can see this mass of enemy tanks

about to pass our position, at any rate at that moment he speaks to me personally on the wireless as follows, "I don't want you to think that we are in a blue funk here or anything like that, but if these fellows continue on as they are doing you will have to come out and hit them in the flank."



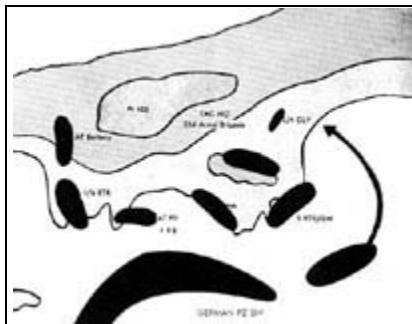
Sketch Map No. 2—positions of 22d Armd Brigade on Alam Halfa ridge at approximately 1700 hours 31 August

I immediately give orders for 4 CLY and 5 RTR to be prepared to move out of their defensive positions, but no sooner have I done so than the leading German tanks halt. (position of head marked "A" on [sketch map No. 2.](#)) so I cancel the order at once. It is fascinating to watch them, as one might watch a snake curl up ready to strike. But there is something unusual too; some of the leading tanks are Mk TVs, and Mk TVs have, in the past, always had short barreled 75 mm guns used for close support work and firing HE only, consequently they are not usually in front. But these Mk IVs have a very long gun on them; in fact it looks the devil of a gun. This must be the long-barreled stepped-up 75 mm the Intelligence people have been talking about.

And now they all turn left and face us and begin to advance slowly. The greatest concentration seems to be opposite the CLY and the AT guns of the Rifle Brigade.

(Eighty-seven German tanks were counted at this time opposite this part of the front.) I warn all units over the air not to fire until the enemy are within 1,000 yards; it can't be long now and then in a few seconds the tanks of the CLY open fire and the battle is on. Once one is in the middle of a battle, time is difficult to judge, but it seems only a few minutes before nearly all the tanks of the Grant squadron of the CLY were on fire. The new German 75 mm is taking a heavy toll. The enemy tanks have halted and they have had their own casualties, but the situation is serious; there is a complete hole in our defense. I hurriedly warn the Greys that they must move at all speed from their defensive positions and plug the gap. Meanwhile the enemy tanks are edging forward again and they have got close to the Rifle Brigade's AT guns, who have held their fire marvelously to a few hundred yards. When they open up they inflict heavy casualties on the enemy, but through sheer weight of numbers some guns are overrun. The SOS artillery fire is called for; it comes down almost at once right on top of the enemy tanks. This, together with the casualties they have received, checks them. But where are the Greys? "Come on the Greys" I shout over the wireless "Get out your whips." But there is no sign of them at the moment coming over the ridge and there is at least another half hour's daylight left.

Meanwhile some of the enemy have started to work round our left flank and the 5th RTR is in action. Although 1st RTR is not engaged, I dare not move them from their position because there seem to be a number of German tanks still in reserve in the rear who could move their way.



Sketch Map No. 3—the situation at approximately 2030 hours 31 August

And now in the center the enemy is edging forward again. The artillery is the only thing I have available to stop them so we bring down all we can and again they are halted. And then the Greys come over the crest from the north; they have not really been long but it has seemed an age. I describe the situation to them over the air as they come in sight of the battlefield and charge down the hill; they are quite clear of the hole they have to plug and they go straight in. The light is beginning to fade and the situation in the center seems to be stabilized. But there is a little trouble on our left; some of the enemy have worked round the 5th Tanks position and are now coming on to our 25 pdr gun lines; a glance at [sketch map No. 3](#) will show that they had not got much further to go before they meet nothing. Accordingly, since the center is now a little congested with the Greys in most of the CLY's position I order the CLY (what remained of them) to move round to the left and cover the gap between 5th RTR and the 44th Division's defenses. As darkness falls, flashes and tracer are to be seen on the left flank; the CLY have met the enemy tanks but have halted them, so we seem secure for the night at any rate.

Meanwhile, in the center of the Army front the enemy has been driven off the Ruweisat Ridge by a strong counterattack and have not returned to the offensive. In the south the 4th Light Arnold Brigade has withdrawn to the area of Gaballa and the 7th Motor

Brigade has withdrawn due east across the front of 22d Armd Brigade, but some 5 miles to the south. Both these Brigades were to do some fine harassing work on the flanks of the enemy on the following day.

It was hardly dark before the first night-bomber passes over our heads and drops a flare on the large concentration of enemy vehicles gathered on the open plain below us. Bombs soon follow the flares, and throughout the night an almost continuous stream of bombers keep up this not very concentrated, but steady and relentless attack. This was the start of continues day and night bombing which was a very important factor in our success.



Co-ordination of the air and ground effort—indispensable key to final success



Pilots of the RAF—they dominate the battlefield and leave the enemy helpless

flesh-pots of Alexandria.

Inevitably we discuss the events of the day. Things are not too bad; the Germans have not been so thrustful as they were earlier in the summer, if they had been they would have taken advantage of that gap in the center when one squadron of the CLY had been "brewed-up." And then they were slow finding our flanks. Of course it is obvious that neither side is as fresh as it had been in May when the Germans had attacked the Gazala line; and it is easy to say what the attacking side should have done when one knows all the details of the defense. But we are not seeking excuses for failures—we are just considering the facts. Even in a tank it is no fun coming under concentrated artillery fire, but, particularly when that fire is mainly of 25 pdr caliber, that should not halt a tank attack. On two occasions it had halted an attack on this day. Obviously the enemy's morale is not as high as it had been a few months ago. And at the very moment we are

Within 22d Armd Brigade, as soon as it is dark, patrols from the rifle companies of the Rifle Brigade are organized to go out with parties of engineers and further immobilize damaged enemy tanks to prevent their recovery by the enemy. Personally, while ammunition and fitters' lorries came up to arm and attend to the tanks and while I await reports of casualties to men and vehicles, I order up my small mess truck and have dinner. It all seems suddenly quite peaceful; my Brigade Second-in-Command, Col Roddick, and I sit at our table under the stars and forget the taste of bully stew and the stress of battle with excellent brandy and cigars recently brought up from the



Dawn 1 September—we seek to discover changes in the enemy's dispositions

discussing these matters more bombers are going over us and more flares and bombs are being dropped on their tank formations and supply echelons. A comparatively sleepless night will not improve their morale for the morrow, and besides, the 8th Armd Brigade is likely to come into action the next day; our left flank will be more secure. Of course there are still elements of anxiety; will their long-barreled 75 mm guns decimate another squadron? Will they press round our right flank which has been weakened by the move of the Greys? But in spite of these disquieting thoughts we feel that we have held them on the first and most important day; that we can do it again, particularly as more reinforcements are available.

As the brandy is finished and cigars burn low, reports from the units begin to come in. Taking the Brigade as a whole, casualties have not been high. In tanks, and I must make it clear that I am referring to Grant tanks only, the figure seems to be about 20; 4 CLY had 12, 5 RTR 1 and the Greys 4. Seventeen out of a Brigade strength of 87. Of the AT guns, the Rifle Brigade has had one section overrun and some men have been taken prisoner; but the remainder claim heavy enemy casualties. One gun alone claims 5 enemy tanks, and the total for this AT platoon is thought to be 19. The armored regiments have their claims too, though their figures are less certain. A fair and conservative estimate for enemy tank casualties seems to be at least 80. Of course, in such circumstances, one would expect the attacker to have higher casualties than the defender.



In the morning enemy artillery bombards our positions . . .

many more were permanently destroyed by our demolition parties.)

The night is uneventful; the bombing of the enemy continues and more locally there are small clashes between our patrols and the German tank recovery parties. (I regret to say that a few enemy tanks were recovered from under our very noses. The Germans were always good at recovery and showed great enterprise. On the other hand, a great



. . . we are being shelled by the Germans using our own 25 pounders

position and the CLY on the left are also in action. Some enemy movement is seen towards the east and not long afterwards we hear that the 8th Armd Brigade is in action.

As dawn breaks on 1 September we strain our eyes through our binoculars to discover how the enemy's dispositions have changed during the night. Not much change is evident, though it seems that the enemy's forces are spread out rather more widely and further to the east than had been the case the previous evening. Nothing particular happens at "first light" and there is certainly no determined early attack. However, it is not long before a move seems to be made towards 5th RTR's

We learn afterwards that they have had a considerable battle with casualties on both sides, but the enemy's the heavier. Our own positions, including my own Tac Headquarters, are subjected to a certain amount of shelling. During the morning, the Corps Commander, Gen Horrocks, visits me and his arrival coincides with particularly concentrated gunfire. He and I share the safety of the inside of my tank but my less fortunate artillery commander, who has to remain outside, is heard to complain that we are being shelled by 25 pdrs; his Second-in-Command, who is with him, mitigates the insult, however, by scornfully remarking that it is "only a 3 -gun troop." (It must be explained that certain of our 25 pdr guns had been captured during the retreat to Alamein and that a troop normally consists of 1 guns.) We are, of course, in full view of the enemy and there is no doubt that Gen Horrocks' arrival and the gathering of one or two nearby officers who want to hear the latest news are responsible for this special attention by the enemy; nevertheless it is well worth it, as is always a visit by Gen Horrocks. He has that wonderful knack of inspiring confidence and enthusiasm wherever he goes, and the raised morale he leaves behind quickly spreads to those he has not even seen. He tells us that the battle is going well; Monty has the whole thing in hand and everything is going exactly according to plan; the 8th Armd Brigade is now up at more or less full strength and the 4th Light Armd Brigade is having a terrific time on the enemy's southern flank and doing great damage. I tell him that, as I had reported to my Divisional Commander, I am a little concerned about my right flank.

In the afternoon some pressure is, in fact, exerted against our right flank and it looks as if an outflanking movement might develop there. Having nothing else available I order the light squadron of 1 RTR to take up positions west of the 1 RTR position and facing south, and should the enemy advance in that direction to delay them as much as possible. Meanwhile, Gen Gatehouse informs me that the 23d Armd Brigade will be moved over from the coastal sector and protect my right flank from a position on the high ground around Deir el Hima. This is good news.

As it happens, however, the attack in this area is not pressed home with much determination. 1 RTR are engaged from their main position and their light squadron engages the enemy further west. This was sufficient to stop him and though 23d Armd Brigade reached their new position during the late afternoon, I do not believe they were called upon to fire a shot.

The day gradually draws to a close and there is no "last light" determined attack by the enemy. In fact on the whole of our front the enemy has withdrawn out of tank range and the last shots that are fired are by the artillery.

Patrols during the night are again organized but no contact is made. The battle of Alam Halfa, as far as 22d Armd Brigade is concerned is virtually over.

The next day, 2 September, the nearest enemy vehicle was at least 3,000 yards away and we could take no action other than harassing fire by the artillery and occasionally by the tanks. Watching the enemy's movement closely through binoculars it was quite clear

that he was pulling out. Most of his vehicles were facing west, a number of vehicles were towing others in a westerly direction and very little fire was directed against us.

In the wider sphere, as soon as it was clear to Gen Montgomery that the German armored attack had been firmly held on the Alam Halfa position, he ordered planning to begin with a view to obtaining the initiative by closing the gap in our minefields. XXX Corps in the north was to be thinned out to provide reserves for an operation to be developed southwards from the New Zealand sector. This operation was finally planned to start on the night 3/4 September and its urgency was apparent when at first light on the 3d September it was clear that the enemy had withdrawn from contact south and west from Alam Haifa, leaving the area they had vacated strewn with vehicles—some derelict and some short of fuel.



After the battle Brigadier Roberts points out salient features to Gen Montgomery and Gen Gatehouse from his command tank

Strict instructions were issued that main bodies should not move from the main defended areas. This was in pursuance of the Army Commander's appreciation that units, and armored units in particular, were neither sufficiently well trained nor mechanically sound enough to undertake a mobile battle. Furthermore, having repulsed the enemy with heavy losses at comparatively slight cost he was most anxious not to lose the advantage which had been gained by fighting the battle on ground of our own choosing.

Harassing attacks were stepped up both by the RAF and 7th Armd Div in the south. By the afternoon of 3 September, columns of the enemy were reported moving west from the gaps in the minefields.

The attacks south from the New Zealand positions went in as planned on the night 3/4 September and met with fierce and stubborn resistance. Heavy and repeated counterattacks were made by the Germans on the 4th September to repel our attempts to cut them off. Fighting continued for the next two days between our two minefield belts and it was clear that the enemy was prepared to fight hard for this area.

Early on 7 September the battle was called off and fresh defensive positions were organized to the east of the area of fighting near the minefields. For tire further plans which Gen Montgomery had for a future offensive, later to be known as the Battle of Alamein, there were definite advantages in containing a strong enemy force in the south. The whole of Eighth Army's energies were now devoted to preparing for this offensive.

Fortunately, owing to the proximity of our bases, there were no serious logistical problems. Alexandria was only 60 miles away and Cairo a little over 100 miles beyond.

Both these two cities had large stores, depots and repair facilities. The Germans on the other hand were at the end of a long line of communication, a situation which we knew only too well ourselves, having twice previously been well away from our bases, and well appreciated all the problems involved in feeding and supplying an army across the Desert. Now, however, right back on our bases the whole situation, from that point of view, seemed very simple. The detailed arrangements in tire individual brigades were, however, much as usual; and it might be of interest if f outlined very briefly the method of supply of the Armored Brigade in battle.

Regimental 'Transport was divided into three Echelons, B, A and AI. Echelon B consisted of vehicles such as store lorries, spare lorries, office lorries, in fact all those vehicles which did not need to go up and down daily in order to supply their units. Echelon A consisted, in the main, of fuel, ammunition and ration lorries. Echelon AT was a very small party consisting of about 8 lorries, including one medical officer's truck, one fitters' truck and 5 or 6 fuel and ammunition lorries, varying in proportion as between petrol and ammunition depending on the type of battle which it was anticipated would be fought. Echelons B and A were brigaded. The former being directed as to its movements by the senior Q Staff Officer of the Brigade from Rear Brigade Headquarters, and the A Echelon commanded by a Brigade Transport Officer, who was at the same time one of the Regimental Transport Officers. This A Echelon, as has already been mentioned, traveled daily between a supply point or refilling point and the individual units.



**Inspecting an abandoned
enemy SP howitzer**

AI Echelon was under Regimental control, in fact, under the direct control of the Commanding Officer, who kept it with him in battle, anywhere from 2 miles to 200 yards behind his fighting tanks. When replenishment of ammunition was necessary, the tanks would probably withdraw from the fighting line 200 or 300 yards and rearm direct from these lorries, one troop per squadron at a time. Sometimes, if the terrain was suitable it was possible for the lorries to go straight up to the tanks and this, in fact, did happen in a number of instances in the battle of Alam Haifa. However, it will be appreciated that the lorries were completely unarmed and, therefore, quite apart from the danger to personnel, there was a grave danger of losing all the reserve ammunition if the lorries themselves got hit.

However, in those days there was no other solution, apart from bringing these "soft" lorries right up into the battle, so that the risk had to be accepted. It might be added, that when lorries in AI Echelon had been emptied, it was frequently the case that they would be replaced from A Echelon or sometimes from a pool of ammunition lorries held at Rear Brigade Headquarters.

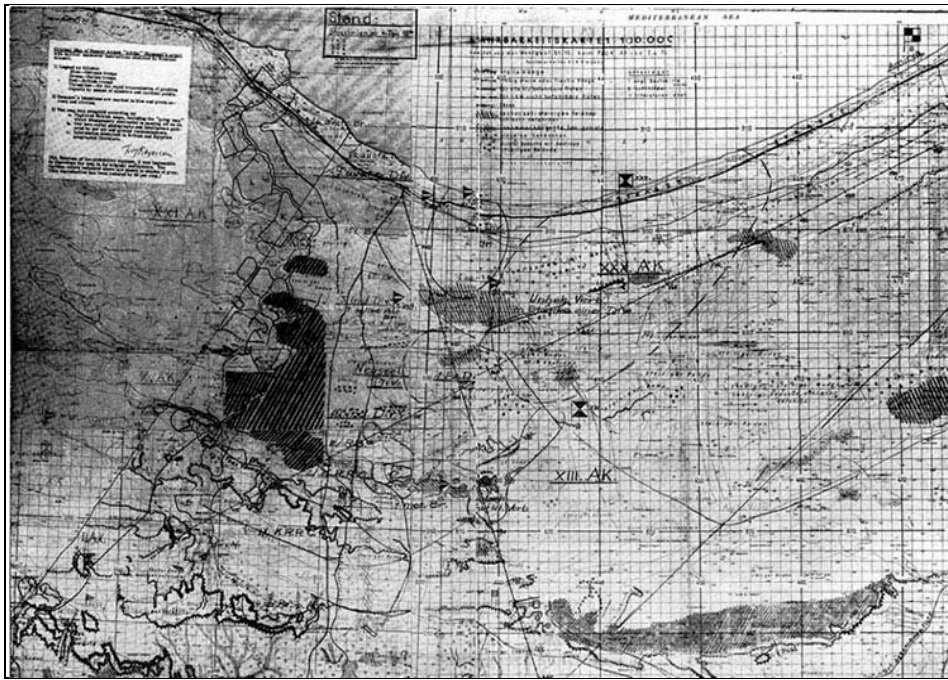
So much for supply; as to communications, these were entirely by wireless, except when the battle got entirely static; then lines were laid to units and sub-units. In the armored units it was seldom that this state of affairs lasted for very long. It is important

to note that the wireless was used personally most of the time by the officers in command of units or sub-units and even as far as brigade and division. It may be said that at the time of the battle of Alam Haifa, wireless communications were at a very high standard, particularly in the Armored Corps. The control that can be achieved over a large force of tanks and guns was very considerable, and the reaction to orders almost immediate. The personal use of wireless by commanders at all levels was, and still is, a vital factor in the control of armored formations in battle.

Before concluding this story of the Battle of Alam Haifa it might be of interest to tell the story of the "going map." This was a plan largely devised by the Chief of Staff of Eighth Army, Gen de Guingand, to confuse the enemy and induce him to plan his advance over ground which was unsuitable for large-scale movement. "Going Maps" were in general use in Eighth Army and were ordinary maps colored in a certain way to indicate the type of desert insofar as it affected vehicle movement. Many of these had been captured by the enemy and it was therefore planned to "plant" one on the enemy which would indicate that certain areas were good, hard "going," but which were, in fact, very soft sand. In particular an area selected for this treatment was situated south of Alam Haifa; whereas it was, in fact, perfectly feasible to find a suitable route by which to approach Main Haifa from the south and west, it was also possible, if misled, to get into some very "sticky going." The fake "going" map was planted on the enemy by means of a scout car which was intentionally blown up one night on an enemy mine; the map, stuffed in a haversack, was found to have been removed the following day. During their advance the enemy certainly went through this area of bad going and thereby indubitably increased his fuel consumption, but the extent to which the fake going map was responsible has never been fully established.

I have endeavored to tell the story of this battle in the atmosphere in which it was fought, although it must inevitably be from a somewhat limited point of view. In so doing, I hope that the reader, who will also have the benefit of reading the German account, may be able to judge and criticize the actions of those taking part in the light of the situation pertaining at the time. It is so easy when considering a battle from the comfort of an armchair some Years after the event, to forget entirely such important points as morale, level of training, mechanical efficiency, fuel and ammunition supply, air superiority and other factors which play such an enormous part in influencing the conduct of affairs at the time.

In retrospect, I have only one point which I welcome this opportunity of stressing. The view has been expressed fairly widely that Gen Montgomery's success in the Western Desert of Egypt was mainly a result of his superiority over the enemy in men and equipment; a superiority not enjoyed by any of his predecessors. However true this may be of the later stages of the campaign, at Alam Haifa our strength in relation to the enemy was rather worse than it had been earlier in the summer. The speed with which he appreciated the essentials of the situation when he arrived in the Desert, the firm plan he at once introduced and the inflexibility of purpose with which he conducted the battle itself, had such a profound effect on the whole of the Eighth Army that within a few weeks he turned a "brave but baffled" force into a conquering army.



Wishelsham



ROCK WASTES, ARID, BARREN, desolate terrain, interspersed with patches of sand, where meagre clumps of desert thorns grow, where the African sun burns down mercilessly in July—that was the Alamein Front. It was situated between the rock-bound heights of Tel el Eisa on the Mediterranean coast and the 200-meter-high pyramid of Garet el Himeimat on file Qattara Depression, the only position secure against encirclement on either flank on the entire North African desert.

There stood what remained of Rommel's army, exhausted after the heavy battles of Tobruk and the pursuit which followed—opposed by, it is true, the defeated, but still battle worthy troops of the Empire. The infantry had to build stone walls about them,

since the hard rock floor of the terrain offered no cover from enemy fire. "Our strength has waned," wrote Rommel in his diary on 3 July 1942. With only 13 battle-worthy tanks we had arrived before Alamein. Of the 4 British defensive emplacements on this position we were only able to seize one in the first attack. Two additional emplacements fell into our hands later. The main position of Alamein with the only fresh-water well in this entire desolate area remained in the hands of the British in spite of our desperate attacks. Already, in these July days, the battle of el Alamein had begun.



Rock-hard terrain offered no cover

"The British Fleet is hastily abandoning Alexandria and heading east," reported our air reconnaissance. We later heard that the British took precautionary measures for the defense of the Nile Delta in case Rommel should succeed in breaking through the gates of Egypt. And, as a precaution, they had prepared plans for a retreat to Palestine, and if necessary, as far as Iraq, in the event that the Nile Delta could not be held.

Gen Auchinleck, however, had no intentions of giving up el Alamein. We felt that immediately. Throughout all of July the Eighth Army attacked our position in order to seize the initiative again. On 10 July the Australians seized the heights of Tel el Eisa west of Alamein. They held this position despite our heavy counterattacks. On 14 July the New Zealanders and Indians launched a night attack, designed to capture the terrain of the strategically important area of Ruweisat Ridge. During the night of 16

July the Australians took the high ridge of Al Makh Ahad in the south.

Rommel conducted an attack against Ruweisat on 18 and 19 July. It was repulsed. While the Australians pushed forward again in the north on 21 July, a New Zealand division, reinforced with tanks, attacked the center of our front in order to dislodge us from our position. The breakthrough failed. A new offensive was launched in the north at Tel el Eisa on 26 July by the 9th Australian Div. Our counterattack was able to ward off a catastrophe.

Auchinleck obviously came to the conclusion, on 30 July, that with the forces available he was not able to conduct further operations. The Alamein Front was stabilized.

In August, Churchill appeared in Cairo on his flight to Moscow. We soon knew from the regrouping of forces in the Western Desert, that the nervous tension which the presence of our Panzers at the gates of Egypt had created, was now over. Gen Sir Harold Alexander was named Commander-in-Chief for the Middle East—one of the best strategic as well as political brains available to the Empire.



Endless supply columns—always menaced by the RAF

At the same time, the command of the British Eighth Army was taken over by Sir Bernard Law Montgomery, one of the most unusual but also gifted generals of the British Army—a discerning strategist who had a great understanding for the requirements of mechanized war. Montgomery could be as arbitrary and unpredictable in his associations with his superiors as with his subordinates, but his strategic plans nevertheless bore the stamp of a rigid system. His requirement for each battle which he conducted was complete materiel superiority.



Gasoline from Tripoli—2,000 kms from the front

According to his own war memoirs (*Alamein to the River Sangro*) he saw as his most important assignment the strengthening and deepening of the British defenses of the Alamein position. All the previous instructions and plans for any further retreat of the Eighth Army to the Middle East he rescinded immediately. He left no doubt that a surrender of the Alamein line was completely out of question. In case Rommel attacked again he would engage in battle immediately—on position. He ordered each division to commit their troops only as complete units. The practice of splitting units which had led to defeat, came to an end. Along with this tactical transposition he also ordered that tanks and artillery be committed only in mass from now on, in recognition of the fact that one can never be strong enough at the decisive point and that the shortage of men must be equalized or overcome by an overwhelming amount of matériel. After he had taken the necessary steps for the strengthening of the defense, he turned his attention to the basic reorganization of the army and the formation of a new corps, which was to be capable of exploiting success in a battle of matériel following an effective breakthrough. The matériel superiority of the British, thanks to the complete mobilization of the British industry and the tremendous American support, gradually became overpowering. Tanks, aircraft, artillery of all calibers, trucks, gasoline and ammunition, came in vast quantities around the Cape of Good Hope into Port Said, Suez and Alexandria.



German airpower melted away



Troops were weary and exhausted

For us, on the other hand, our supplies, which came across the seas, sank to 6,000 tons of supply goods per month—only $\frac{1}{5}$ of our normal requirements. Three quarters of all convoys were sunk by British air and sea power. To build a stock pile for the decisive battle of the future was impossible. The Royal Air Force had reached hitherto unprecedented heights of strength and combat effectiveness. Against it the air power of Kesselring gradually melted away. He did not receive any replacements. Hitler needed everything in Russia. The German fighter squadrons became very small in numbers; even Capt Marseille, ace of the African sky, with 158 air victories, had met a hero's death.

Malta won its importance as a base for the fight against the convoys back and forth between Italy and North Africa, inasmuch as the greater portion of the transports went

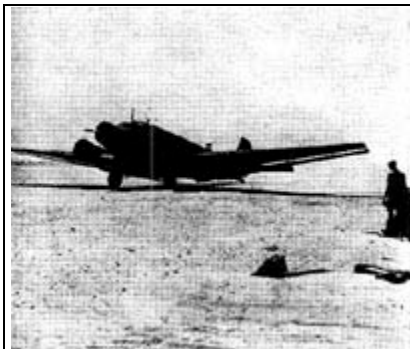
from southern Italy to Benghazi, the principal transfer point for German and Italian supplies. The convoy routes lay within effective striking range of Malta. Tobruk did not have sufficient tonnage capacity; therefore there was an endless column of supply vehicles from the harbor to the positions before Alamein. These were constantly menaced by the Royal Air Force. This method of supply consumed precious fuel and required that the transport columns were overburdened more than necessary. The distance from the battlefield to Tobruk was 550 km; from the major port of Benghazi, 1,000 km; and from Tripoli, where many supplies also arrived, it was over 2,000 km. On the other hand the British supply lines from Alexandria and Suez were only 90 km and 850 km, respectively.



On the Alamein Front the possibilities to refresh and rest the troops were negligible

If Malta remained in British hands and Kesselring's air power was not increased at the same time, then sufficient support for the front in Africa was impossible. But at that time Hitler would not consider seizing the island fortress. It was maintained that Alamein could have very easily been resupplied from Crete, and Malta could have been neutralized by heavy air attacks as was Dunkirk in 1940. (At that time Adolf Hitler announced with arrogant pride, "Dunkirk will be turned over to the German Luftwaffe"—thereby delivering the British Expeditionary Corps.) In a sober strategic estimate of our situation in August 1942, it had to be recognized that now a situation existed in which neither of the deadly threats to the axes of supply in the rear of the army (Allied control of the air

on one hand and naval base of Malta on the other) had been destroyed. Nor could the situation be expected to improve, by gaining the Nile Delta right in the lap of British strength in the Eastern Mediterranean. Rommel's army was halted in the middle of the desert, far from its base of supply, while the enemy superiority in the air grew stronger daily. On the other hand the possibilities for improving our own combat effectiveness, even to rest and refresh the exhausted troop units, were negligible at best.



Kesselring guaranteed 1,000 tons of gasoline would be delivered by air

These considerations then raised a question. In spite of the advantage of the Alamein position, anchored on both flanks—would it not be wiser to break off contact and move away from the enemy in time, and thereby abandon the worthless desert terrain and the long supply route to the enemy? The offensive power of our army could have been renewed, undisturbed by the enemy, in one of the prepared defensive positions closer to the supply center, perhaps at Sollum. In the meantime, we could have conducted a landing operation on Malta. This was Rommel's own idea. However, Hitler completely closed his mind to any such thoughts of moving backward; his goal was the Suez Canal.



Marshal Cavallero and Rommel: "You can begin the battle now, Herr Feldmarschall, the gasoline is already underway."

Consequently nothing happened. Neither was Malta attacked nor did Rommel's army move back. That was the decision upon which the life or death of the Alamein Front depended. Rommel's supply situation necessarily had to become catastrophic. Every expectation of winning the Nile Delta and the Suez Canal now vanished. Thereby the hopes of a great pincer movement—to be conducted from the north out of the Ukraine and over the Caucasus; and from the south out of the Western Desert over the Suez Canal and on to the oil fields of the Middle East, exposing the wide open southern flank of the Soviet Union—faded away more and more.

Now or Never—Alam el Haifa

In spite of this, Hitler calmly ordered preparations for the attack on the Nile Delta. Even the Italian High Command implored Rommel not to move back under any circumstance. Mussolini himself came to North Africa and waited impatiently in Derna for the moment when the Panzers of the Axis would appear among the pyramids and parade before him.

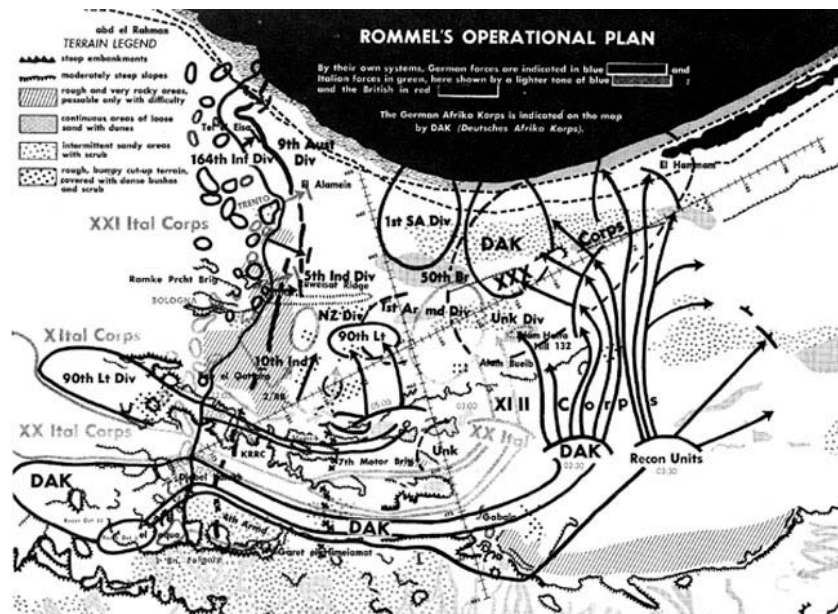
Soon, however, Rommel had to settle with both of his dictators. The troops originally destined for the attack on Malta were now given to him as reinforcements. Finally it had to happen, that Rommel was forced to make his decision to attack the British Alamein position and to break through to the Suez Canal. He made this contingent upon his receiving several thousand cubic meters of gasoline by water or by air. Now or never, it was Rommel's belief that he could once more attempt the drive to the Delta. In conversations on 27 August, Marshals Kesselring and Cavallero guaranteed him that he would receive 6,000 tons of gasoline, of which 1,000 would come by air. Rommel stated, "The battle is dependent upon the prompt delivery of this gasoline." Cavallero answered, "You can begin the battle now, Herr Feldmarschall, the gasoline is already under way."

In the night of 31 August Rommel launched the attack. Even then the British had a superiority in artillery, ammunition and tanks. Unopposed, the RAF controlled the air. We were short of tanks and ammunition. A frontal attack through the strong British line therefore was out. Rommel searched for the only other possibility, the enveloping attack. He conducted diversionary attacks in the northern part of the front, an audacious secondary attack from the center, then the main attack in the south. His intention was to break through along the Qattara Depression where the British concentrations were weakest, then to swing in to the north, passing east of Alam el Haifa and on to the coast at El Hammam. Thereby, he hoped to roll up the entire enemy position, exactly as he had three months earlier at Gazala. Had this plan succeeded, then the Eighth Army would have been encircled and its access to its supply in the rear cut off. Both Generals

Alexander and Montgomery had reckoned with this plan. Montgomery, as soon as he had arrived in the Western Desert—as we later learned—heavily fortified the most important ridge, Alam el Haifa, and prepared it for defense by placing the greater part of his armor there. He even allowed a map to fall into our hands on which the terrain south of Alam el Haifa was shown as trafficable for armored vehicles. Actually, it was bottomless sand which would create extreme difficulties for our wheeled vehicles.

Clockwise from top left

- . . . the battle is dependent upon the prompt delivery of gasoline!
- Panzers moving up along the telegraph lines south of Abd el Rhaman
- The author in the desert
- Rommel watches an Italian unit move up the coast road at Sidi Abd el Rhaman
- The Qattara Depression as seen from Abu Dweis
- Flat-top heights just west of the Qattara Depression
- The rock wastes of the desert floor in the center of the Alamien line



The Attack

At the end of August 1942, according to the results of our reconnaissance, the British stood approximately in the following positions.

In the northern sector under the command of the XXX Corps were the 50th Indian Div, the 50th British* and the 9th Australian Divs; behind then, on the coast, was the 1st South African Div in reserve. The southern sector was defended by the 2d New Zealand Div under the XIII Corps and adjacent to it on the left, the 7th Armd Div with its reconnaissance units. Behind the center and the southern sectors of the Alamein

position stood the 1st British Arm'd Div,** and as it was later discovered, the 10th Arm'd Div also.



Discussing the situation just prior to the battle: Rommel, Bayerlein, von Bismarck

Rommel had the following intentions:

By observing all precautionary measures possible in order to avoid detection, the mechanized offensive group consisting of the German Afrika Corps (a part of the *Panzer-armee Afrika*), the XX Italian Corps and the 90th Light Div were to be moved into assembly areas at Djebel Kalakh. The tanks were to be moved by night-marches into positions on the line of departure in the course of 4 nights, one quarter each night, and there camouflaged in

position. Following this, the wheeled vehicles were to be moved into the assembly areas the last night. But at the same time their disappearance was to be covered by the dispositions of the supply and service troops into their old area. Above all, our intentions must be kept secret.



Last light—the attack would jump off at night

Our reconnaissance had consistently reported during the last few weeks that in the southern portion of the Alamein front the enemy had planted minefields which could be easily overcome. These obstacles should be penetrated during the night of 30/31 August by pioneers and infantry, and the enemy ejected from the positions by tank units following immediately behind. The *Deutsches Afrika Korps*, with elements of the Italian Motorized Corps, should advance at top speed to the east during the same

night to seize the territory southwest of El Hammam, 40 to 50 kilometers distant from the line of departure.

While the X Italian Corps (which held the southern front) was to remain ready for the defense, the 90th light Div and part of the XX Italian Corps were to cover the left flank of the offensive group in order to ward off anticipated British counterattacks.

At first light the *Deutsches Afrika Korps*, however, should even continue to press the advance northward to the coast and seek a decision in open battle. In this operation, relying on previous experience, Rommel, above all else, reckoned on the long time required for the British command and troops to react. He hoped, therefore, to be able to confront the British with the *fait accompli* of the entire operation by this stroke.

Following this, everything was to move rapidly. According to Rommel's concept, he couldn't afford to have the battle fall into a static phase. Continuing smaller limited attacks by the remaining German and Italian infantry in the Alamein position were to tie down the British strength there while the decisive battle was planned to take place behind the British front. We wanted to equalize our inferiority in materiel strength by relying on the superior ability of our troops to wage a battle of movement and the highly

developed tactical skill of our commanders- This had been our experience in the recent battles in the Western Desert, 1941-42. Separated from their supply points, the only thing that would remain for the British to do would be to fight to the last round of ammunition or breakout and escape to the east, which would mean giving up Egypt.

The success of this operation depended not only on the availability of supply support to our forces, but also on the surmise that our offensive preparations could be completed without being discovered by the enemy. In addition, we had to assume that the British positions could rapidly be overwhelmed and the advance into the British rear could be speedily effected.



From assembly areas ...



after heavy artillery preparation ...



Pioneers move into the minefields clearing lanes for the infantry to get ready ...



... and Go! booby-trapped minefields prove difficult ...



but the attack moves on through the barriers ...

By the end of August the supplies of munitions and fuel promised by the Italian *Commando Supremo* had not yet arrived. The period of full moon, which was absolutely necessary for the execution of the operation was already waning. A further delay would have meant the complete abandoning of our offensive plans.

During the night of 30/31 August we jumped off in the attack against the southern bastions of the British Alamein Front. Shortly after our troops had crossed the eastern limits of their own minefields and traversed No-Man's-Land, they ran into heretofore unknown British mine obstacles which were tenaciously defended. Under cover of heavy artillery fire and after several assaults, our pioneers and infantrymen succeeded partially in driving narrow passages through the British barricades. As a result of this, our losses were considerable and we lost much time since the mine fields were of considerable depth and had been additionally planted with a great number of booby traps.

Soon the carpet bombing of the RAF began on the area occupied by our forward elements. Wave after wave of heavy bomber formations dropped their high explosives while both sky and earth were intermittently made light as day by parachute flares and pyrotechnics. Gen von Bismarck, commanding general of the 21st Panzer Div was killed by a direct hit and Gen Nehring, commander of the Afrika Korps was severely wounded by a bomb fragment.

As a result, by daybreak, the most forward elements of the *Deutsches Afrika Korps* and the Reconnaissance Group could only reach a point 12 to 15 kilometers east of their own mine fields. Rommel's intention, to drive 50 kilometers to the east with his motorized units during the moonlit night and to further press the attack northward at first light, had not succeeded. The element of surprise upon which, in the final analysis, the entire plan was built, had consequently been lost. We now considered, in the face of this Fact, whether or not we should break off the battle. The British now knew our dispositions. Rommel decided to base his decision to break off the battle or to continue the offensive upon the immediate situation of the Afrika Korps.



"Rommel discusses with Bayerlein the possibility of breaking off the action or the advisability of continuing the attack"

The *Deutsches A Afrika Korps*, in the meantime under my command (I had taken over command of the Afrika Korps after Gen Nehring had been wounded) had overcome all the British mine obstacles and was in tire process of continuing the attack to the east. Rommel discussed the situation with me, and we arrived at the decision—continue the attack.

Since the British armored units had now concentrated and stood ready for immediate counteraction, we were forced to make our turning movement northward earlier than we had originally planned. The operational objectives for the *Deutsches Afrika Korps* was now Hill 132, Alam Haifa; and for the XX Italian Corps, Alam Bueib. According to the information of our air reconnaissance this ridge was heavily fortified and, as was later confirmed, occupied by the 49th British Inf Div, which had just been assigned to the Eighth Army fresh out of Great Britain. Naturally, it was quite clear to us that the struggle for this high ground which was the key to the el



the forward elements have progressed only 12 to 15 kms eastward . . .



still the Afrika Korps moves on (here east of Djebel Kalakh) . . .



in the afternoon the attack of the Panzer division is well underway . . .



and passes through the minefields east of Djebel Kalakh . . .

Alamein position, would be very difficult in light of our experiences in similar battles. Field marshal Kesselring, commander of the Luftwaffe in Africa, was therefore requested to attack the fortified ridge with strong air forces.



Rommel moves forward with the advance. He and Bayerlein consider the course of events—their decision is based on the immediate situation of the Afrika Korps

After the *Deutsches Afrika Korps* had refueled and rearmed, which took considerable time, it assembled at 1300 hours. During an intense sandstorm, which was blowing from our backs into the face of tire enemy, the attack of the 15th and the 21st Pz Divs got underway well in the beginning. Unfortunately, at this time the Italian armored divisions *Ariete* and *Trieste* were still held up by clearing lanes through mine fields and by the serial movement of their The units through the captured British defense system. For this reason they could only begin their attack by evening.

After Rommel had again discussed the situation with me he traveled over to the Italian divisions and spurred them on with all haste. In the meantime, our tanks and vehicles labored with the greatest difficulty through the loose sand which covered the terrain of the approach march. The entire day a sandstorm raged, making life miserable for our men, but at the same time it prevented the RAF from attacking our units. Because of this difficult terrain, tile fuel levels within the *Deutsches Afrika Korps* had been seriously reduced by evening. Around 1600 hours our attack against Hill 132 was stopped for the time being. The Italian Corps, which was to support us on our flank, was still a considerable distance away. The lie 90th Light Div had reached its assigned position. The Reconnaissance Group (Recon Detachments 3, 33 and 580) had made contact to the east and southeast with the 7th Armd Div.

During the night 31 August/1 September our Recon Group was the target of heavy British bomber and fighter attacks. With the help of countless parachute flares every movement was subject to an immediate strafing attack. Soon a great number of our vehicles were in flames and burned out. The Recon Group suffered heavy losses.



The Panzers move on past the captured stronghold of Deir el Shein

In the meantime, the gasoline which had been promised us had not arrived in Africa. Also the task of tile resupply columns moving east through the clearings in the mine fields became very difficult in view of the heavy harassing attacks of British armored units and the RAF. So, at the very last minute (the morning of 1 September) Rommel was forced to stop any large-scale actions for the time being because movements involving greater depths with motorized units had to be avoided. At the most, we could only attempt to conduct several local lint iced attacks.



Italian infantry move up—Rommel urges them on with all haste

Limited by these requirements, the *Deutsches Afrika Korps* continued the attack during the course of the morning of 1 September against, Alam Halfa with the 15th Pz Div. In tire course of this action the major portion of the Division reached tile terrain just south of Hill 132 alter destroying several British heavy

tanks. Then, however, this attack, too, had to be halted because there was hardly enough fuel on hand to continue, and strong enemy armored attacks were being launched against our unprotected east flank.



Bayerlein at the head of the Afrika Korps—leading the advance to Alam Halfa

During this entire day the RAF conducted heavy strikes against the *Deutsches Afrika Korps*. In the open coverless terrain, where the explosion of the bombs was partially reinforced by rock fragments, heavy casualties were incurred. From the staff of the Afrika Korps alone, 7 officers were killed in action on this day.

In the afternoon Rommel again reconsidered whether or not he should break off the engagement in view of the critical supply situation. All day the ceaseless attacks of the British bomber formations continued on the battlefield. Enemy artillery fired immense quantities of ammunition into our positions. Movement on the battlefield was impossible. Again and again our outnumbered fighter aircraft threw themselves against the British bomber formations. But seldom did they succeed in getting close to the British bombers, since they were always engaged in aerial battles with extraordinarily strong fighter formations of the RAF which were assigned to protect the seemingly endless flight of the bomber squadrons.

Our problem was one of supply. Even at this late date the gasoline which had been promised by Kesselring and Cavallero had *still* not yet arrived on African soil. By the night of 1 September the *Panzerarmee* had only enough gasoline left at its disposal to keep the supply columns going, and even by most frugal use it would only last for a short time. There was no fuel for tactical maneuver.

The whole night through, until the morning of 2 September, we were again under continuous aerial bombardment by bombs of all sizes.

After this night, because of the critical situation in the air and the catastrophic supply situation, Rommel decided to discontinue the attack and pull back, step by step, to positions extending from el Taqua to Bab el Qattara. For the time being, we remained in this area.

In the meantime, the British had gathered powerful armored units between Alam Haifa and Bab el Qattara. However, they attacked hesitantly and could easily be repulsed.



Rommel gives a push to his command car bogged down south of Munassib

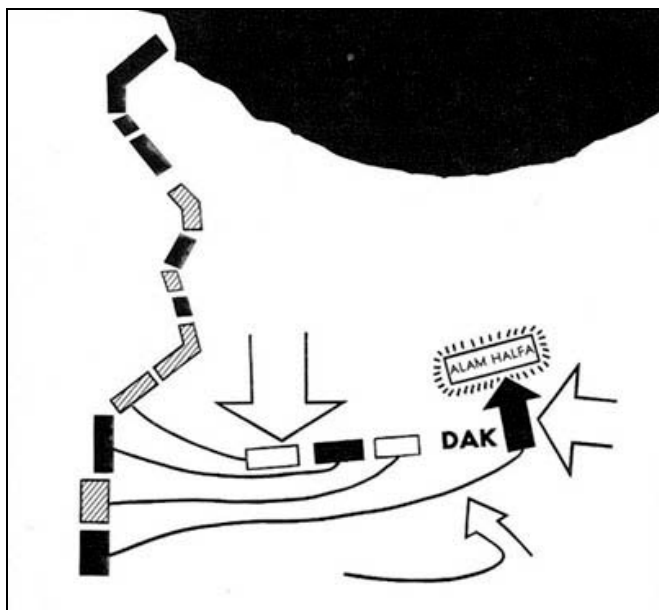


The battle at Alam Halfa 1 September

Also during the night of 2/3 September we were hit by ceaseless attacks of large formations of British aircraft. Pyrotechnics bathed the entire desert in bright light. Magnesium bombs, which could not be extinguished, burned on the ground and lighted the surrounding area. In between these, huge quantities of high explosive and fragmentation bombs fell on the terrain occupied by our troops. The 88mm flak guns, which during the days before succeeded in shooting down a bomber now and then, were discovered by the British and attacked from much higher altitudes. Hundreds of our vehicles were destroyed or damaged.

On 3 September we continued our retrograde movement according to plan. The British attacked only here and there and for the most part let the RAF and the artillery take over.

An attack by our Luftwaffe against the 10th Indian Div,



Moving around south of Alam Halfa



Moving by Garet el Himeimat during withdrawal from Alam Halfa

which was in the assembly area for a counterattack against the center of the front, caused the units which were assembled there to scatter to the winds. Also, all other attacks launched by other units against our flanks, especially the New Zealanders, were too weak to be able to effect a penetration—they could be repulsed. A night attack conducted against the X Italian Corps resulted in especially high losses for the British. Countless enemy dead lay on the battlefield and 200 prisoners were taken among whom was Gen Clifton, commanding general of the 6th New Zealand Brigade.

Conclusions

The offensive failed for the following reasons:

- 1) We were too weak for such an extended enveloping operation.
- 2) The British positions in the south were, in fact, exceptionally heavily mined as compared to the information we had from reconnaissance; and the British knew our intentions.
- 3) Devastating attacks by the RAF, which had complete command of the air and which literally nailed us to the ground, made any orderly advance and any effective movement impossible.
- 4) The fuel, a necessary requirement for the completion of our plan, did not arrive. The ships, which Cavallero had promised us were either sunk, delayed or never sent. Kesselring, unfortunately, was not able to keep his promise—if necessary, to fly 500 tons per day to the front.

The losses to our troops were extraordinarily high. In the front lines they were caused by the bombs and strafing attacks of the RAF. The German and Italian units suffered casualties amounting to 570 dead, 1,800 wounded and 570 captured—altogether almost 3,000 men. We lost in addition: 400 vehicles, 50 tanks (of the 200 we had), 15 artillery pieces and 35 antitank guns. According to reports from our units, during the course of the operation they had taken 350 British prisoners and 150 British tanks and armored cars fell into our hands or were destroyed—along with 10 pieces of artillery and 20 antitank guns.

An important lesson which was to influence all our later plans, especially the entire method of our conduct of the war, had been learned during this operation: *The operational and tactical capabilities are of little consequence if the enemy commands the air space with a powerful air force and can fly massive attack, missions undisturbed.*

The ground troops of the British had hardly come into the picture during our attack. Montgomery had desisted from undertaking a strong attack to regain his southern front, an attempt at which he probably would not have succeeded. Instead of this, he let his overwhelmingly superior artillery and air force take over. In addition to this, our lines of communication were constantly exposed to harassing attacks by the 7th British Armd Div. This action by the British commander was indeed correct and practical, since, thereby, he could inflict on us much greater loss in comparison to his own casualties and still keep his units combat-ready.

After these experiences we could only look forward to the coming offensive of the British against the el Alamein position with gloomy thoughts.

A handwritten signature in black ink on a yellow rectangular background. The signature appears to read "Fritz Bayerlein" in a cursive, slightly stylized script.

CRITIQUE

IT WAS NATURAL that the disappointing end of the British July counteroffensive should have renewed the bad impression left by the disastrous breakdowns of June—obscuring the basic fact that the enemy's aim of overrunning Egypt had been defeated—and produced an impulsive feeling that a clean sweep of the higher command was needed. Psychologically, such drastic action had much justification, for it responded to the wave of feeling among the public at home and in the contributing Commonwealth countries as well as among the troops on the spot. But in the light of later knowledge and historical examination, these sweeping changes were an indiscriminating and unjust conclusion to a crucial month of the war. It was left to the enemy to put Auchinleck's achievement in true proportion and be first in paying him due tribute. An ironical sequel to his removal was that the renewal of the British offensive was postponed to a much later date than he had contemplated, and an impatient Prime Minister had to bow to the new High Command's determination to wait—until satisfied that preparations and training were complete, even though the delay meant leaving the initiative to Rommel.

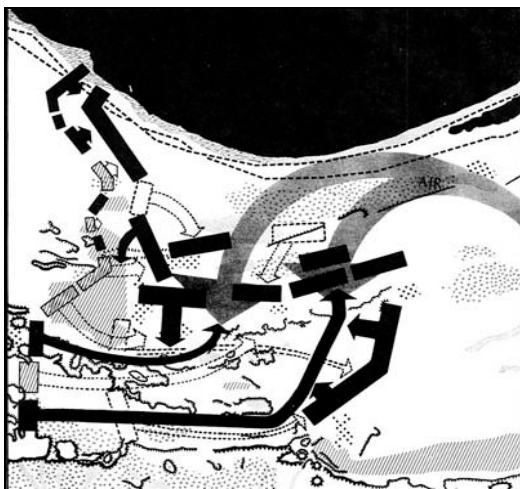
During August Rommel was reinforced by only 2 fresh formations, one German and one Italian—the *Ramcke* Parachute Brigade and *Folgore* Parachute Division, both being "dismounted" and employed as infantry. But the wastage in the other formations was made up to a considerable extent by drafts and fresh supplies of equipment—although much more arrived for the Italian divisions than for the German. By the eve of the attack there was approximately a total of 200 gun-armed tanks with the 2 panzer divisions and 240 with the 2 Italian armored divisions—which, as Alexander remarked in his dispatch, "hardly came into action at all in this battle." The German armored strength comprised 169 Panzer IIIs (of which 74 were J type, with the long 50 mm gun), and 35 Panzer IVs (of which 26 had the new long 75 mm).

On the British side, the now well fortified front was still held by the same 4 infantry divisions as in July, with strength rebuilt, and the 7th (Light) Armd Div remained, while the 1st Armd Div went back to refit and was replaced by the 10th—comprising two armored brigades, the 8th and the 22d (which had 4 tank units instead of the usual 3). There were 3 other fresh divisions now in Egypt—the 44th and 51st Infantry, and the 8th Armored. The 44th was brought up to the front to reinforce the rearward position on the Alam Halfa Ridge. From the 8th Armd Div the 23d Armd Brigade already brought up, was initially used to support the infantry holding the front, but after the opening phase it was placed under Gatehouse's 10th Armd Div, which thus controlled 3 armored brigades—the largest body of armor that ever fought under one divisional commander during the campaign. As for the tank strength, the Prime Minister in his report to the War Cabinet from Cairo on 21 August said: "For an August battle we should have at the front about 700 tanks, with 100 replacements." Alexander in his dispatch gives the figure as 480 in the formations engaged.

There was no alteration of the plan for countering a renewed enemy offensive that had already been devised before Auchinleck left. Alexander, in his dispatch, stated the facts with an honesty that shattered stories of its radical recasting which subsequently became current. He said that when he took over the command from Auchinleck: "The plan was to hold as strongly as possible the area between the sea and Ruweisat Ridge and to threaten from the flank any enemy advance south of the ridge from a strongly defended prepared position on the Alam el Halfa ridge. Gen Montgomery, now in command of Eighth Army, accepted this plan in principle, to which I agreed, and hoped that if the enemy should give us enough time he would be able to improve our positions by strengthening the left or southern flank." The Alam Halfa position was given further reinforcements before Rommel struck, but in the battle its defense was not put to the test, as the issue was decided by the positioning of the armor.

The XXX Corps front, from the coast to the Ruweisat Ridge inclusive, was held by the 9th Australian, 1st South African and 5th Indian Divs—from right to left. South of it, the XIII Corps front was held by the New Zealand Div, while the open flank of 15 miles between its left and the escarpment of the Qattara Depression was covered by a mined belt that was itself given mobile cover by the 7th Armcd Div (composed of light tank and armored car units).

This southern stretch was, obviously, the only part of the front where a quick penetration could possibly be achieved, so in making such an attempt Rommel was bound to take that line of advance. This was what the defense system evolved under Auchinleck had been designed to produce.



While surprise in direction was thus ruled out, Rommel sought a solution of the offensive problem by surprise in time and speed—to break through the southern sector and get astride the Eighth Army's communications so quickly that it would be thrown off balance and drawn into disjointed action on a reversed front. His plan was that, following a concealed side-step of his mobile forces, the mined belt should be captured by night attack, and the Afrika Korps with part of the Italian XX Corps was to drive on eastward for 25-30 miles before morning. Then at dawn the striking force would wheel northwards to the coast and overrun the British supply area. This

menace, he hoped, would draw most of the British armor in chase, so that he might trap and destroy it in the open. Meanwhile, the German 90th Light Div and the rest of the Italian XX Corps was to form a protective corridor which, in that case, should be strong enough to withstand piecemeal attack from the north until he had won the main battle, in the British rear. He said that in adopting this plan he "placed particular reliance on the slow reaction of the British command, for experience had shown us that it always took them some time to reach decisions and put them into effect."

If Rommel's night advance had gone anything like as fast as planned, the effects might have been upsetting—as the British armored brigades were not kept close together at the outset, and in the event were not concentrated until the second morning. But they were allowed ample time. For Rommel soon discovered that his Intelligence was mistaken both about the depth of the mined belt and of the British positions. On those obstacles his plan was wrecked. By dawn the leading troops were only some 8 miles beyond the mined belt, while the mass of the Afrika Korps was not ready to begin its long eastward drive until 0930. By then it was a target for air attacks.

As speed-surprise had been lost, Rommel thought of abandoning his offensive, but after discussion with Bayerlein decided to let it go on, in a modified way. Since it was evident that the British armor had been allowed to assemble for action, Rommel came to the conclusion that "it was impossible to continue with our wide sweep to the east, as our flanks would be under constant threat. . . . This compelled us to decide on an earlier turn to the north than we had intended." The Afrika Korps was therefore ordered to make an immediate wheel and head for Pt. 132, the dominant feature of the Alam Halfa Ridge, while the XX Corps came up on its left flank. This change of direction brought it towards the area where the 22d Armd Brigade was posted—and also towards an area of soft sand, cramping to local maneuver. Its original line of thrust was well clear of this area.

On the British side, the 8th Armd Brigade's battle positions were some 10 miles distant, southeastward, from the 22d. It was thus more directly placed to check a by-passing move, on Rommel's part, instead of trusting to the indirect deterrent of a flanking position. In taking the risk of such a separation, between the brigades, the higher command relied on the fact that each of them was almost as strong in armor as the whole Afrika Korps, and thus should be capable of holding out until the other brigade arrived to support it.

The 8th, however, did not reach its assigned position until 0430—it was fortunate that the enemy had been so much delayed, for under Rommel's original plan the Afrika Korps had been directed on that same area and intended to arrive there before dawn—A collision in the dark, or assault in the morning, before the 8th was firmly in position, might have produced an awkward situation, especially for troops who were in action for the first time.

As a result of the enemy's change of plans, the attack fell on 22d Armd Brigade alone, but not until late in the day. Continued harassing by the 7th Armd Division—which only gave way gradually—and the delayed arrival of fuel and ammunition convoys as well as air attacks, so retarded the advance, that the Afrika Korps did not begin the shortened northward wheel until the afternoon. On approaching the battle positions of the 22nd Armd Brigade its massive tank columns came under a storm of fire from "Pip" Roberts' well-sited tanks and then from his supporting artillery. Repeated advances and attempted local flank moves were checked—until nightfall closed down the fight, bringing well-earned respite to the defenders and spreading depression among the attackers.

The abortiveness of the enemy attack was due, however, not only to these actual repulses. Fuel was so short in the Afrika Korps that as early as 1600 hours, Rommel had cancelled his orders for an all-out effort to gain Pt. 132.

When morning came, fuel was still so short that Rommel was forced to give up the idea of making any large-scale move that day, 1 September. All that could be attempted was a local and limited attack, to gain the Alam Halfa ridge, employing only the 15th Pz Div. It was a very uncomfortable situation for the Afrika Korps, for the pounding it had suffered all night from the RAF and the XIII Corps artillery was continued throughout the day. The diminished attacks of the German armor were successively checked by a reinforced defense—early that same morning Montgomery, now convinced that the enemy was not driving east towards his rear, had ordered the rest of the armor to concentrate alongside Roberts' brigade.

In the afternoon Montgomery "ordered planning to begin for a counterstroke which would give us the initiative"—his idea being to develop a wheeling push southward from the New Zealand position to close the neck of the bag. He also made arrangements to bring up X Corps HQ—"to command a pursuit force" that was "to be prepared to push through to Daba with all reserves available."

But after another night of almost continuous bombing by the RAF, and the *Panzerarmee* having now only one day's standard fuel issue left, Rommel had decided to call off the offensive and make a gradual withdrawal.

During that day, 2 September, the Germans were seen to be thinning out and columns started moving westward. But requests for permission to follow them up were refused—as it was Montgomery's policy to avoid his armor being lured into one of Rommel's traps. At the same time he ordered the southward attack by the New Zealand Div, reinforced, to begin on the night of the 3/4 September.

On the 3d, the Afrika Korps made a general step-back, but was only followed up by patrols. That night the "bottling" attack was launched, against the corridor held by the 90th Light and *Trieste* Divs. The attack became badly confused, suffered heavy losses and was abandoned next day.

During the 4 and 5 September the Afrika Korps continued its step by step withdrawal from "the bag," but no further attempt was made to cut it off, and it was only followed up by small detachments. On the 6th it came to a halt on a line of high ground 6 miles east of the original front, and was clearly determined to make a stand there. So on the 7th, Alexander and Montgomery decided to break off the battle, leaving Rommel in possession of this limited gain of ground—a small consolation for his strategic frustration.

Since taking over the Eighth Army, Montgomery had impressed his personality on the troops with very bracing effect. This was now strengthened by the thrill and relief of seeing the enemy in retreat, even if only for a short distance—a palpable sign that the tide had turned.

The question remains whether an exceptional opportunity was missed of annihilating the enemy while the Afrika Korps was in "the bag," and thereby saving the later trouble and cost of assaulting him in his prepared positions. But so far as it went, the battle of Alam Halfa was a great success. At its conclusion the enemy in Africa was left powerless to resume the initiative and, with the ever-increasing flow of British reinforcements, the next battle was bound to be, as Rommel called it, a "Battle Without Hope."

SUMMING UP

Tactically, this battle has a special interest. For it was not only won by the defending side, but decided by pure defense, without any counteroffensive—or even any serious attempt to develop a counteroffensive. It thus provides a contrast to most of the "turning point" battles of the Second World War and earlier wars. While Montgomery's decision to abstain from following up his defensive success in an offensive way forfeited the chance of trapping and destroying Rommel's forces—momentarily a very good chance—it did not impair the underlying decisiveness of the battle as a turning point in the campaign. From that time onwards, the British troops had an assurance of ultimate success which heightened their morale, while the opposing forces labored under a sense of hopelessness, feeling that whatever their efforts and sacrifice, they could achieve no more than a temporary postponement of the end.

The lesson-value of the Battle of Alam Haifa is increased by the conditions of the atomic age in which we now live. For where both sides possess the power to use thermonuclear weapons of unlimited destructiveness that very potentiality imposes fundamentally limiting conditions on warfare and the military aim. An aggressive-minded dictator may still venture on an invasion with limited objectives in some part of the globe on the calculation that so long as he does not pursue his advantage too far, his opponents will hesitate to use their thermonuclear weapons against his homeland, since that would precipitate an all-out nuclear war fatal to both sides. In meeting a limited invasion of this kind it would be worse than foolish for his opponents to follow up a repulse of the invading forces with a counteroffensive in the old way, aimed to annihilate the invading forces—as that would be the surest way to produce general suicide. Threatened with imminent annihilation, anyone will resort to the use of mutually suicidal weapons for, if he is made to feel that he is likely to be destroyed in any case, he will not care whether it happens in a "conventional" or "unconventional" form of warfare, nor care how many other people perish with him. Thus, in the atomic age the old aim of complete "victory" has become a lunatic aim, and the only sane concept of strategy is to aim at repulsing the aggressor's forces so effectively as to make him abandon his aim. "Alam Halfa" is worth studying from this new strategical viewpoint, as a prototype battle.

There is also much to be learned from its tactical technique. The positioning of the British forces, and the choice of ground, had a great influence upon the issue. So did the flexibility of the dispositions. Most important of all was the well gauged combination of airpower with the ground forces' plan. Its effectiveness was facilitated by the defensive pattern of the battle, with the ground forces holding the ring while the air

forces constantly bombed the arena, now a trap, into which Rommel's troops had pushed. In the pattern of this battle, the air forces could operate the more freely and effectively because of being able to count on all troops within the ring as being "enemy," and thus targets—in contrast to the way that air action is handicapped in a more fluid kind of battle.

Rarely has any vital battle been as uneventful as that which is now engraved in history as the "Battle of Alam Haifa." The battle was won by sitting tight—and offering no target—in a well-chosen position that commanded the enemy's line of thrust, while the air force battered the attacking force which could neither press an assault nor dare to push deeper.

Bob Widdell



