

DESERT RATS

The North Africa Campaign

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ADDITIONAL INSTRUCTIONS FOR

SPECTRUM 128K USERS

The 128K version has been expanded to include two additional scenarios and a number of improved features. The instructions have therefore been updated for the 128K users.

LOADING

Select TAPE LOADER from menu and key ENTER instead of keying LOAD "".

1. INTRODUCTION

The game now covers the period from the first British offensive against the Italians in December 1940 to the defeat of the Afrika Korps at the battle of El Alamein and their subsequent withdrawal from Libya at the end of 1942.

2. MAIN MENU

There is a joystick option and Kempston, Protek and Sinclair joystick interfaces can be used.

Keying 0 when selecting the number of players will result in the computer going into demo mode. This can be escaped by holding the "M" key down until the end of a turn.

3. THE SCENARIOS

There are eight scenarios:-

- 1) **Operation Compass** - this scenario covers the first British offensive from its beginning until the capture of Tobruk. The scenario lasts 45 turns from 9th December 1940 to 22nd January 1941. The British player must endeavour to capture Bardia and Tobruk whilst the Italian player must try to maintain his position in Egypt and should not allow the British player to capture Derna.
- 2) **Beda Fomm** - this scenario covers the period from the fall of Tobruk until the surrender of the Italian Tenth Army. It lasts 15 turns from 24th January to 7th February 1941. The British player's aim is to capture Benghazi and to destroy the Italian army. The Italian player should try to frustrate those aims whilst holding as much territory as possible.

- 3) **Enter Rommel** - as before.
- 4) **Battleaxe** - as before.
- 5) **Operation Crusader** - as before.
- 6) **The Battle of Gazala** - as before.
- 7) **El Alamein** - as before.
- 8) **The Desert War** - this scenario now starts with the first British offensive in December 1940 until Rommel's withdrawal from El Agheila in December 1942. It lasts 736 turns from 9th December 1940 to 14th December 1942.

6. UNITS

Note that whilst "Libyan" and "Blackshirt" Divisions are nominally divisions, they are treated as brigades in the game because they are weak and therefore they require a HQ unit to supply them.

8. ORDERING UNITS

Stacking points have been reduced from 13 to 10 in a square.

11. SUPPLY

Supply range has been increased from 7 to 10 squares and from 5 to 7 diagonally.

LOADING INSTRUCTIONS

The procedure for loading a program into your computer is given in your manual. Please follow these steps for loading the program.

1. Connect the EAR socket of the computer to the EAR socket of your tape recorder.
2. Set the volume control as per your manual.
3. Adjust the tone control to maximum.
4. Type LOAD "" (Spectrum) RUN " (Amstrad)
5. Start the tape recorder. The program will RUN automatically once loaded.

Note that for the Amstrad 664 and 6128 you will need to key | TAPE first. (The | symbol is obtained by keying SHIFT @ before TAPE)

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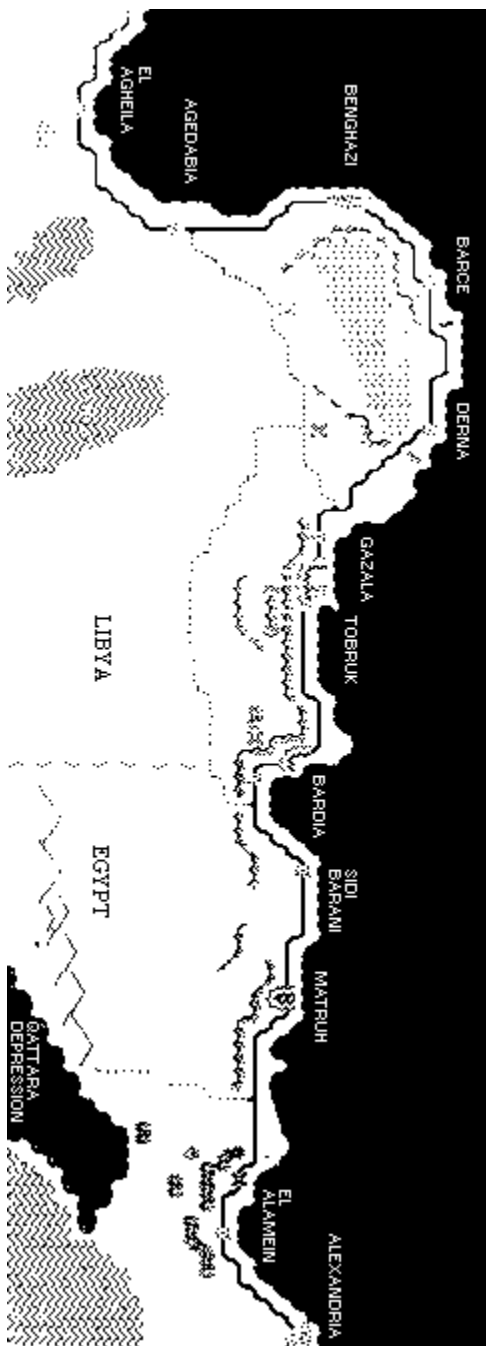
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"THE PLAYING AREA"



1.INTRODUCTION

Desert Rats is a 1 or 2 player wargame depicting the campaign in the "Western Desert" from the arrival of the Afrika Korps in the Spring of 1941, until their defeat at the battle of Alamein and subsequent withdrawal from Libya at the end of 1942.

Players may choose to fight the whole campaign or one of the major battles.

One player commands the British (Allied) forces, and the other player the German and Italian (Axis) forces. In the one player game, the computer may control either side.

2. THE MAIN MENU

Upon loading "Desert Rats" you will be presented with the main menu. There are several options available here, although not all are available at once. They are:

- **Begin New Game**
- **Continue Play**
- **Load New Game**
This loads a previously saved game, from tape.
- **Save Game**
This saves the current state of play to tape, so that the game may be continued later.
- **Alter Number of Players**
The player may change to playing against the computer instead of another player or vice versa.
- **Abandon Game**
This abandons the current game, and allows a new one to be started.

When a scenario has finished the following option is also available:

- **Extend Game**
Selecting this option enables play to continue up to the final turn of the next scenario.

e.g. You select scenario 1 ("Enter Rommel"), and play on until it finishes on the April 30th turn and if you then select the "Extend Game" option, you will be able to continue play until June 21st, which is the end of scenario 2. The winner will then be decided, according to the victory conditions for scenario 2. You may then of course extend the game further until the end of scenario 3.

3. THE SCENARIOS

When you begin a new game, you must choose a scenario to play. There are a total of six. They are:

1) **Enter Rommel**

This scenario covers the Afrika Korp's first offensive. It lasts 31 turns, from 31st March 1941 until 30th April 1941.

To win the Axis player must either capture Tobruk, or cut the road route leading to it. The British player wins if he prevents this.

2) **Battleaxe**

This is an introductory scenario, that covers the British offensive codenamed Battleaxe. It lasts 7 turns from June 15th 1941 to June 21st 1941.

To win the British player must clear the road to Tobruk, of enemy units. The Axis player wins if he prevents this.

3) **Operation Crusader**

This covers the 2nd major British offensive to relieve the siege of Tobruk. It covers the period from the beginning of the offensive until the Axis withdrawal to El Agheila. The scenario lasts for 45 turns from 18th November 1941 to January 1st 1942.

To win the British player must clear the road to Tobruk and/or inflict heavy casualties on the Axis forces. The Axis player must attempt to keep Tobruk besieged and hold his position at the Egyptian border.

4) **The Battle of Gazala**

This covers the period from the beginning of the battle of Gazala until the Afrika Korp's advance was halted at the first battle of Alamein. The scenario lasts 39 turns, from May 26th 1942 until July 3rd 1942.

To win the Axis player must capture Tobruk and advance as far forwards as possible. The British player wins if he maintains his position at Gazala, or inflicts heavy enough losses on the Axis forces.

5) **El Alamein**

This scenario covers the defeat of the Afrika Korps at the second battle of Alamein. It lasts 19 turns, from October 23rd 1942 until November 10th 1942.

To win, the British player must advance to the Libyan / Egyptian border, and inflict heavy losses on the Axis. The Axis player must try to hold his position as far forwards as possible.

6) **The Desert War**

This scenario covers the war in the desert from Rommel's first attack in the Spring of 1941 until his withdrawal from El Agheila at the end of 1942. The scenario lasts 624 turns, from 31st March 1941 until 14th December 1942.

The only way to win is to destroy all your opponent's units.

In all scenarios it is necessary to achieve the victory conditions, without taking excessive losses. If a player attains his victory conditions, but the computer judges that his losses have been too severe, then the game will be declared a draw.

4. MALTA STATUS

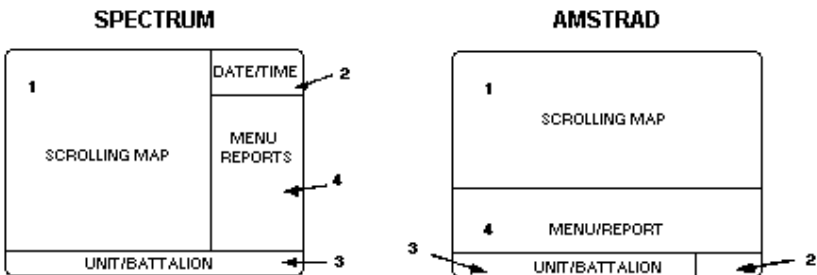
There are no skill levels as such in "Desert Rats". Instead the "Malta Status" is used to alter the balance of play.

British Air and Naval forces operating from Malta destroyed large quantities of Axis supplies greatly impairing the effectiveness of their ground forces. It is therefore possible to choose how effectively the Axis forces operate. There are three options.

- 1) **Historical.** This recreates the historical situation with regard to the Axis supplies.
- 2) **Operation Herkules.** This option assumes that the plan to capture Malta in the Summer of 1942 was successfully carried out. If this option is chosen then the Axis player will receive greatly increased amounts of supply during the latter half of 1942.
- 3) **Not used as Base.** This option assumes that Malta was not used by the British as a naval base or that the Axis powers made a much greater effort to suppress its effectiveness. If chosen, Axis supplies will increase throughout the game.

5. THE DISPLAY

The screen display consists of four sections (see diagram). Section one is a window onto the map; shown on page two over which the game is played. Section two shows the date of the current turn, and section three shows the identity of the unit being ordered. Section four is the "menu window" and is used to show options available when giving orders, and for displaying reports and messages.



6. UNITS

The various military formations that took part in the campaign are termed units. British units are coloured Blue (Spectrum) Magenta (Amstrad), German ones Black (Spectrum and Amstrad), and Italian units are Magenta (Spectrum) Green (Amstrad).

The presence of a unit is indicated, either by a symbol showing its type, or by an "unidentified unit" symbol showing that it has not been identified by the other side.

For the convenience of those playing in "black and white", Axis units are shown facing right, and filled in solid, whereas British units face left, and are shown in outline.

Units come in four sizes; divisions, brigades, battalions, and HQs. Only Italian units are division size.

Brigades, battalions and HQs may belong to a division. If so then the division name is given with the unit name in section three of the display when the unit is being ordered. The division a unit belongs to is important for supply purposes and when giving orders.

Units that do not belong to any division, are termed "independent units". Independent HQs are termed "Corps HQs".

UNIT SYMBOLS



MEDIUM TANK



ANTI-TANK



LIGHT TANK



ARTILLERY



INFANTRY TANK



HQ



RECCE



DUG IN UNIT



MOTORISED INFANTRY



FORTIFIED UNIT



INFANTRY



UNIDENTIFIED UNIT



SUPPORT GROUP

7. SEQUENCE OF PLAY

The game is played in a series of turns. Each normal turn represents one day. The order in which activities occur during each turn is as follows:-

- Each player gives orders to his units, the British player first. All units then move to carry out their orders simultaneously - both sides moving at the same time.
- After units have moved combat occurs between adjacent units. - Those units forced to retreat as a result of combat then move and the units that they were blocking may continue to move towards their objective.
- The next turn then begins.

Each scenario begins with an offensive by one side or the other. To recreate the surprise achieved, only the attacking side is allowed to give orders during the first turn of each scenario.

It would be very tedious to play the whole campaign in turns of one day each. Therefore when nothing much is happening, eg. both sides are resting in preparation for the next offensive, the turn length is increased to six days. These longer turns are termed "reorganisation phases".

Whilst the computer is executing orders, players may scroll the map using the arrow keys.

8. ORDERING UNITS

Units must be given orders at the start of each turn. If playing with two players, then only the player actually giving orders should look at the screen.

The program prompts each unit in turn to be given orders by highlighting the unit and showing the options available to it. The unit's identification will be shown at the bottom of the screen together with a symbol showing its type.

If the division's name is followed by the number of units in it, the order will apply to all the units. It is however, still possible to order the units separately (see D Divide below).

When satisfied that a unit's orders are correct key 'ENTER' to move on to the next unit. (Note that the program moves on automatically if some orders are selected). If you key 'ENTER' without changing the order or moving the cursor, then the unit will continue with its old orders. Thus it is possible to give an order that will take several turns to complete and doing so will save time when giving orders. If you move the cursor accidentally or change your mind, then moving it back over the unit, will enable the unit to continue with its old orders.

NOTE THAT FOR THE AMSTRAD a joystick can be used for the cursor movements using the fire button to end commands instead of using ENTER/RETURN key.

The following orders may be given:

- M MOVE.** This order instructs a unit to move to another location. Use the arrow keys to move the flashing cursor to the desired destination and press 'ENTER'. If a unit already has "Move" orders then moving the cursor will redefine its destination. If a unit has "Hold" or "Fortify" orders then it will automatically be given "Move" orders if the cursor is not over the unit when 'ENTER' is pressed.
- A ASSAULT.** This is similar to "Move" and the order is given in the same way. However, "Assault" instructs a unit to be more aggressive in trying to get to its objective. Thus if it meets an enemy unit, it will inflict more damage in combat than a unit with "Move" orders, although it will suffer more itself.
- H HOLD.** This order instructs a unit to stay where it is. The unit will "dig in" which will protect it in combat particularly against armour. Units with "Hold" orders also recover from fatigue. (Efficiency)
- T TRAVEL.** This order instructs a unit to move along the road at four times normal speed. It may only be given if the unit is on the road and not next to an enemy unit. Units travelling are very vulnerable to attack, and may not themselves attack. To give the order, press "T", then move the cursor to a destination on the road. If a unit already has "Travel" orders, and you wish to change its destination, then you must select the "Travel" order again by pressing "T".
- P GO TO PORT.** One British unit per turn, may move between Alexandria and Tobruk, or vice versa by sea. This order instructs a unit to do so. It may only be given if Tobruk is occupied by a British unit.
- F FORTIFY.** This order instructs a unit to strengthen its position by digging fox holes, laying mines etc. The longer a unit is at this task the more effective will be the result. Units may only fortify if they are already "dug in" ie. have selected "Hold" the previous turn. Tank units may not fortify. If a unit moves then it loses all benefits from its fortifications.
- D DIVIDE.** This command does not count as an order but causes a unit that is stacked with other units of its division to be split off temporarily, so that it may be ordered separately.
- R REPORT.** This command does not count as an order but gives a report on the current unit. See below for details.

NOTE: It is possible to have more than one unit in a square. This is referred to as stacking. Divisions count as 7 stacking points, brigades as 3 and HQs and battalions as 1. It is possible to have up to 13 stacking points in one square. As a rule of thumb, players should assume that they can stack all the units of one division together.

9. REPORTS

When a report is requested, the following information is given:-

STR	Strength. This gives an indication of the unit's strength either in men or in tanks.
MPS	Moves per Turn. This gives an indication of how far a unit may move. The number given is the number of squares it may move in one turn, over clear terrain. It will go slower over rough terrain.
SUP	Supplies. This gives an indication of the supply level of the unit. Units with very low supply may not attack, and units with none suffer double damage when attacked. When a $\sqrt{\quad}$ is shown the unit is able to receive supplies.
MOR	Morale. This gives the morale of a unit. The higher it is, the less likely it is to retreat after combat.
A/M	Attack Modifier. This is the unit's attack modifier. The higher it is, the more effective the unit is at attacking.
EFF	Efficiency. This is the unit's efficiency level. It is reduced due to fatigue, when a unit is in combat. Some units enter the game with low efficiency level, to reflect lack of training. A unit may recover from fatigue when it has "Hold" orders. (ie. it is resting or training).
FRT	Fortification. The number given. is the number of days that a unit has been "Fortifying" for, ie. the effectiveness of its defences.

In addition the report shows for each side the number of supply points being received per turn, together with the number of replacements available in men and tanks. These are used to replace losses. (Replenishments for Germans and Italians are shown separately).

10. COMBAT

Combat occurs between units that end their movement adjacent to each other. For each attacking unit, the computer flashes the attacked units and makes a sound the length of which is related to the greatest damage done to any of the attacked units. However, if a unit is dug in it will not attack the enemy units which are also dug in.

The effectiveness of an attack is determined by a number of factors. a) The unit types of the defender and attacker; b) their strengths; c) their orders (eg. move, assault; d) the terrain; e) the attacking unit's attack modifier and efficiency level; f) the defending unit's supply level (ie. units with no supplies take double damage); g) whether the defender is dug in, or fortified); h) the other units stacked with the defending units; i) the effectiveness of an attack is also reduced if the attacking unit is on an escarpment square and attacking uphill (ie. away from the sea).

If sufficient damage is inflicted on a unit in combat, it will have to retreat.

11. SUPPLY

Supply played an important part in the Desert War, not only was the outcome of a battle decided by who had the greater reserves of fuel and ammunition, but individual units often ran out of petrol at inconvenient moments. To reflect this the supply rules in "Desert Rats" are quite complex.

Each unit carries supplies with it and these are used up when a unit moves, fortifies or attacks. In addition each side has a pool of supplies off the map from which units may replenish their own stocks.

There are two separate sets of rules for replenishing supplies, one for battalion and brigade sized units and another for HQ units and division sized units which contain their own divisional HQs.

Brigades and Battalions

These units can only draw supplies if they are next to, or overlapping an HQ unit. Any unit may draw supplies from a Corps HQ unit. In addition, independent units may draw supplies from any HQ. Otherwise units may only draw supplies from their own divisional HQ.

Divisions and HQs

The supply rules for Divisions and HQs are quite different to those for Brigade and Battalions. In particular, no HQ may draw supplies from another HQ.

These units draw supplies by being within seven squares (five diagonally) of a road square, provided that the road is clear of enemy units all the way back to the edge of the map. (Left hand edge for Axis units, and right hand edge for British units). Supplies can be blocked if an enemy unit is between the unit and the road.

Supplies may also be drawn from a track, in the same way as from a road, provided that a clear route exists back along the track to the road, and thence to the map edge.

Supplies may also be drawn from a port in the same way as from a road square. Benghazi and Tobruk are ports.

In all the above cases, in order to draw supplies, a unit must be on the same vertical, horizontal or diagonal line, as the supply source. It may sometimes be necessary to move units' positions a little to get them in supply. A tick against Sup in the Report will indicate that unit may receive supplies.

Transporting the supplies also uses them up. The further along the road a unit is, the greater will be this loss, and the less will be available to the unit. Losses of supplies going through a port, are greater than for those going by road. Usually supplies are drawn from the off map pool.

The amount of supplies used by a unit are dependent on its size, and its actions. A division uses more supplies than a brigade, which in turn uses more than a battalion or HQ. Units use supplies when they move, fortify or engage in combat. When in combat units with "Assault" orders use twice as many supplies as those with "Move" orders. Units with "Hold" orders use very few supplies in combat. Units with insufficient supplies may not attack.

12. REINFORCEMENTS, WITHDRAWALS and REPLACEMENTS

From time to time, players will receive new units, and old ones will be withdrawn. This will happen automatically, although warning will be given of an impending withdrawal.

Replacements are used to replace losses suffered in combat. They are divided into two types, armour for tank units, and infantry for other types.

Replacements are distributed automatically to under strength units, but only units with "Hold" orders may receive them. If enough replacements are accumulated, then previously destroyed units may be rebuilt. Players receive replacements every month.

Other changes may happen to units during the course of the game when playing scenario 6, or an extended scenario. A unit's type may change as may its designation and the division it belongs to. These changes reflect historical ones although they have been simplified to avoid confusion to players.

13. TERRAIN

There are many different types of terrain in "Desert Rats". Any symbols not shown on the terrain chart, are purely decorative.

Sea, salt marsh, and steep escarpment squares, are impassable, whilst escarpment, ridge, and rough squares slow down movement, and also give some protection in combat. Escarpments provide the best protection of the three, but to benefit, a unit must be behind the escarpment, not on it.

The best protection is provided by a fort or fortification square. A unit must be actually on the square rather than behind it to get the benefit. Forts and fortifications around some towns are considered the same, but provide different benefits to the "fortify" order.

TERRAIN SYMBOLS



ESCARPMENT (RED)



STEEP ESCARPMENT (BLACK)



ROUGH (RED)



RIDGE (BLUE)



FORTIFICATION (BLACK)



FORT (BLACK)



ROAD (BLACK)



TRACK (BLACK)



TOWN (BLACK)



SALT MARSH (WHITE)



SEA (BLUE)

14. UNIT TYPES

The following is a brief resume of the types of units in the game.

Medium Tanks	These are very powerful, both against other tanks and particularly against infantry. They are however much less effective against units that are dug in. Tanks are vulnerable to HQs, artillery and anti-tank units.
Light Tanks	These are similar to medium tanks, but slightly less powerful and more vulnerable. They are slightly faster.
Infantry Tanks	These are very slow, and not particularly powerful against other tanks, but are even more powerful against infantry. They are hard to kill in combat.
Recce	Recce units do little damage in combat, and take very little themselves. They are very fast. They are useful for cutting off retreats, cutting supply lines, and generally being a nuisance. However, they will usually retreat when attacked.
Motorised Infantry	These are not particularly powerful when attacking and, if not dug in, are very vulnerable to tanks. They can however fortify their positions, making them difficult to capture. They are better than tanks at attacking fortified, or dug in positions.
Foot Infantry	These are similar to motorised infantry, but move more slowly.
Support Groups	These are a mixture of infantry and artillery. They are more effective against tanks than infantry units, but are less effective against infantry.
Artillery	Artillery is useful against tanks, but vulnerable to attack by infantry.
Anti-Tank	Anti-tank units are effective against tanks, but not against anything else. They are vulnerable to attack by infantry.
HQs	These represent, not only administration units, but also a division's artillery. They are thus useful against tanks. They are very vulnerable to attack and should always be supported.

15. PLAYER'S NOTES

As with any game of any complexity it requires experience to master the tactics needed to play "Desert Rats". However, a few general points are listed that should help players through their first games. Ideas for strategies can be gleaned from the historical notes.

One of the most important points for the players to master is deciding how to go about attacking the enemy. The obvious method would be to order your units to the same square as is occupied by the enemy unit you wish to attack. However, in many cases this is not a good approach, because the enemy may well have moved away before your units arrive, and your attack will fail. A better method is to decide on an "axis of advance" for your units, and set their objective at some point behind the enemy lines. This will allow your units to pursue if the enemy retreats and if it holds its ground to attack. If it is forced to retreat or destroyed, then your units will be able to continue advancing behind enemy lines. Adopting this approach will also speed up the game as units can continue on the same axis for several turns, negating the need to give them new orders each turn.

Another useful strategy which the attacker should adopt is to make good use of the "assault" order. By doing so the effectiveness of the attacks will increase and result in resistance being overcome quickly. However, using the "assault" order all the time will not only be expensive in supply terms, but will leave your units rather vulnerable if met by unexpected resistance, or a counter-attack.

A defending player should not attempt to be too active but should concentrate his units to make each stack as strong as possible, making use of the benefits of being dug in, particularly if the unit is infantry when tanks are about to attack. Let the attacker use up his supply and be on the alert for opportunities to counter-attack units that are separated from the main attacking force or who are running short of supply.

Whether attacking or defending, it is vital to keep a close eye on the supply situation. Particularly important is to prevent enemy units from cutting your supply lines. If this occurs, your operations will quickly grind to a halt. Recce units are particularly effective at cutting supply lines and can often divert much larger enemy forces. If any substantial enemy forces get behind your lines, the forces cut off could be in serious trouble as they may not be able to dislodge it before their supplies run out.

The general level of supply in your army is also important especially when conducting an offensive. If supplies are running short then it is wise to get your units back to safe positions rather than let them be stranded on the battlefield where they will be sitting ducks for enemy counter attacks. It is best to avoid attacking until all units have a reasonable level of supply.

Players should also bear in mind, that "fortifying" uses supply. If many units are fortifying, then this can be a drain on your supplies. Since any benefits are lost if a unit moves it is usually not worth fortifying, whilst waiting to amass sufficient supply for an offensive. The Axis player receives less supplies than the British player and so must use them with particular care.



"The irrepressible humour of the British soldier is well illustrated by the sign painted on a tank transporter"

16. HISTORICAL BACKGROUND

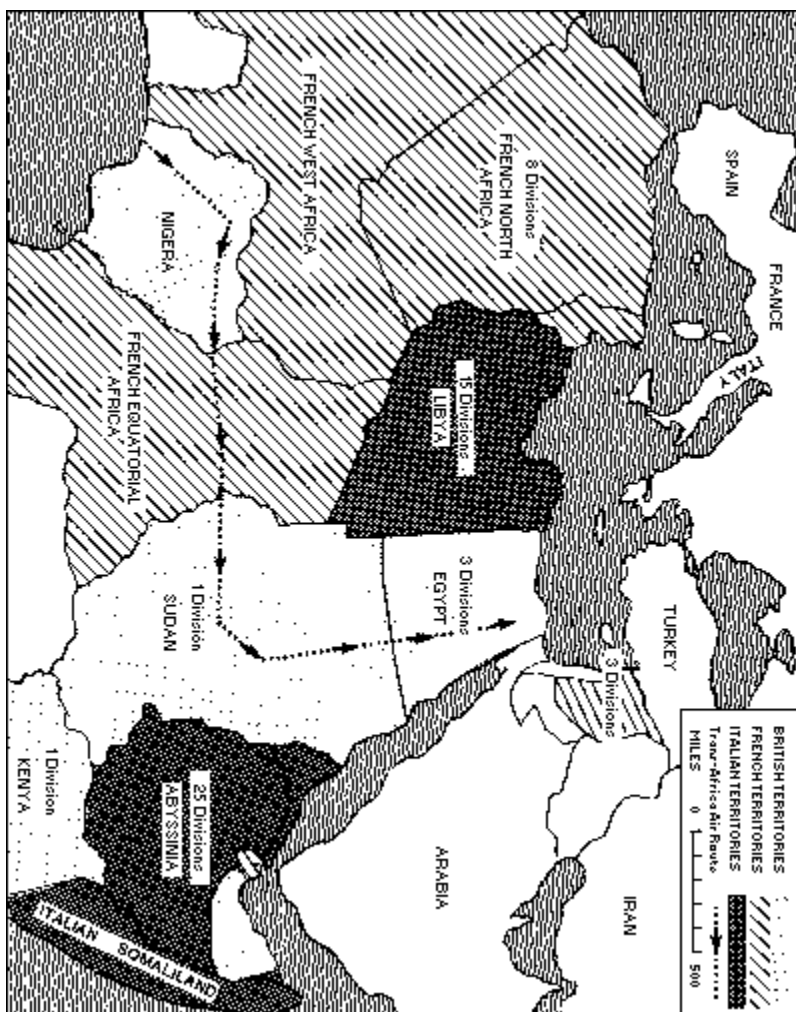
The North African Campaign was important not only because of North Africa's strategic situation, but also because it enabled Allied Forces and Commanders to gain valuable battle experience for the European Theatre and enabled Operation Overlord to be successfully executed in 1944.

When Britain declared war on Germany on 3rd September 1939 as a result of Germany invading Poland, the North African situation was as illustrated on map opposite. At that time the Italians were neutral but were favourable to Germany. France and her North African possessions were Britains' most important ally. The "Phoney War" went on until 21st April 1940 when Germany invaded Norway. Then in June as a result of France falling the balance of power in North Africa changed. On 11th June Italy joined with Germany and declared war on the United Kingdom and on 24th June the French Vichy Government signed an armistice with Germany, and Algeria, Morocco, Tunisia and Syria all followed suit. Only French Equatorial Africa declared for the Free French under De Gaulle. (This enabled the Allies to supply their forces in North Africa from the Gold Coast and Nigeria by using the Trans-African route (see map opposite). In August 1939 Germany signed a Non-Aggression Pact with the Russians, thus the way was clear for the Germans to attack the Middle East via the Balkans and Turkey.

The initial skirmishes by the British with the Italians on land and sea were very successful inflicting losses of 3,500 men in the first 3 months. Mussolini was under intense pressure from Hitler to invade Egypt and on 13th September he ordered Graziani to attack. The small British frontier force fell back and allowed Graziani to advance to Sidi Barrani. Graziani was reluctant to advance further as his supply lines were fully stretched.

The Allies used October and November in which to consolidate and plan the counter attack. The Royal Navy scored a spectacular success at Taranto disabling a large number of the Italian ships. These losses so demoralised the Italian Navy that they then ceased to be a threat to the Royal Navy.

In December 1940 the British counter attacked at Sidi Barrani. The attack was a complete success and the Italians were driven back to Sollum. The attack came as a surprise to the Italians and was carried out in text book style. Later they fell back to Bardia and Tobruk. Further successes on land were achieved by the Allies in January 1941. The Australians breached the Italian defences of Bardia and the town fell and 40,000 Italian prisoners were taken. This success was followed up in early February 1941 by the 6th Australian Division and the 7th Armoured Division (the Desert Rats) taking Benghazi in the West of Libya. These two Divisions had overwhelmed the nine Divisions of the Italian Tenth Army!



NORTH AFRICAN THEATRE

There was a price to be paid for the successes and some historians state that the North African Campaign would have been shorter if the British had taken more time to demolish the Italians. When Sidi Barrani fell Hitler authorised "Mittelmeer" the intervention of the Luftwaffe in the Mediterranean. Later when Bardia fell he authorised "Sonnenblume" (Sunflower) the transfer to North Africa of the 5th Light Motorised Division which was commanded by Rommel. In January as a result of Mittelmeer the Royal Navy had lost their supremacy in the Mediterranean. The Luftwaffe so seriously damaged "H.M.S. Illustrious" the aircraft carrier, that she had to flee through the Suez Canal to be repaired in the U.S.A. Malta was no longer a safe haven to have one of the Royal Navy's capital ships repaired.

Meanwhile in Abyssinia (Ethiopia) British and Allied Troops fought a determined campaign and although outnumbered 10 to 1, obtained the Italians surrender by 19th May 1941. This success enabled much needed British Divisions to be diverted to North Africa.

However in spite of the British victories the balance of power in North Africa swung against the Allies in March when Sonnenblume was launched and four Allied Divisions were transferred to Greece to counter the Balkan threat.

17. ENTER ROMMEL - 31st March to 30th April 1941

In March Hitler launched Operation Sunflower. German troops under the command of Erwin Rommel landed in Tripoli. In order to impress the Allies Rommel held a huge march past in which nearly every German was on parade, some groups marching past the saluting base more than once! Rommel also had 200 dummy tanks made of wood and fixed to old car chassis, strategically placed in the desert to confuse the enemy. This was however all in vain as the Allies had no agents in Tripoli and therefore the first reports of Germans were not until a border reconnaissance unit saw some eight-wheeler trucks near El Agheila some weeks after they had landed. Even so the Allies were reluctant to accept that the Germans had landed a substantial number of troops from the Afrika Korps and under pressure from Churchill, transferred four divisions from North Africa to Greece in March.

Later in March further German troops were landed at Tripoli including 8,000 men of the 5th Light Division equipped with powerful Panzer III and IV tanks. At the end of March Rommel attacked and took El Agheila. This attack was followed up on 31st March by taking the well defended Mersa el Brega gap by attacking the British right flank at night with a well trained machine gun battalion. The professionalism of the Germans surprised the British Commanders who decided to withdraw their troops from Benghazi. Rommel broke all the rules of logistics and split his forces. One group headed across the desert to Mechili and the other headed along the coastal road to Benghazi.

By 7th April the Germans had taken both Derna and Mechili. What started as an orderly withdrawal ended in a rout. A week later on 15th April the Allies were back where they had started holding a defence line at Sollum, the border between Egypt and Libya which was marked by a 12 ft barbed wire fence. However, in spite of Rommel's blitzkrieg tactics, he could not dislodge the Australians holding Tobruk and he was to fail again when he made another attempt on 30th April. Tobruk was to remain a thorn in his side for the whole of the North African campaign.



"Field Marshal Rommel"

18. OPERATION BATTLEAXE - 15th June - 21st June 1941

Allied defeats in both Greece and Crete resulted in losses of heavy equipment and men. Nevertheless 16,500 men were brought back to Egypt from Greece.

By June, Churchill was thirsting for a decisive victory on the battlefield. He personally supervised the transportation of 180 Heavy Matildas and 127 Cruiser tanks, insisting that they were sent using the dangerous Mediterranean route. The operation was called "Tiger" and the tanks became known as "Tiger Cubs". In the event only one ship was sunk and 250 Tiger cubs got through to Alexandria. Churchill was getting accurate reports of Rommel's supply difficulties from Ultra (a section of British Intelligence which had broken the German code and therefore was able to decode all Rommel's messages). Churchill therefore urged General Wavell to launch Battleaxe as soon as possible using the 250 "Tiger Cubs" which he had just received. The tanks had not arrived in very good shape and it took some time to make them operational. Therefore very little time was left for the tank crews to train on the new equipment

On 15th June Operation Battleaxe was launched by the British. A regiment of Matildas with the 4th Armoured Brigade attacked the Halfaya Pass while the 7th Armoured Brigade attacked Point 206 and Fort Capuzzo and the 7th Armoured Division attacked the Hafid Ridge. The Germans had heavily fortified the Halfaya Pass and dug in a battery of eighty-eight guns. The Matildas were picked off like ducks in a fairground shooting range. Meanwhile the Matildas in the 7th Armoured Brigade fared better against eighty-eights at Fort Capuzzo and the constant Stuka attacks and finally overran the German position at Fort Capuzzo. Meanwhile the 7th Armoured Division was making steady progress against the garrison on Hafid Ridge in spite of heavy losses in Cruiser tanks. The garrison on Hafid Ridge was nearly out of ammunition when they were reinforced by the 5th Light Division which resulted in the 7th Armoured Division withdrawing to the South.

The next day the 15th Panzer Division attacked the British at Fort Capuzzo and the 5th Light Division pressed their attack towards Sidi Omar. In both actions the German losses were heavy but the Germans had managed to counter the Allied attacks and push the British back.

On the 17th June the 5th Light and the 15th Panzer Divisions pressed their attacks towards the Sidi Suleiman area. The 22nd Guards Brigade and the Matilda brigade who were holding Fort Capuzzo decided to withdraw to avoid being encircled.

Fortunately the Panzers did not attack the Matildas as they withdrew and most of the tanks got through to Mersa Matruh. The Allies were back where they had started. Operation Battleaxe had failed. The British had lost 99 tanks and the Germans had lost only 12.

19. OPERATION CRUSADER - 18th November 1941 - 1st January 1942

Crusader was a very complex battle. It was fought in a vast gravel desert area of 100 x 40 miles. Large escarpments parallel with the coast traverse this area which rise in steps from the coastal strip to the desert plateau. There was one road via Balbia between the coast and the Northern escarpment and a desert track Trigh el Capuzzo which ran between the Northern and Southern escarpments. There was no clearly defined front line and the British forces criss-crossed each other fighting individual battles. The Generals on both sides found great difficulty in co-ordinating their troops. Communications were poor because radio sets suffered from interference from electric storms and the range of sets was reduced at dawn and dusk. At the time the British were planning Operation Crusader Rommel was also planning a major offensive against Tobruk and was moving his forces into position at the same time as the British were moving their XXX Corps across the Libyan frontier at Fort Maddelana. The Allied tanks were disguised as trucks and because the bad weather prevented reconnaissance the British reached their objective without alerting the Germans. The next day the British advance continued to their objective at Sidi Rezegh.

The Allies achieved some successes on the first day. The 22nd Armoured Brigade destroyed 34 Italian tanks with a loss of 25 of their own, the 7th Armoured Brigade overran Sidi Rezegh's airfield destroying 19 Axis aircraft, the 4th Armoured Brigade held off the 21st Panzer Division's 5th Regiment south of Bardia.

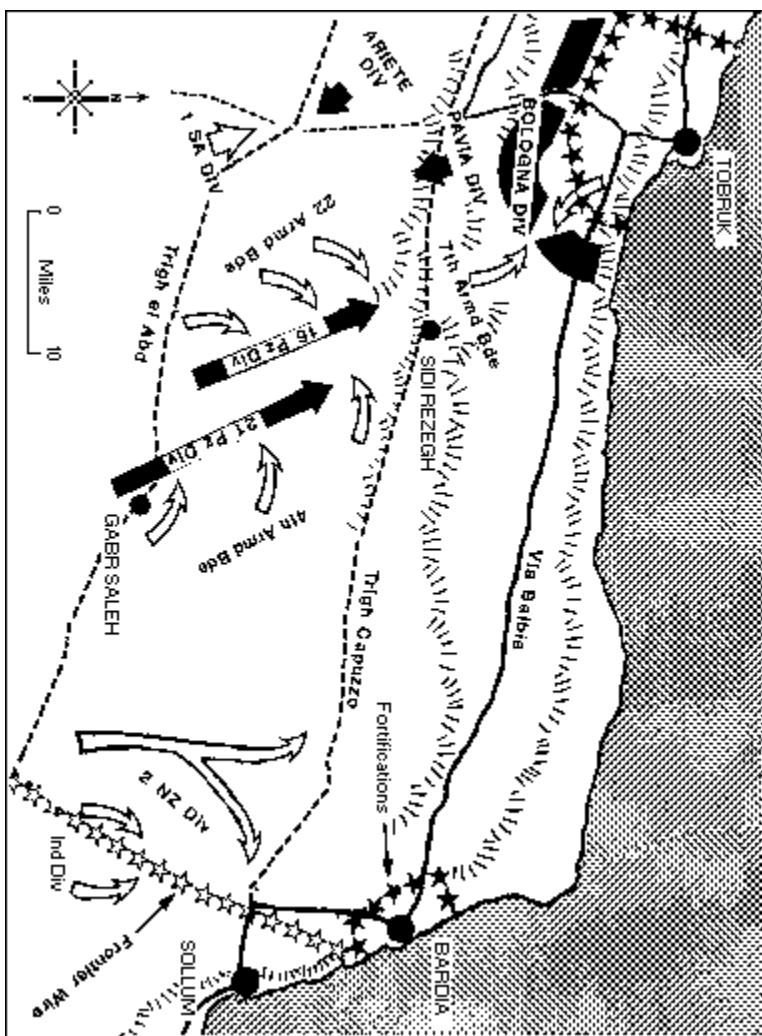
During the 20th November the British built up their forces at Sidi Rezegh and prepared for the breakout from Tobruk. Cruwell (Rommel's No.1) decided to stage an attack on the 4th Armoured Brigade at Gabr Saleh with the 15th Panzer Division supported by the 21st Panzer Division when it had finished refuelling. The 22nd Armoured Brigade came too late to support the 4th Armoured Brigade and the battle resulted in the losses of 26 more British tanks. The position of the 7th Armoured Division at Sidi Rezegh was being made uncomfortable by the Afrika Division which had infiltrated along the escarpment which overlooked the airfield.

On the 21st November Rommel withdrew his 15th and 21st Panzer Divisions from Gabr Saleh to attack the 7th Armoured Brigade at Sidi Rezegh to stop the British breaking out of Tobruk. (See map on page 23). The Scobie breakout from Tobruk started successfully but could not be supported by the 7th Armoured Brigade which was under attack. During the day the 7th Armoured Brigade held on but suffered heavy losses. The 21st Panzer Division virtually destroyed the 7th Hussars which lost all but 10 of their tanks. The 22nd and 4th Armoured Brigades pursued the 15th and 21st Panzer Divisions to Sidi Rezegh. Thus the stage was set for a major battle, the outcome of which would decisively influence the North African Campaign.

On the 22nd November the Germans overran the airfield at Sidi Rezegh. The Allied Forces retreated south. British tank losses were severe and by the end of the day the Germans had won a numerical superiority in tanks. The following day the Germans consolidated their position further by encircling the 5th South Africa Brigade and the remnants of the 22nd and 7th Armoured Brigade. Cruwell formed up the Panzer Divisions to the South of the 5th South African Brigade to stage the Battle of Tottensonntag. However, he suffered many losses before the attack began as the 1st South Africa Brigade engaged him in probing attacks. Nevertheless Cruwell achieved his objective and of the 5,700 South African Brigade only 2,300 managed to escape back to the South African Division. The Germans suffered heavy losses of tanks and senior officers; 72 out of 162 tanks were destroyed.

Cruwell's success encouraged Rommel to launch his most imaginative attack on the 24th November. The 21st and 15th Panzer Divisions were instructed to "Dash for the Wire"; ie. to attack Sidi Omar on the Egyptian border and relieve the Axis forces in Sollum and Bardia, thus cutting off the Allied troops from their supply lines. He had over-estimated the British losses and he was to fail in his objective. As the German advance passed between the Allied Forces they suffered losses from attacks by the 1st South African Brigade in the South and the 7th Armoured Brigade in the North. Although the column passed through many of the British Headquarters which were situated on the Trigh el Abd very few losses were suffered by the astonished Allied Forces. The RAF were also successful in depleting this column which did not have air support. By 26th November little had been achieved by the German Panzer Divisions and as they were nearly out of fuel they withdrew to Bardia to refuel. Meanwhile the 2nd New Zealand Division took Belhamed (5 miles Northwest of Sidi Rezegh) from the Afrika Division. As the 21st Panzer Division was no longer a threat to Scobie's Tobruk Garrison, he took the opportunity of consolidating the breakout and took Ed Duda (5 miles North of Sidi Rezegh) joining up with the forces of the 2nd New Zealand Division.

On the 27th November Rommel decided that he would use the 15th and 21st Panzer Divisions to stop the breakout from Tobruk. The Panzer Divisions were sent along the Trigh Capuzzo to retake Belhamed and El Duda. This they achieved but suffered heavy casualties. On the 29th November the 15th Panzer Division encircled Sidi Rezegh and drove the 6th New Zealand Brigade out. The Afrika Korps were victorious for the second time in seven days on the battlefield of Sidi Rezegh. Nevertheless the victories had been won expensively and when Rommel was told that he could not expect further reinforcements or supplies of equipment and stores before the end of December, he decided that he had no alternative but to withdraw to El Agheila (the frontier between Tripolitania and Cyrenaica). The withdrawal started on the 8th December and was completed by the 1st January 1942. The Allies had lost the battle on the battlefield but won the battle overall on logistics.



CRUSADER

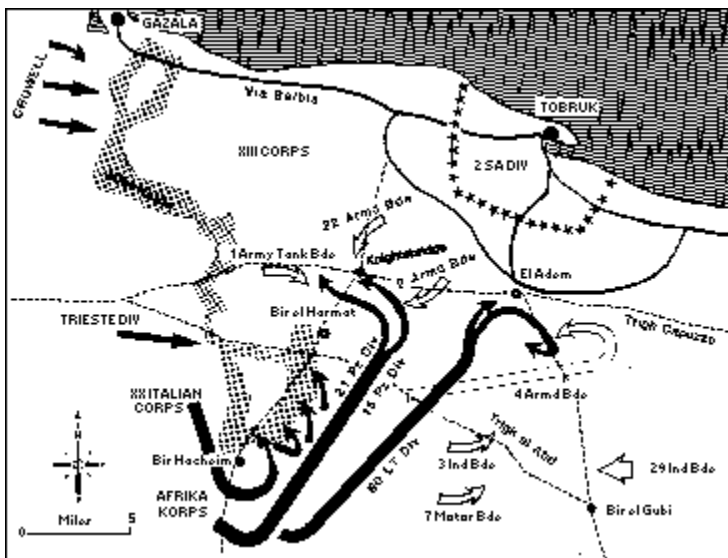
AFRIKA KORPS WITHDRAWAL FROM GABR SALEH - 21st Nov 1942

20. BATTLE OF GAZALA - 26th May 1942 - 3rd July 1942

Summary of Equipment on 26th May 1942

	Allies		Axis Forces
Medium Tanks	424	German	282
Light Tanks	425	Italian	228
		German	50
Aircraft			
Forward Area	190		497
Within Range	749		1000

The Allied Forces had fortified the "Gazala Line" with extensive minefields along the line with "boxes" at intervals of well dug in troops supported by artillery. Rommel conceived his operation "Venezia". The plan was for the 15th and 21st Panzer Divisions supported by the 90th Light Division and the Italian Ariete Division to sweep 60 miles southwards to Bir Hacheim and thereby avoid the fortified Gazala Line. On 27th May the operation started and the Axis Forces penetrated deep behind the Allied lines. (See map opposite). The 15th and 21st Panzer Divisions nearly reached Via Balbia before they again turned South to Bir el Harmat. The 90th Light were stopped short of El Adem where there was a RAF airfield. The Allied response was to move troops to close the southern route to ensure that the Germans would be cut off from their supplies. The next day Rommel ordered the 90th Light and the Ariete to give up their positions and move towards Bir el Harmat. The Pavia and Trieste Divisions of the Ariete were to clear the route through the mine fields, so that Rommel could use the Trigh Capuzzo and Trigh el Abd to supply his forces from the West. Rommel's objectives were mostly achieved but with heavy losses of tanks and men. The British Commander Richies response was operation "Aberdeen" which was intended to take the initiative from Rommel by using the 22nd and 9th Armoured Brigades to attack the Axis position in the Cauldron (which consisted of a series of high ridges to the North of Bir el Harmat) in order to plug the gaps in the Gazala Line which had been made by the Trieste Division. Meanwhile Rommel had sent the 90th Light Division west to Bir el Harmat to consolidate his tanks in the Cauldron. The 90th Light Division met strong resistance from the 4th Armoured Brigade and they had to "hedgehog" behind their anti-tank guns to achieve their objective. The Ariete also reached Bir el Harmat and set up an anti-tank screen to cover the supply column along the Trigh el Abd. The Battle of the Cauldron was a British military disaster. It commenced at 0250 hrs. on 5th June and the 10th Indian Brigade attacked the strongly defended Cauldron. Their attack was co-ordinated with that of the 32nd Army Tank Brigade from the North on the 21st Panzer Division. Both attacks failed and heavy losses of tanks, equipment and men resulted. Rommel capitalised on the situation and sent the 15th Panzer Division South East through a gap in the British minefields to attack Bir el Harmat which he had given up only days before to withdraw his forces into the Cauldron and overran the two Divisional Headquarters and the two Indian Brigade Group Headquarters. Control broke



GAZALA - 27th MAY 1942

down and Rommel again inflicted serious losses on the Allied Forces. The RAF and Luftwaffe were only able to give limited support to their forces in this battle due to the difficulty in identifying the enemy as both sides were using captured equipment.

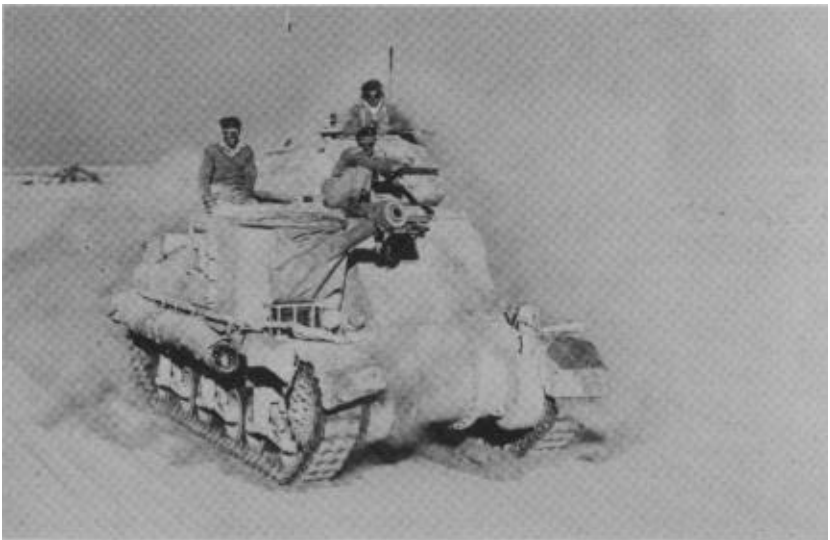
The decisive "Battle of Knightsbridge" opened on 12th June. The Commander of the 2nd and 4th Armoured Brigades ran into the 90th Light and had to hide to avoid capture, thus leaving the 2nd and 4th Armoured Brigades without precise orders and this resulted in them being heavily mauled by the 15th and 21st Panzer Divisions. The 22nd Armoured Brigade dashed Eastwards to assist but arrived too late. The British suffered losses of 100 tanks and again found themselves outnumbered by the Axis tanks.

Still indecision plagued the British forces and the order to withdraw the XIII Corps from the Gazala Line was delayed 24 hours. What started as a withdrawal ended in a rout. An old contingency plan Operation "Freeborn" was resurrected and adapted. The 1st South Africa Division was to withdraw Eastwards towards Tobruk whereas the 50th Division was ordered to break out southwards through the Italian lines. The withdrawal started well and most of the 1st South Africa Division had cleared the minefield before Rommel realised what was happening and sent his 15th Panzer Division North to intercept the 1st South Africa Division. Most of the 50th Division successfully broke through the Italian lines. At first the British Commanders attempted to hold a line West of Tobruk but by 18th June most of the British Forces were in retreat without sufficient tanks with which to fight a rearguard action. Thus the British were forced to retreat East of Tobruk and the Garrison of 32,000 in Tobruk were again cut off from the main British Forces. Rommel followed up his two successes on the 18th June and two days later he

"GERMAN & BRITISH TANKS"



"A German tank advancing during the Western Desert fighting - June 1942"



"A General Grant tank moving up through a cloud of dust - 29.10.1942"

turned the 21st and 15th Panzer Divisions from their advance eastwards, 180° to attack Tobruk together with the Ariete and Trieste Divisions. By 21st June after fierce fighting Tobruk had fallen yielding valuable stores including 500,000 gallons of gasoline. A brilliant manoeuvre executed at speed had caught the British Commanders off their guard! The Allied Forces continued to withdraw and Ritchie decided to hold a line from Mersa Matruh southwest along the Siwa Track. Defences were prepared and minefields hurriedly laid. By the end of June Rommel was ready to mount another major offensive. He decided to use the same tactics to attack Mersa Matruh as he had used to take Tobruk. He decided to drive a wedge between the forces holding Mersa Matruh and the rest of the Allied Forces. On 27th June he used his Afrika Korps and the 90th Light Division and attacked astride of the Northern Escarpment. The 90th Light then swept North to the coast to cut off the 50th Division. Meanwhile the 21st Panzer Division swept between the Northern and Southern Escarpments turning southwards at Minqar Qaim to attack the 2nd New Zealand Division. The 15th Panzer Division also proceeded eastwards but was checked by the 4th and 22nd Armoured Brigades. The Allies fiercely resisted but due to poor communications the British Commander Goff concluded that the battle was going against the Allies and ordered the Allied Forces to retreat to the Alamein line. Fortunately the 10th Indian Division was able to break out of Mersa Matruh and the 50th Division fought their way Eastwards to rejoin the Allied Forces.

21. CURTAIN RAISER - 13th August 1942 - 3rd September 1942 (Not covered by a separate scenario)

Montgomery took command of the Eighth Army on 13th August 1942. He immediately set about strengthening the defences, visiting troops in each part of the battlefield to improve morale. He scrapped all contingency plans for further withdrawal and deployed transport vehicles from the front line to the rear. He decided that the gap between the high ridges of Alam Nayil and Alim el Halfa should be fortified, thus providing natural defences from an attack from the South. By 30th August he had deployed the 22nd Armoured Brigade between the ridge with the 23rd Armoured Division held in reserve.

His strategy was to build up the anti-tank guns along these ridges and wait for Rommel, picking off his tanks one by one! He also set in motion the development of the X Corps which would be a rival to the Afrika Korps consisting of three Armoured Divisions and one Infantry Division to form a "Corps de Chasse".

Air reconnaissance on the 30th August detected the forming up of a large force. The 90th Light Division to the North, the Italian XX Mobile Corps and the Ariete Divisions in the centre with the Afrika Korps including 200 tanks of the 15th and 21st Panzer Divisions, in the south. As Montgomery had predicted this force made its attack across the Southern minefield defended by the 7th Armoured Division and intended to swing north around the Alam el Halfa ridge. The battle started at 0200 hrs. on 31st August. The 7th Armoured Division resisted strongly and delayed the 15th and 21st Panzer Divisions sufficiently so that they were behind their schedule. They swung North towards Alam Halfa instead of around it. At 1530 hrs. the German Panzer Divisions closed on the hidden anti-tank guns of the 23rd Armoured Brigade. The Germans suffered very high losses, but as there were so many tanks some tanks broke through and overran several gun positions. As soon as Montgomery was certain that all the Axis Forces were

committed he released the 23rd Armoured Brigade to support the 22nd. The Panzer Division had been so effectively countered that they withdrew from the battlefield to leaguer. During the night the RAF carried out extensive bombing on the Axis Forces causing further casualties. Montgomery deployed the 2nd New Zealand Division Southwards to close the gap and the 7th Armoured Division were ordered to work their way eastwards along the top of the Qattara Depression to encircle the Axis Forces. He also deployed some of the XXX Corps Forces holding the northern sector of the line to form a reserve force.

The 1st September opened with the 21st Panzer Division short of fuel and the 15th Panzer Division trying to edge its way round the 22nd Armoured Brigade. In so doing it clashed with the newly formed 8th Armoured Brigade which was annihilated by the anti-tank screen of the 15th Panzer Division.

The RAF continued its intensive bombing of the Axis Forces throughout the day and the following night. Rommel decided to withdraw his forces which by 4th September had managed to fight their way back westwards. Although losses of tanks and planes by the Allies were more than those suffered by the Axis Forces, the Battle of Alam el Halfa was significant because it demonstrated that the British could halt Rommel.

Malta had been resupplied with aircraft in July and now provided effective air cover for supply convoys to the British and more importantly were able to stop the Axis convoys from supplying Rommel. The British could therefore afford losses but the Germans could not. Montgomery also demonstrated to his troops that if they had the will they could beat Rommel.



"The 8th Army Commander watches the breakout at El Alamein from the turret of the Grant tank in which he uses to travel around the battlefield"

22. EL ALAMEIN - 23rd October - 10th November 1942

In spite of El Alamein being regarded as a triumphant victory and a watershed in the fortunes of the Allies ("before Alamein we never had a victory. After Alamein we never had a defeat" - Churchill) the battle was logistically won by the Allies before the first shot was ever fired. Whereas Rommel was being starved of supplies and equipment, Montgomery was receiving 2,500 tons of equipment, ammunition and supplies each day using the railway from Alexandria. His strategy was therefore to launch an offensive which would last at least 12 days knowing that by that time Rommel would be out of fuel and ammunition! Montgomery also had a 2:1 advantage in equipment, tanks and men over the Axis forces.

The line held at El Alamein was fortified along its 40 miles between the coast at El Alamein and the Qattara Depression in the south. When the Allies first fell back onto this line, the fortifications were far from satisfactory but Montgomery soon set about strengthening the Allies position. Between the Axis and Allied position there were over 500,000 mines! (See map opposite).

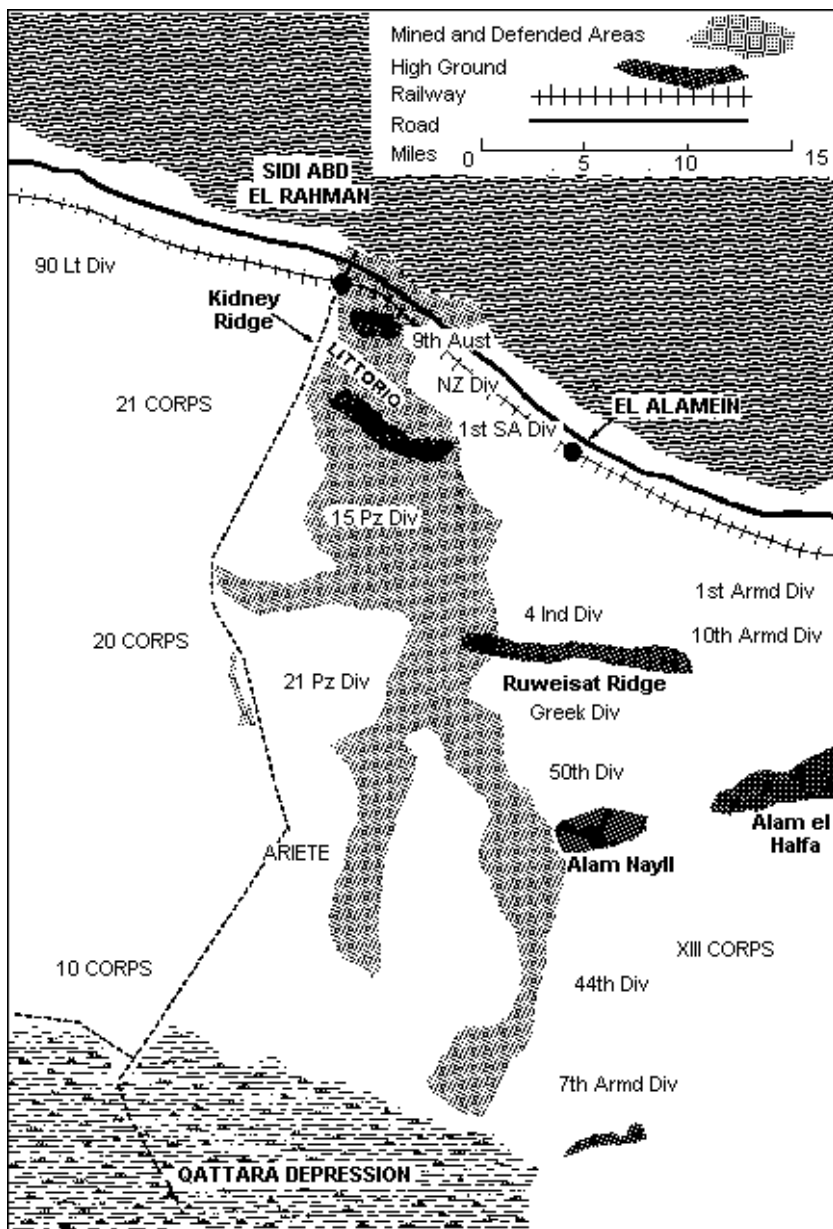
Montgomery needed the period between the Battle of Alam el Halfa and Alamein to re-equip and train his troops. His planning was meticulous and training exercises were developed that simulated the exact conditions that the troops would encounter once the battle had begun. The time was also used to develop the procedures necessary to clear a path through the minefields, co-ordinating the sappers role with flail tanks and gap marking parties. A system of traffic control was necessary to ensure that the tanks, equipment and infantry moved through the narrow gaps in the minefields as quickly as possible.

The battle was fought in four distinct phases.

- the break-in
- the crumbling process
- Operation Supercharge
- the break-out

The first phase, the "break-in" began on the night of 23rd/24th October, chosen because it was a full moon. Following an impressive barrage and bombardment, four Divisions of XXX Corps made rapid progress through the eastern minefields until they met the "Devil's Gardens" (randomly laid minefields of anti-tank and anti-personnel mines with booby traps).

The X Corps followed the XXX Corps through the gap which had been made in the minefield to press the attack towards Kidney Ridge. Progress was much slower than expected and the Allies were suffering expensive losses in troops and tanks and the Divisional Commanders were of the opinion that the advance should be abandoned. A midnight conference with Montgomery was arranged at which he made it clear that the advance should continue as it was important for the Armoured Divisions to get out into the open country which was west of the minefields. After severe losses a wedge six miles wide and five miles deep was driven into the Axis defences. The German reaction to the attack must have been hampered by the death of General Stumme from a heart attack in the



EL ALAMEIN - 23rd OCTOBER 1942

middle of the battle. On 25th October Rommel returned from Germany to take charge of the battle. His return co-incided with Montgomery actioning phase two of his plan, the "crumbling process", by using the New Zealanders to attack Kidney Ridge. However, this operation was halted and the 9th Australian Division was ordered to "crumble" northwards towards the coast to take point 29.

On the 27th October Rommel launched a counter-attack against the 1st Armoured Division and the 51st Highland Division holding the area around Kidney Ridge. The attack was repelled by Colonel Turner's 2nd Battalion who inflicted serious losses on the 8th Panzer Regiment and for his courage and tenacity Colonel Turner was awarded the Victoria Cross.

The crumbling process was succeeding. Rommel had to throw all his forces into the front line and now had no reserves with which to plug and new gaps in his front line.

On 1st November Operation "Supercharge" was launched (a replica of Operation "Lightfoot" on a smaller scale). The objective was to press home the attack Westwards to Tel el Aqqaqir which is on the Rahman Track. This was a well fortified anti-tank position. The assault was led by the 151st and 152nd Infantry Brigades with two Regiments of Valentine tanks. Following them was the 9th Armoured Brigade consisting of the Wiltshire and Warwickshire Regiments and the 3rd Hussars. Behind the 9th Armoured Brigade was the 1st Armoured Division. The attack was co-ordinated with diversionary attacks by the Australian Division northwestwards towards the 90th Light Division. Heavy losses were incurred by the Allied Forces. The 9th Armoured Brigade lost 75% of its tanks and 50% of its crews but they achieved their objective and had fractured Rommel's containing screen.

The next morning Rommel re-deployed the Panzer Divisions supporting the 90th Light Division's southwards to check the advance of the 1st Armoured Division but both his attacks at 1100 hrs. and 1400 hrs. were repulsed with the loss of 117 tanks.

Montgomery sensing that Rommel was nearing defeat ordered the 51st Highland Division to attack southwestwards towards the position held by the Trieste Division.

The breakout was underway and Rommel decided that if he was to save the Panzerarmees he would have to withdraw to the "Fuka Line" and abandon his Italian Infantry. Of 100,000 Axis Forces which were engaged in the Battle of El Alamein about 40,000 were taken prisoner and about 20,000 were casualties and the Panzerarmees had left 1,000 guns and 400 tanks on the battlefield. The Allies lost 13,500 men killed and wounded, and 100 guns and 150 tanks were destroyed.

23. OPERATION COMPASS - 9th December 1940 - 22nd January 1941

At the beginning of December 1940, the Italian Tenth Army in Egypt consisted of around 80,000 men, whereas the British forces opposing them numbered only 36,000. Nevertheless, it was the British under General O'Connor who assumed the offensive. The Italians were grouped around Sidi Barani in a series of fortified camps with a gap between them and the troops further back towards the border. It was this gap that General O'Connor planned to exploit in his attack.

The assault began on December 9th with the 7th Armoured Division moving into position in the gap whilst the 4th Indian Division stormed the Italian camps at Nibeiba and Tummar. These camps were overrun quickly, mainly due to the presence of forty-eight Matilda tanks of the 7th Royal Tank Regiment. Whilst these tanks were rather slow, they were very well armoured and the Italians had no weapons effective against them. These successes trapped the Italian forces nearer the sea and these were in turn destroyed.

The remainder of the Italian army retreated to the fortress of Bardia with the British troops following closely to invest them. However, O'Connor could do no more as the Indian Division had been withdrawn to fight in Ethiopia. They were replaced at the end of the month by the 6th Australian Division.

The assault on Bardia began on January 3rd 1941. Despite being a well fortified position, defended by 45,000 men, the Australians stormed it in two days heavy fighting. Even before its fall O'Connor had despatched the tanks of the 7th Armoured Division to prevent the escape of the Italians in Tobruk. This fortress was itself stormed on January 21st.

24. BEDA FOMM - 24th January - 7th February 1941

Despite the heavy losses suffered, the Italian army in Cyrenaica was still considerable, holding a line from Derna to Mechili. An attempt was made to surround the armoured brigade in the south, but they managed to retreat back northwards. The Australians then moved up to face the Italian positions at Derna. However, before they could mount an assault the Italians withdrew.

Due to the speed of the withdrawal O'Connor feared that the Italian army would get away. He therefore dispatched the 4th Armoured Brigade, together with the 11th Hussars and part of the Support Group, in a madcap dash to try to cut the coast road south of Benghazi. The Hussars reached the road at midday on February 5th near the village of Beda Fomm only a couple of hours ahead of the first Italian convoys.

Throughout the evening and the following day the Support Group prevented Italian attempts to break through, whilst the tanks harried the flanks of the Italian column despite being outnumbered by the Italian tanks. On the morning of February 7th the Italians launched one final attack which was only narrowly

repulsed. Then, because they assumed the British forces to be much more numerous than they were and with the Australians closing in behind them, they surrendered.

In ten weeks O'Connor's two divisions had advanced five hundred miles, captured 130,000 prisoners, 180 medium tanks and over 800 pieces of artillery. The Italian Tenth Army had been totally destroyed and the way cleared for the complete conquest of Libya. This though was not to be, as the best of the Allied troops were withdrawn to fight in Greece, leaving only a handful of raw troops to hold the recent gains. This respite enabled the Axis powers to reinforce Africa with both Italian and German troops.

DESIGNER'S NOTES

Players of "Arnhem", will immediately recognise the style of this game, but should not assume that it is merely "Arnhem" in yellow. It took longer to write, is far more wide ranging, and has more involved mechanics, whilst being easier to play.

I have retained the "order/move" system for "Desert Rats", rather than making it a "real time wargame" which are popular in some quarters. This is for three reasons. Firstly, I do not believe in the premise that a general has to make his decisions in real time. Any high level commander has hours, rather than seconds to reach a decision. Secondly, when a player is rushing around trying to move all his units as quickly as he can, he is unable to watch his units moving and fighting thus losing the element of suspense. The third reason is that the need for the computer to be able to run the game quickly may mean that compromises have to be made in the game design.

I have however, dropped the somewhat cumbersome "three phase" system used in "Arnhem". Its purpose was to divide up the time spent giving orders, and the time spent watching them being carried out, but because of the improvements in the mechanics of giving orders, and because there are usually fewer units in play, in "Desert Rats" this is no longer necessary. Moreover, having both players giving orders in one phase and evaluating them simultaneously, helps recreate the confused battles that were so characteristic of the fighting in the desert.

Another feature of the desert fighting, was the problem posed by supply. "Desert Rats" used a method to simulate these problems which reflects the way that the daily volume of supplies reached an army and determined how active it could be, and also allows for the possibility of individual units running out of petrol or ammunition. Whilst units occasionally ran short of food or water, generally petrol and ammunition were most likely to be scarce. Therefore, units only use supply when they move or fight.

As I have been interested in the "Desert War" for some time, I was particularly anxious to make "Desert Rats" as accurate historically as possible. I feel that I have largely succeeded in this aim, and that those areas where the game falls short, are due to memory restrictions. The area that suffers most from limited memory, is the map. Whilst it is on a large enough scale to depict the more mobile battles, scenario 5 (El Alamein) would have benefited from using a larger scale. Nevertheless, it reflects the overall trends of the battle, even if the details are not as well depicted as in the other scenarios.

If you have not yet played my other wargame "Arnhem - The Market Garden Operation", it is available from CCS at #8.95 and will give you many hours of enjoyment.

R.T. Smith