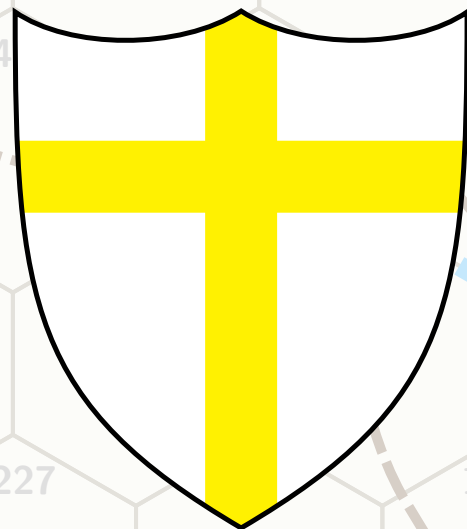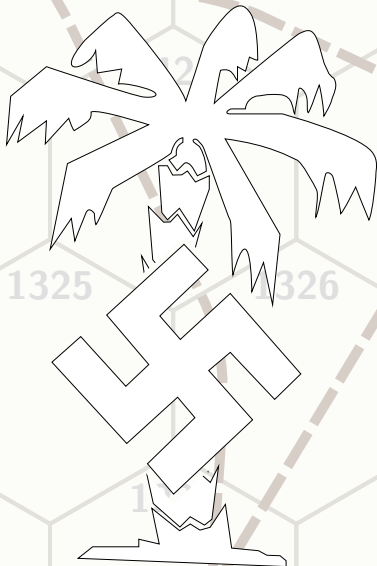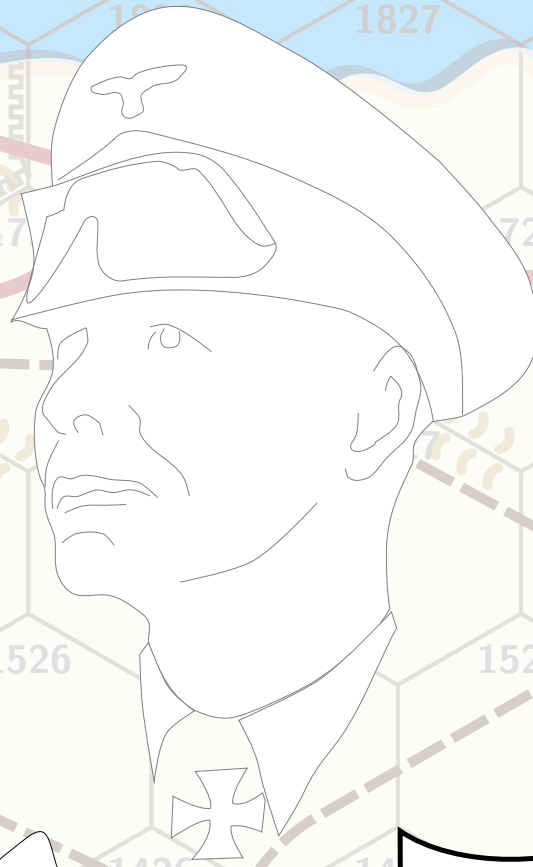# PANZERARMEE AFRIKA

ROMMEL IN THE DESERT, APRIL 1941 – NOVEMBER 1942

Simulation Publications Inc.
Avalon Hill Game Company
Revised by Christian Holm Christensen

Game mechanics

Period	WWII
Level	operational
Hex scale	19.3 km (12 miles)
Unit scale	regiment (ııı)
Turn scale	one month
# turns	20
Unit density	low
Complexity	4 of 10
Solitaire	8 of 10

Articles

[1] "Consolidated Errata - PanzerArmee Afrika, Desert War, KampfPanzer, East is Red and Leipzig (as of April 1974)", *Moves* **14**, p21-23, 1974.

[2] SPI R&D staff, "Panzerarmee Afrika Brainstorming", *Moves* **17**, p13-16, 1974.

[3] Vickers, R., "Command Control", *Phoenix* **3**, p9, 1976.

[4] Nash, R., "How not to fight Rommel", *Phoenix* **10**, p9, 1977.

[5] Spence, J., "Game Problem: Panzerarmee Afrika", *Phoenix* **13**, p15, 1978.

[6] Spence, J., "Problem Result: Panzerarmee Afrika", *Phoenix* **14**, p12, 1978.

[7] Medrow, B., "Over Burning Sands: A Tour Through Panzerarmee Afrika: Rommel in the Desert, April 1941 – November 1942", *The General* **22** #1, p5-8, 1985.

[8] Martin, R.A., "To the Borderline: Opening Strategies for Panzerarmee Afrika: Rommel in the Desert, April 1941 – November 1942", *The General* **22** #1, p9-14, 1985.

[9] "Contest #125", *The General* **22** #1, p14, 1985.

[10] "Question box: Panzerarmee Afrika", *The General* **22** #1, p46, 1985.

[11] "Infiltrator Report", *The General*, **22**, #2, p47, 1985.

[12] Shaw, M., "With Rommel (and Monty) in the Desert — A Study of Axis and Allied Play in Panzerarmee Afrika: Rommel in the Desert, April 1941 – November 1942", *The General* **25** #6, p27-31, 1989.

[13] SPI originals

This version all text, illustrations, graphics, and layout by Christian Holm Christensen.

Preface

This is my revision of the game *Panzerarmee[1] Afrika: Rommel in the Desert — April 1941 to November 1942* (*Panzerarmee Afrika* for short). The game was originally published by *Simulation Publications Inc.* (SPI) in 1973 in *Strategy & Tactics* **40**. It was later, in 1982, revisited and republished by the *Avalon Hill Game Company*. This revision leans mostly on the AHGC version, but notes specific differences to the SPI version.

All text and graphics are new and original to this revision. Nothing has been copied from the SPI or AHGC version.

In this revision, NATO App6 symbology is used throughout. In the original versions, Allied "augmented" (or reinforced) units were represented by generic counters. In this revision, each unit has its own set of reinforcement counters. The counters has also been made double-sided where the back-side represents the out-of-supply, out-of-C^2, or dismounted state.

The rules have been restructured to follow the game flow more closely, and several illustrations have been added to help understand the rules. All known errata has been incorporated.

Panzerarmee Afrika is somewhat different from most other board wargames of the 1970'ies and 80'ies, and even some younger games. It behoves the reader to carefully read the rules before starting a game.

Contents

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[1]"Panzerarmee" is compound word in German, and the "A" in "armee" should not be capitalised.

Rules

§1 Introduction

Panzerarmee Afrika concerns the North Africa theatre of the Second World War, starting from the point were Generalleutnant Erwin Rommel takes command of the Italian and German forces and starts a new offensive with a keen eye on Cairo. Historically, the theatre was characterised by very high mobility and a front that waved back and forth up until the autumn of 1942, when the British and Commonwealth forces, now under command of Bernard Montgomery, had accrued mass and began a decisive counter-offensive.

The objective of the Axis faction is to reach Alexandria, or, failing that, maintain a strong presence in Eqypt. The objective of the Allied forces is to inflict enough casualties to the Axis faction that maintaining a presence in Egypt is untenable, and thereby drive the Axis back toward Tunis.

Most of the fighting takes place in the desert, and supply and logistics are key elements of the conflict. Neither faction can wage an all-out war without stretching supply lines dangerously thin. *Panzerarmee Afrika* is as much a game about planning and opportunity as it is a game of attrition.

§2 Components

The game consists of

- One board with a map of part of North Africa, turn track, and Axis and Allied replacement point tracks.
- Two Orders-of-Battle (OOB), one for each faction.
- 323 counters, 162 and 71 for the Allied and Axis factions, respectively, and 90 auxiliary markers.
- These rules.

In addition, one six-sided dice is needed.

§2.1 The board

The board contains a map that shows a region of North Africa. Superimposed on the map is a grid of hexagons (or hexes) to govern the units movement on the map. Each hex has a unique coordinate printed in it. The first two digits index the row, while the third and fourth index the column. The *last* digit has a special significance for Allied Command and Control (C^2, see §10). Otherwise, the hex coordinates have no other function, other than to help identify locations on the map.

§2.1.1 Terrain and features

Each hex on the board has a certain *terrain* and possibly *feature*. These are summarised in Table 1. Each hex is roughly 19.3 km (12 miles) across.

Clear Open terrain, mainly desert. Infantry and ar-

Terrain or feature	MF □	MF 🚛	Combat effect
Clear	3	—	
Rough	10	—	2× DF
Swamp	10	—	2× DF†
Escarpment	+10‡	—	½× AF
Bardia*			2× DF
Tobruk			5× DF
Fort ZOC¶			
Road§	1		
Track§	2	8	
Change	+2	—	
Railroad#	—		
Overrun	+10	—	
Border			
Prohibited	—		

Table 1: Terrain and features. The table summarises the terrain and features of the map, as well as their effects on movement and combat.
*Nullifies other costs when moving *along.* †🌴 only. ‡In addition to other costs. ¶*Must* attack enemies in ⬡. §🛡🚛 transport *any* distance. #At most 2 □ may stack.

moured units can move across these, but transports (🚛) cannot.

Rough Hilly and otherwise more rough terrain. Movement is hindered in this terrain, and thus attacks units occupying rough terrain is more difficult.

Swamp Wet terrain with limited movement. This provide an improved defensive stance for the Axis faction *only.*

Escarpment Not a hex terrain, but a feature of the hex-*side.* This are steeply rising and falling terrain that makes movement and attacks across difficult.

Bardia (1730) and Tobruk (1925) Both of these port cities are heavily fortified (Tobruk more so than Bardia), which provides a stronger defensive stance.

Fort ZOC The outer periphery of fortified cities (minefields, obstacles, and so on). When a friendly unit occupies such hexes, it is within firing range of the fortified city and *must* therefore attack the city.

Road The road that runs along the coastline is the main logistical feature of the map. Movement along this road is especially easy and transport units may utilise this.

Tracks Lower quality than the coastal road, but nevertheless important logistics routes. These can be utilised by transport units.
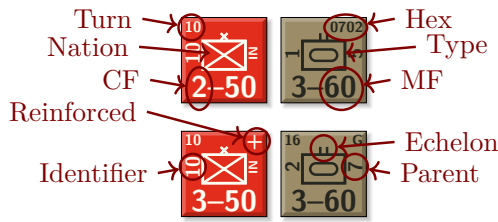
Figure 1: Regular units. The individual fields are explained in the text.

Eqyptian railroad Allied, *only*, supply installations can be moved freely along this railroad (§11.3.1).

Border The border between Libya and Egypt. The main effect on play is when the Axis faction attempts an (off-board) invasion of Malta.

Prohibited crossings Some hex-sides are marked with a red-white stripped line. No movement nor combat may be conducted over these hex-sides.

§2.1.2 Sea transport

White lines between Alexandria (1351), Bardia (1730), and Tobruk (1925) illustrates possible transports routes by sea. No other lines of transport than those are available to either faction.

§2.1.3 Cadres

Both the Axis and Allied factions have dedicated *Cadre* boxes on the map. When a unit is eliminated, it is placed into its faction Cadre box, and can later be replaced by its faction spending *Replacement Points* (RPs, see §13.3).

§2.1.4 Turn and replacement point tracks

Each of the Axis and Allied factions have a dedicated Replacement Point (RP) track, ranging from 0 to 10. A faction cannot accumulate more than 10 RP across turns.

In the middle is a turn track, with numbers 1 to 20 and months printed in it. This is used to keep track of the current turn using the dedicated game turn marker.

§2.2 Orders of Battle

There is one Order-of-Battle (OOB) chart for each of the Allied and Axis factions. These show when (and sometimes where) each unit appears.

§2.3 The counters

There are 323 counters in total, of which some represent regular ground units, and others to help with game mechanics.

§2.3.1 Regular units

Regular units represents Axis and Allied formations present during the campaign. Figure 1 shows some examples of regular units, with arrows indicating the various parts of each unit.

DE	German	IT	Italian
UK	British	IN	Indian
US	American	AU	Australian
NZ	New Zealand	SA	South African
FR	French	PL	Polish
GK	Greek	BE	Belgian

Table 2: National colours. For Axis units, the unit background indicate the nation. For Allied units the background in the NATO symbol indicates from which part of the British Commonwealth the unit is from.

Turn This field records which turn the unit appears as reinforcement (§7.1).

Hex or reinforcement option If this is a hex coordinate it shows where the unit must be placed as part of the setup. If it is a single letter, then the unit belongs to a reinforcement option (§13.5).

Nation For Allied units, the background colour of the NATO symbol indicates which part of the British Commonwealth it comes from. See also Table 2.

Type NATO symbology of unit type. See also Table 3.

CF Combat, or strength, factor of the unit. The larger the number, the more capacity to inflict casualties on the opponent.

MF Movement factor. The MF indicate the mobility of a unit.

Reinforced Allied only. A single '+' indicates that the unit has been reinforced once, while two '++' indicates it has been reinforced twice (§13.4).

Echelon Where in the military hierarchy the unit sits, and roughly reflects the units size. A battalion (ıı) is between 600-1000 men, regiments (ııı) are 1100-3200 men, and brigades (×) 2000-4000 men (see also Table 3).

Identifier Unit identifier.

Parent Parent unit identifier.

The types of units fall into two categories: Infantry (⊠, ⊠, ⊠, and ⊠), and Armoured (⊠, ⊟, and ▭), as indicated in Table 3. Unless otherwise note, 'infantry' and 'armoured' will refer to these two categories e.g., 'infantry' can mean any of the four times of infantry, while 'armoured' covers the 3 mechanised and armoured types. The two groups are *not* inter-changeable.

Each unit is double-sided, with its back side representing the out-of-supply (OSS, §8), or dismounted (§13.6) state.

§2.3.2 Logistics units

Each faction has a number of logistics 'units', as illustrated in Figure 2. Firstly, they have 3 transport (or 'lorry') units. These units server to transport supply installations on the map. These units are limited to movement on roads and tracks. The second type of unit

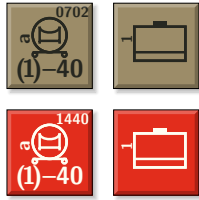|	
Infantry	⊠ Infantry
	⊠ Motorised infantry
	⊠ Airborne infantry
	⊠ Air assault infantry
Armoured	⊠ Mechanised infantry
	⊠ Mechanised reconnaissance
	⊡ Armoured
	⊡ Supply installation
	⊜ Transport unit
×	Brigade (2000-4000 men)
⊩	Regiment (1100-3200 men)
⊪	Battalion (600-1000 men)

Table 3: NATO symbology.

Figure 2: Logistics units. The left column shows an Axis and Allied transport unit, or "lorry", and the right hand column an Axis and Allied supply installation.

is not really a unit, by an supply installation or depot. These provide support for the regular units and are essential for those regular units operations. Supply installations cannot move by their own volition but must be transported by transport units (either lorries or, for the Allied faction, the Eqyption Railroad).

§2.3.3   Markers

There are a total of 90 auxiliary markers used to help keep track of game mechanics. Some examples are shown in Figure 3.

The game turn marker is used on the turn track on the board. It can be flipped to indicate which faction is in turn.

The replacement point markers are used with the replacement point (RP) tracks on the board (§13.3). Note that these are divided between infantry and armoured type RPs, and do not mix. Also, the Axis faction have separate RP markers for the German and Italian units.

The types of markers are used to indicate the status of units or stacks of units. These are typically placed below (for single unit states) or above (for stack states) units to indicate these states.

There are three control markers that has an Axis and Allied side to them. Use these to keep track of who controls objectives such as El Agheila, Tobruk, and Alexandria.

To help keep track of which optional reinforcements a faction has deployed, there are a number of markers that can be placed on the OOBs. Removing or flipping these
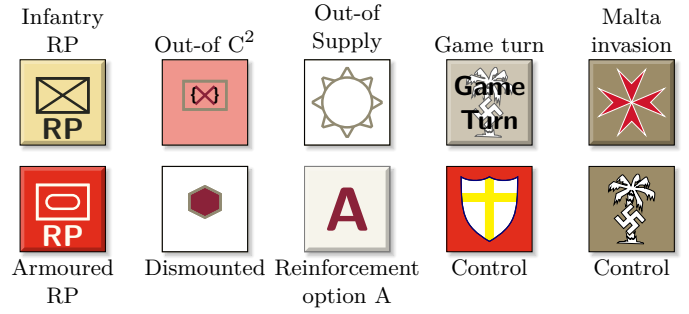
Figure 3: Markers. Left most are examples of replacement point markers. In the next column and top of third are markers for indicating C^2, dismounted, or OOS state of a unit. The bottom marker in the third row is an example of a optional reinforcement marker used on the OOBs. The fourth column shows the game turn marker, used on the turn track to keep track of time, and an example control marker that can be used to keep track of which faction control objectives. Top right, is a marker to keep track of a possible invasion of Malta (§9).
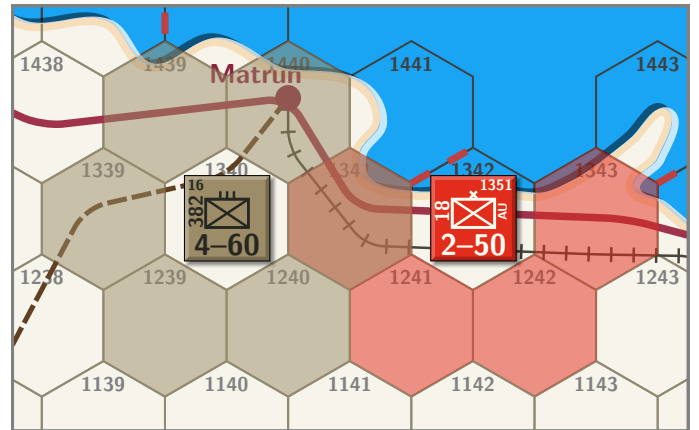
Figure 4: ZOC. DE 382/IREGT has ZOC in it's 6 neighbouring hexes. AU 18/IBDE has ZOC in 4 neighbouring hexes, since ZOC does not extend into the sea, nor across impassable hex-sides. Note that both units have ZOC in 1341.

counters can be used to indicate if a replacement option is not available or has been chosen, respectively.

§3   Zone of Control

All regular units excerpt a Zone-of-Control (ZOC) into the 6 neighbouring hexes. The ZOC of enemy units is called enemy-ZOC (or EZOC).

ZOC *does not* extend over impassable hex-sides, nor into full sea hexes, This is illustrated in Figure 4. However, if enemy units occupy a fortified hex, then the hexes neighbouring the fortified hex are in that hex's ZOC, and the units *must* attack the fortified hex (see also §12.1).

Supply installations (⊡) and transportation units (⊜)

do not excerpt ZOC.

Enemy ZOC limits movement of units, supply lines (§8), and beside the special fortified hex ZOC, does not effect combat.

§4 Stacking

At the *end* of any movement (§11), combat (§12), and reinforcement and replacement (§13) phases, *at most* three friendly, regular units may occupy a single hex, except in Bardia (1730) where only *two* such units may be present.

Supply installations (⌂) and transport units (◉) are not considered regular units and do therefore not count toward the stacking limit. However, at most *one* supply installation (⌂) may be in a hex at the end of the above mentioned phases.

During movement, combat, and reinforcement and replacement phases, the above stacking limits may be broken temporarily. For example, units may move through a hex holding three friendly, already moved, units as long as it does not end its movement there.

§5 Control

A hex is controlled by the faction that last had an regular ground unit occupy or move through that hex. Supply installations and transport units that occupy or pass through a hex *does not* change which faction controls that hex.

§5.1 Bases

El Agheila (0702), and Alexandria (1351) are *bases* for the Axis and Allied factions, respectively. Both bases consists of the centre hex (0702) *and* the six surrounding hexes. A faction only controls a base if it controls the centre hex (0702 or 1351).

§6 Set-up

Faction should decide upon which optional rules are used before starting the game (§15).

Each faction then places all their units on their OOB.

🛡 Allied units may, by expending replacement points (RPs) reinforce existing units (§13.4). Each Allied unit is therefore represented by multiple counters. The Allied faction should place all counters for a particular unit on its slot on the OOB, with the lowest-CF counter on top.

Optional reinforcement markers are placed on their slot on the OOBs.

Each faction then places their *replacement point* (RP) marker for each of their nations (Axis has a German and Italian set, Allied only a Commonwealth set) on their own RP track. The game turn marker is placed on turn 1 on the turn track on the board.

🛡 **Allied turn**
Supply
C^2
Movement
Combat
Attack supply
Resolution
Replacements & reinforcements
🌴 **Axis turn**
Supply
Movement
Combat
Attack supply
Resolution
Replacements & reinforcements

Table 4: Turn sequence.

Control markers can be placed in El Agheila (0702), Tobruk (1925), and Alexandria (1351), to track control of those cities. Other markers should be kept off to the side for later use.

When the above has been completed, then each faction picks up their respective "At-Start" units from the OOB, and places them in the hexes designated on the OOB and units. Note that units designated to start in either base El Agheila (0702), and Alexandria (1351) may be placed in *any* of the bases hexes (§5.1).

🛡 Only the lowest CF, un-reinforced, counter representations of units should be placed on the board. The reinforcement counters must remain on the OOB until the Allied faction expends RPs to reinforce active units.

When the set-up is complete, then the game begins in earnest.

§7 Turns and turn sequence

The game is played over 20 turns, or until a sudden-death victory condition is achieved by either faction (§14). Each turn is further sub-divided into an Axis and Allied *player turn*.

§7.1 Turn sequence

Each game turn is divided into an Allied and Axis portion, called the faction, or player, turn. In each turn, the Allied faction first completes its turn, and then the Axis does the same. When the Axis faction has completed its turn, then the game turn is over and the game turn marker is progressed to the next slot on the turn track.

Each faction turn is divided into a number of *phases*. A phase *must* be fully completed before moving on to the next phase. The faction who's turn it is called the phasing or attacking faction. The other faction is then the

defending faction. During a faction's turn, the defending faction may not move, attack or do other actions, except when explicitly called for.

The turn sequence of phases is shown in Table 4.

Supply phase : In this phase, the attacking faction determines which of its units on the map are in-supply and which are Out-of-Supply (OOS) (§8).

C² phase (🛡 only): The Allied faction determines which of its on-map units are out of Command and Control (C², §10).

Movement phase The attacking faction may move any of its on-map units, within the movement restrictions (§11).

Combat phase The attacking faction conducts all combats and the defending faction will counter-attack (§12).

Replacements & Reinforcements phase The attacking faction may receive reinforcements, or build replacement units. The Allied faction may in also reinforce existing units on the map (§13).

§8 Supply

In the supply phase, the attacking faction *must* determine which of its on-map units are in- or Out-of-Supply (OSS).

🌴 On turn 15, June 1942, the Axis faction has the option to attempt an off-board invasion of Malta. The Axis faction *must* declare that the faction will attempt that invasion no later than the supply phase of turn 15, or forfeit that option. The option is described in §9.

§8.1 Tracing supply lines

When tracing supply lines from a regular unit (▢), supply installation (▱), or transport unit (◉), movement costs calculated as if a regular unit was performing the movement (see also §11).

Supply lines are traced from a regular unit, supply installation, or transport unit to a supply installation or supply terminal, discounting the hex occupied by the regular unit, supply installation, or transport unit, but including the hex occupied by the target supply installation or terminal.

§8.2 Valid supply lines

A valid supply *segment*

- from a regular or transport unit to a supply installation, or

- from a supply installation to another supply installation or terminal,

is a path of hexes no longer than 20 MF long (§11), and which *does not* pass through enemy units, no matter if it is OOS (§8.4) or OOC² (§10.3), nor enemy ZOC (§3), *unless* the enemy ZOC hex is occupied by a friendly unit. That is, for tracing supply lines, enemy ZOC is negated

by friendly units.

Supply installations and terminals can supply *any* number of regular or transport units and supply installations.

A valid supply *line* starts at a regular unit, supply installation, or transport unit, and consists of one more valid supply segments *and* ends in a supply terminal.

For an infantry or armoured unit to trace a valid supply line, it must be within 20 MF of a supply installation. That supply installation must in turn be within 20 MF of another supply installation or supply terminal. If the supply installation is not within 20 MF of a supply terminal, but within 20 MF of a second supply installation, then that second must be able to extend the supply line to other supply installations (within 20 MF) eventually ending up at a supply terminal. Supply lines therefore typically form a network, with edges no longer than 20 MF and supply installations as nodes, eventually ending in one or more supply terminals as root nodes.

Note that a regular or transport unit cannot *trace a supply segment directly to a supply terminal, with some exceptions for the Allied factions (see §8.3.2).*

A supply installation can provide supply to *any* number of regular or transport units, as well as to any number of supply installation within 20 MF.

§8.3 Supply terminals

🌴 §8.3.1 Axis terminals

El Agheila (0702) home base (all 5 hexes) is a supply terminal for Axis faction as long as that faction control El Agheila.

If the Axis faction controls Tobruk (1925) or Alexandria (1351), then those may be used as supply terminals from the turn of capture (§5.1.

🛡 §8.3.2 Allied terminals

Alexandria (1351) home base (all 6 hexes), and Tobruk (1925) are a supply terminals for Allied faction as long as that faction control them.

Furthermore, both the Alexandria home base and Tobruk are considered supply *installations* to the Allied faction, meaning a regular or transport unit does *not* need to trace supply lines via an intermediate supply installation, but can trace a valid supply line *directly* to either Tobruk or Alexandria.

Likewise, Bardia (1730), is considered *both* a supply installation *and* terminal for any Allied unit that *occupies* that hex.

Should the Allied faction take control of El Agheila (0702), then that base may also be used as a supply terminal.
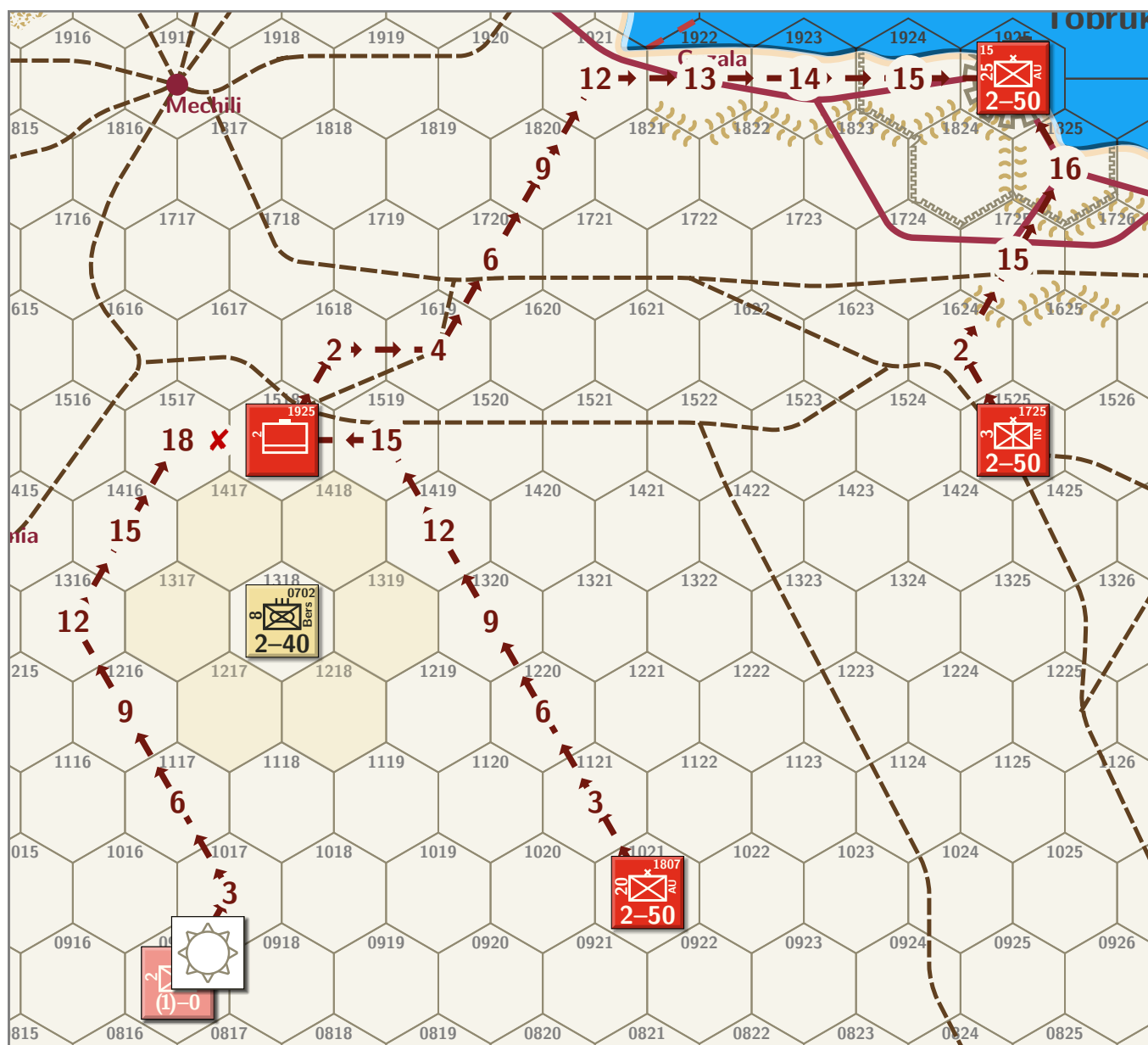
Figure 5: Tracing supply lines. Numbers show the accumulated MF cost of movement. The Allied AU 25/IBDE is *in* Tobruk and can trace a 0 MF supply line to the supply installation and terminal of Tobruk. Likewise, IN 3/MIBDE can trace a valid supply line back to Tobruk (*directly*, only available to 🛡). The AU 20/IBDE in 1021 can trace a supply segment to the supply installation in 1518, which in turn can trace a supply segment to Tobruk. However, IT 8/BERM/AIREGT's ZOC (§3) blocks the supply segment from BR 2/SG/IBDE in 0917 to the supply installation in 1518, and the British unit is OOS. Had there been an Allied units in for example 1317 and 1417, then those would have negated the Italian ZOC, and the British unit would have been in supply. Note that if the faction of all units was flipped, then the Axis units in 1525 and Tobruk (1925) could *not* trace a supply line directly to Tobruk, but would have to trace it via the supply installation in 1518.

⚙ §8.4   Out of Supply

Any of the attacking faction's regular or transport units that *cannot* trace a valid supply line in the factions supply phase are Out-of-Supply (OOS). OOS unit must be flipped to their reverse side, and optionally a OOS marker (§2.3.3) can be placed on it.

An OOS unit

- may *not* move, including sea movement, and for transport units, transport supply installations,
- may *not* attack, and
- defend at half-strength (but counter-attack (§12.4.4) at full strength).

Note, *dismounted* units (§13.6) are considered OOS, and the above limitations apply.

State	MF to 🗍	MF	AF	DF
OOS	> 20	0		×½
General	≤ 20		×½	
Attack	≤ 8	×1	×1	×1
Max attack	≤ 8 & 🗍 spent		×2	

Table 5: Supply states.

The OOS state persists until the end of the attacking factions turn.

During the enemy faction turn, friendly units are evaluated for supply *no later* than at the start of the enemy movement phase, and persists until the end of the enemy turn.

A unit that *can* trace a valid line of supply is said to be in-supply. If it was previously OOS, then it is flipped to its front side, and any OOS marker is removed.

An example is shown in Figure 5. Please see §11 for how to calculate MF costs.

🛡 §8.4.1   Allied limitations

The Allied faction may never *voluntarily* place its regular ground or transportation units OOS. This includes even temporarily while moving units (§11), by voluntary elimination of supply installations (§12.3), or when transporting supply installations.

♆ §8.4.2   Axis limitations

The Axis faction may never *voluntarily* place its regular Italian ground units OOS. This includes even temporarily while moving units (§11).

German units, starting their turn in-supply, may *continue* movement even if that would leave them OOS, as long as they have the MF to do so.

Both German and Italian units may become OOS due to voluntary elimination of supply installations, including when forming *maximum attack supply*, MAS (§12.3).

Note that Axis units that started their turn in-supply, but become OOS later during the Axis turn, are *still* considered to be in-supply for the rest of the turn.

§8.5   Supply states

A regular or transport unit no more than 20 MF from a supply installation, with a valid supply line to a supply terminal, is said to be in *general supply* (GS).

A regular unit no more than 8 MF from a supply installation, which has not been moved this turn, with a valid supply line to a supply terminal, is said to be in *attack supply* (AS).

The effects of GS and AS supply are summarised in Table 5. The consequences for movement and combat will be elaborated in §11 and §12, respectively. Note that AS (and *maximum attack supply*, MAS), is only evaluated at the time of combat, and *does not* persist throughout the faction's turn.

Die roll	In-supply 🟥 in Libya None	Some
1		Success
2	Success	
3		Failure
4		
5	Failure	
6		

Table 6: Invasion of Malta.

♆ ✳ §9   Malta invasion

On turn 15, June of 1942, the Axis faction has the option to attempt an invasion of Malta. Whether the Axis faction declines that option, or does attempt the invasion and either succeeds or fails, has consequences for reinforcements, and which optional reinforcements the Axis faction may choose (§13.5).

The Axis faction *must* declare that the invasion is attempted no later than the Supply phase of the Axis 15th turn. The Axis faction then rolls a dice (1d6) and consults Table 6.

If the Axis faction decides to attempt the invasion of Malta, the success or failure depends on whether there are *any* in-supply (§8.4) Allied regular units in Libya (west of the border line starting in 1531 and ending in 0130).

If there good order Allied regular units in Libya, then the invasion succeeds on a die roll of 1 or 2. If there are no good order Allied regular units in Libya, then the invasion succeeds on a die roll of 1, 2, 3, or 4.

Use the provided Malta marker, on the Axis OOB, to keep track of the status on the invasion.

If the invasion is attempted, whether it is a success or not, then no Axis regular or transport units may cross the border from Libya into Egypt in the movement phase of turn 15. Axis units already in Egypt may remain there and operate as normal.

Axis reinforcement options that does not correspond to the status of the Malta invasion — not attempted, failure, or success — should be removed from the Axis OOB.

🛡 §10   C²

This section only applies when the Allied faction is in turn.

During the North Africa campaign, Command and Control (C^2) was a real problem for the Allied. To simulate Allied units can, on every turn, randomly be assigned an out-of-C^2 condition. Out-of-C^2 (OOC^2) affects regular and transportation units, as well as supply installations.

There are two ways of resolving which Allied units are OOC^2 — one from the original SPI version of the game,

Die roll	Hexes ✹	Λ
1	1, 3, 7	1, 7
2	2, 4, 8	2, 8
3	3, 5, 9	3, 9
4	4, 6, 0	4, 0
5	5, 7, 1	5
6	6, 0, 2	6

Table 7: C^2 resolution table.

and one from the later Avalon Hill version. The factions must decide upon which method to use before the start of the game.

The ✹ way of resolving OOC^2 results a higher mean relative number of Allied units placed in an OOC^2 condition, and has a bias in not all hexes are equally susceptible to loss of C^2. On the other hand, the Λ method has a lower mean relative number of Allied units that end in OOC^2, and the probability is the same in every hex. It does, though, require far more die-rolls.

Note, no hex is exempt from the effect of the C^2 trouble. That is, units in the Alexander base, Tobruk, or any where else on map, are equally susceptible to the loss of C^2.

✹ §10.1 Resolve C^2 with single die roll

The Allied faction rolls a single die (1d6). Then for each hex that contains a stack of Allied regular or transport units, or supply installations, cross-index the die roll with the second column of Table 7. If the hex coordinate, printed in the hex, ends on one of the digits in that column, then the Allied units in that hex are out-of-C^2.

Λ §10.2 Resolve C^2 with die roll per hex

For every hex that contains one or more Allied regular or transport units, or supply installations, the Allied faction rolls a die (1d6) and cross index the die roll with third column of Table 7. If the last digit of the hex coordinate, printed in the hex, is one of the digits in column, then the Allied units in that hex are out-of-C^2.

Note, one can equally decide that on a die-roll of "1" — or any other specific result — the units are out-of-C^2.

⊠ §10.3 Effect of out-of-C^2

An Allied unit that is out-of-C^2 (OOC^2)

- may *not* attack,
- may *not* move, including by sea transport, and supply installations *cannot* be transported, and
- supply installation cannot form *maximum attack supply* (§12.3).

An OOC^2 marker (§2.3.3) must be placed on units that are OOC^2 (one per hex is usually enough), and the

counter flipped to its reverse side. The OOC^2 state persists until the end of the Allied turn, at which point the OOC^2 marker is removed, and unit flipped to its front side if it is not *dismounted* (§13.6).

Other Allied units may pass through or stack with OOC^2 units in the movement phase. However, OOC^2 units may *not* participate in an attack should other stacked units attack during the combat phase.

◻ OOC^2 supply installation can still provide valid support for other units, or participate in a network of supplies.

✧ The state of OOS and OOC^2 are entirely orthogonal. That is, and Allied unit can be OOS, OOC^2, both or neither.

§11 Movement

During the movement phase of a factions turn, that faction can perform a number of manoeuvres:

- Land movement of regular units already on the map (§11.1).
- Sea transport of regular units and supply installations from port to port (§11.2).
- Transportation of supply installations via transport units, or for the Allied faction, by rail (§11.3).
- Overrun assaults by regular units against enemy regular ground units, supply installations, and transport units (§11.4).

Units that are OOS, including *dismounted* units (§13.6), *may not* perform *any* of these manoeuvres.

◻ §11.1 Land movement

Regular units (◻), and transport units (⊜), may move across the map by moving from hex to adjacent hex, in any direction, if it has the mobility to do so.

Regular ground, and transport units, have a number of *movement factors* (MF, see also §2.3.1). This reflects the mobility of that unit, and governs how a unit may move across the map. An in-supply unit has its full number of MF available on every turn, but MFs cannot be accumulated across turn, nor shared or transferred between units.

A unit or stack of units *may* move through hexes containing other friendly units, including OOS (§8.4) and OOC^2 (§10.3) units, temporarily violating stacking limitations (§4), as long as these limitations are not violated *at the end* of the movement phase.

Units may be moved individually or as stacks of units. Stacks of units may be formed and broken up at any point during movement at no cost to the participating units.

An attacking unit may *never* enter a hex occupied by defending regular and transport units, *except* via an *overrun assault* (§11.4).
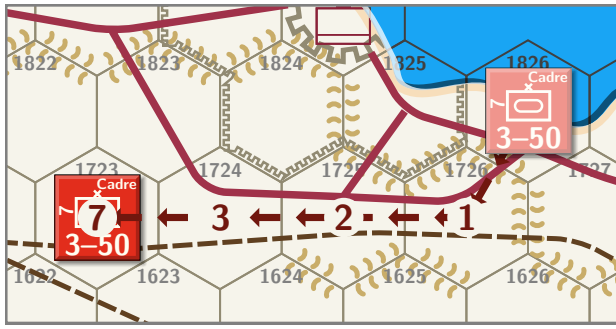
Figure 6: Change of road or track. BR 7/ABDE moves along the road from 1826 to 1724, paying 1 MF per hex moved. At 1724, the unit changes from the road to the track, paying +2 MF for the change, and then into 1723 paying 2 MF for the track movement, totalling 4 MF for the last hex, and 7 MF in total.

To move from one hex to an adjacent hex, a unit must spend enough MFs to enter the target hex. If the unit does not have enough remaining MFs to pay the full price, it cannot move into the target hex. The cost of moving into a hex depends on the terrain of the *target* hex, and in some cases, the terrain on the hex side traversed. These costs are summarised in Table 1.

§11.1.1   OOS limitations

The Allied faction may *not* move its regular ground or transport units in such a way that the units become OOS (§8.4), however temporarily. That is, an Allied unit *must* be in supply at all times, including while moving.

This includes when supply installations are being transported: A supply installation may not be transported in such a way that it would leave some Allied units OOS, however temporarily.

Like Allied units, Italian (and only Italian) regular ground units may not become OOS as a consequence of movement. German units, however, may *continue* moving even after becoming OOS, as long as it has the MF to do so, and it did not start the movement phase OOS.

§11.1.2   Regular unit MF cost

For *regular ground* units, the costs are

Clear To move into a clear hex, a unit must spend 3 MF.

Rough To enter a rough terrain hex, a unit must spend 10 MF.

Swamp Swamp hexes costs 10 MF to enter for a regular unit.

Escarpment To enter a hex over an escarpment hex-*side* +10 MF must be spend in *additional* to the other terrain cost of the target hex. Crossing an escarpment hex side via road movement (see below)

does *not* incur this additional cost.

& Forts and its ZOC The cost to enter these hexes is that of the other terrain in the hex.

Road If a unit enters a hex over a hex side perforated by a road, then that unit is performing road movement at a cost of one MF. Road movement negates *all* other cost of the target hex terrain or traversed hex side.

Track Like road moveement, a unit that enters a hex over a hex side perforated by a track pays a cost of 2 MF. Also like road-movement, track-movement negates all other movement costs.

Change of road or track If a unit enters a hex via one road, but leaves the hex via another, *not connected* road or track, then an *additional* +2 MF must be payed. See also Figure 6.

Railroad Rail movement is *not* available to regular units and can *only* be used to transport supply installations (§11.3).

Prohibited Movement across these hex sides is *not* possible.

Some examples of MF costs are shown in Figure 5.

§11.1.3   Transport unit MF cost

For transport units, *only* road and track movement is allowed, and transport units *may not* change roads or tracks that are not connected. The cost of this are

Clear, rough, swamp, escarpment, forts and its ZOC A transport unit may *not* enter such hexes or cross such hex sides, *except* by road or track.

Road Road movement, as described above, costs 1 MF for a transport unit.

Track Track movement, as described above, costs 8 MF for a transport unit.

Change of road or track A transport unit *may not* change road or track in a hex where these are not connected.

Railroad Rail movement is *not* available to transport units.

Prohibited Movement across these hex sides is *not* possible.

§11.1.4   Enemy ZOC

When an attack unit enter an enemy ZOC (§3) it *must* stop moving and can move no further this movement phase. A unit that starts its movement phase in enemy ZOC may leave enemy ZOC, but *must* do so by first entering a hex *not* in enemy ZOC. If its remaining MFs allow, it may enter another hex in enemy ZOC, from the same or other enemy units, and must then halt all movement.

| Die Roll	Turn 1	2+
1–2	▪	▪
3–4	▪	—
5–6	—	

Table 8: Capture or elimination of supply installations. A result of ⌑ indicates that the enemy supply installation is captured and replaced with an supply installation from the attacker's OOB. If no friendly supply installations are available on the attacking faction's OOB, then the capture has no effect. In all cases, including "—", the enemy supply installation is eliminated and placed back on the enemy's OOB. Note that Allied supply installations are captured by the Axis faction on die rolls of 1, 2, 3, and 4 on turn 1. On later turns, Allied supply installations are captured on die rolls of 1 or 2, as it is for the Axis faction.

§11.1.5 Enemy fort ZOC

A unit that enters the ZOC of an enemy occupied fort *must* stop and cannot move further that movement phase. An enemy unit may leave a fort's ZOC normally, with one exception: If an enemy unit entered the fort ZOC as a consequence of an advance after combat (§12.4.7), then it *must* attack the fort *at least once* before leaving the enemy occupied fort ZOC.

§11.1.6 Enemy supply installation capture

If an enemy supply installation is alone in a hex, then a regular ground or transportation unit *may* move into or through that hex.

> *Technically, this is an overrun assault (§11.4) without the +10 MF additional cost and with no counter attack (§12.4.4).*

If it does, then the attacking faction rolls a die (1d6), and cross-index the die roll with the appropriate column for the turn in Table 8. If the result is *not* "—", then the enemy supply installation is *captured*. In all cases, the enemy supply installation is removed from the map and placed back on the enemy OOB. The supply installation may then re-enter the map as a regular supply installation reinforcement in an enemy's reinforcement & replacement phase (§13.2.1).

If the enemy supply installation is captured, then the attacking faction will place any of its own supply installations, if available on its OOB, in the location of the enemy supply installation. If the attacking faction has no supply installations available on its OOB, then there is no effect of the capture other than to eliminate the enemy supply installation.

Enemy supply installations captured are immediately available to the capturing faction and can be used in overruns (§11.4) and the following combat phase (§12).

§11.2 Sea transport

A regular unit or supply installation that starts its movement phase in a port hex (⌧), *and* has not otherwise performed manoeuvres this phase, *may be* eligible for sea transport.

Transport units (⊖) *may not* be transported by sea.

Port hexes are Tobruk (1925), Bardia (1730), and Alexandria (1351 *only*). A unit may be transported by sea (white lines on the map), from a friendly controlled port to another friendly controlled port. Units transported by sea may *not* perform any other manoeuvres in this movement phase. A unit transported by sea *may* participate in combat in this faction's or the following opponents faction's combat phases.

🌴 The Axis faction may only transport regular units or supply installations to and from Tobruk (1925), and Bardia (1730) if there are no in-supply (§8.4) Allied units within 20 hexes (19 intervening hexes) of both the departing and arriving port hex.

At most 2 regular units and one supply installation may depart from the ports of Tobruk and Alexandra, each, per movement phase. Likewise, at most 2 regular units and one supply installation may arrive at these two ports each per movement phase. Tobruk and Alexandra can both ship out 2 regular units and one supply installation *and* receive the same number of units and installation in the same movement phase.

Only *one* regular unit *or* one supply installation may *either* depart *or* arrive in the port of Bardia (1730). That is Bardia can *either* ship out a regular ground unit or supply installation, *or* receive one regular unit or supply installation, not both.

§11.3 Supply transportation

Supply installations represent supply depots of fuel, ammunition, food, water, and so on. They have no inherent mobility and *must* be transported across the map.

A transport unit may move into a hex occupied by a supply installation, and there load the supply installation. It can then transport the supply unit to another location on map within the restrictions of regular land movement for transport units (§11.1.3). The supply installation may be unloaded at any point during the movement of the transport unit.

It costs no additional MF for a transport unit to load or unload a supply installation. A single transport unit may transport as many supply installations as its MFs allow in a given movement phase, but only *one* supply installation may be transported at any given time by a transport unit.

Supply installations may be transported by multiple transport units in a single movement phase.
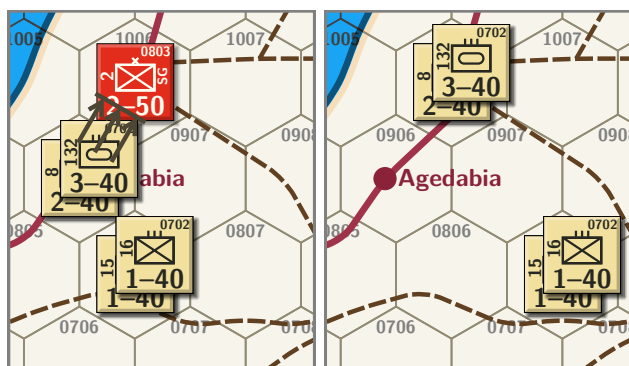
Figure 7: Before and after an overrun assault. IT BERS/8/AIREGT and IT 132/AREGT have moved to 0906, with AS (§8.5), with the intent of overrunning BR SG/2/IBDE in 1006. The combat differential comes out to be 3 ΔCF (§12.4.2), which guarantees that at least 2 CF of the defender is lost (Table 9), enough to eliminate BR SG/2/IBDE. After the overrun, the BR SG/2/IBDE counter attack (§12.4.4) with 0 ΔCF.

The stack in 0807 may *not* move to say 1007 and assist in the overrun. The stack in 0807 can move to or through 1006 *without* paying the +10 MF overrun cost. If there had been an Allied regular unit in 1005, then the overrun could not be initiated from 0906, since that hex would be in enemy ZOC from two different hexes. The overrun could have been initiated from 0907. Had there been an Allied regular unit in 1007, then the overrun could still take place, but the Italian units would be locked in their ZOC, unless, of course they could perform another overrun.

⛨⬡ §11.3.1 Allied railroad supply transport

The Allied faction may transport supply installation by the Egyptian railroad (starting in 1353 and running to 1440). Supply units may start at any point of the railroad and may be moved any distance along the railroad at no MF cost and without using a transport unit. A supply unit *may not* be transported by rail through an enemy ZOC (§3), nor west of enemy ZOC. That is, if the Axis faction has ZOC on a rail hex, then the railroad can only be operated east of the eastern most such hex. Allied units *do not* negate ZOC for rail movement purposes.

Transport by railroad and transport unit of supply installations can be freely mixed. That is, a supply installation may first be moved by rail, then by a transport unit, and then again by rail, or any such combination.

The Egyptian railroad may transport any number of supply installations in a single turn.

The railroad is *not* available to the Axis faction, nor can it be damaged nor destroyed by the Axis faction.

⇛ §11.4 Overrun

During a faction's movement phase, it may attempt an *overrun* assault, using regular in-supply units, on a single enemy stack. To overrun an enemy stack:

- The friendly stack of units move up to the enemy stack as per usual movement rules.
- The friendly stack then moves *into* the hex occupied by the enemy stack paying +10 MF in *addition* to normal movement cost.
- The combat factor differential (ΔCF, see §12.4.2) between the attacking and defending stack *must* be large enough to *ensure* elimination of the *entire* defending stack of regular ground units (§12.4).
  - All supply and terrain modifiers that would be applied during the combat phase applies.
  - Supply status of the attacking stack is determined as the attacking stack moves into the defended hex.
  - Supply status of the defending stack is as it was at the start of the attackers movement phase, preventing OOS by encirclement.
  - The attacker *may not* use maximum supply (§12.3) in an overrun assault.
- The attacking faction need not roll a die for the attack, and the defending stack is eliminated (§12.4.5).
- The defending stack *can* counter-attack with ΔCF=0 (§12.4.4).

Only *one* stack of friendly units may participate in the overrun assault. Other stacks may *not* participate in the assault or assist in any way. That is, only units start their movement phase together as a stack may perform the overrun.

An overrun may not be initiated from a hex that is in enemy ZOC from multiple hexes.

⚙ Enemy units occupying a fortified hex (1925 and 1730) *cannot* be overrun. A lone transportation unit, with a defending CF=1, can be overrun.

Once the overrun assault has been resolved, including the defender's counter attack (§12.4.4), then the attacking stack is free to move on, including further overruns, should it have the MFs to do so. The overrunning stack *may* participate in combat in the following friendly combat phase.

After the overrun has been resolved, other friendly units can pass through the hex that was overrun. These other friendly units *do not* pay the additional +10 MF price for moving into that hex.

See also Figure 7 for an illustration of an overrun.

☺ Transport units in the overrun stack are automatically eliminated, and their CF are not considered when calculating the CF loss requirement for the overrun assault.

⬚ Supply installations in an overrun hex are either cap-

tured or eliminated as described in §11.1.6.

§12 Combat

Combat happens between opposing regular units in adjacent hexes. Only in-supply (§8.4), and Allied in-C^2 (§10.3) regular ground units of the attacking faction may initiate a combat. Defending units, transport units, and units OOS or OOC^2, *may not* initiate combat.

🛡 During the first turn (April 1941), the Allied faction *may not* attack at all.

✤ §12.1 Enemy ZOC

Combat is *always* voluntary *except* if the attacking units are in the ZOC of a fort occupied by the opposing faction (see below).

That is, an attacking unit in enemy ZOC is not forced to attack the enemy, nor must any defending unit that has attacking units in its ZOC necessarily be attacked, with the exception of §12.1.1.

⬡ §12.1.1 Enemy fort ZOC

If the attacking units are in the ZOC of a fort *occupied* by the opposing faction, then the attacking units *must* attack any units within the fort. They *must* do so as long as they stay in the fort's ZOC.

If the attacking units in a fort's ZOC cannot achieve a combat differential of zero or larger ($\Delta CF \geq 0$), or they OOS or OOC^2, then they are considered to have performed an ineffective attack.

Any defending units in the fort *may* counter-attack the attacking units in the fort ZOC (§12.4.4), even if the attack was an ineffective attack.

§12.2 Declarations of combats

The attacking faction must declare all combats. The attacking faction chooses which attacking regular units are attacking which hexes. Attacking units in the same hex need not participate in the same combat, nor necessarily participate in *any* combat even if other attacking units in the same hex do perform combat.

⬡ Attacking units in an enemy ZOC of a fort, including OOS and OOC^2, *must*, however, attack (§12.1).

Attacking units that do not participate in an combat are *never* effected by the results of the combat.

All defending units in hex under attack *must* participate in same the combat. Thus, the attacker must attack *all* enemy units in a hex. Defending units can only be attacked *once* per combat.

Attacking units in multiple adjacent hexes may attack the same defending units, whether these defending units are in one or more hexes, *as long as* all attacking units are adjacent to *all* defending units.
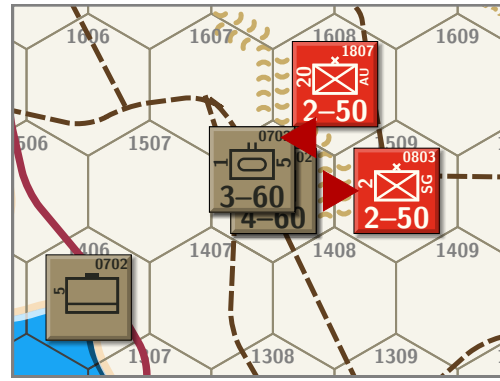

Figure 8: Combat supply. DE 104/IREGT and DE 5/1/ABN in 1508 attack BR SQ/2/IBDE in 1509 and AU 20/IBDE in 1608. Both German units attack over an escarpment hex-side (⬡), and their CFs are therefore halved. However, the Axis faction decides to sacrifice the supply installation in 1406 to create MAS, thus doubling the CFs for the two German units. The total AF is therefore $2(\frac{1}{2}4 + \frac{1}{2}3) = 7$. The two Allied units have no defensive factors, and the total DF becomes $2 + 2 = 4$. The CF differential is therefore $7 - 4 = 3$. Note, if the Axis faction did not sacrifice the supply installation, then the total AF would be $3\frac{1}{2}$, and the combat differential would be $-\frac{1}{2}$ which is not a permissible attack.

🗋 §12.3 Combat supply

When combats have been declared, then the supply state (§8.5) of all attacking regular units is determined. The supply state of defending units is determined when the combat is resolved.

An attacking regular unit in *general supply* (GS) *at the start of the turn*, i.e, within 20 MF of a supply installation, which may or may not have been moved this turn, have its CF halved.

An attacking regular unit in *attack supply* (AS), i.e., within 8 MF of a supply installation that has *not* been moved this turn, *at the point of the combat*, use its full CF in the combat.

If the attacking faction desires to do so, it may create a *maximum attack supply* (MAS) state by sacrificing a supply installation. Then, any attacking unit that are in AS of that supply installation will have its CF doubled in the coming combat. See also Figure 8 for an illustration.

Supply installations that are sacrificed to form MAS are removed from the board at the end of the combat phase, and placed back on its slot on its OOB.

During supply resolution for combat, the attacking faction may *voluntarily* eliminate a supply installation by removing it from the board and placing it in its slot on the OOB. Such supply installations can *not* support any combat.

⛊ §12.3.1 Allied limitations

During the first game turn (April 1941), the Allied faction *may not* voluntarily eliminate supply installations.

Allied supply installations that are OOC[2] *may not* be used to form MAS.

Allied supply installations *may not* voluntarily be eliminated, including by forming MAS (§12.3), if it would mean that some Allied regular or transportation units would become OOS (§8.4) as a consequence.

⚁ §12.4 Combat resolution

When all combats have been declared, and the supply status of all attacking units have been resolved, then the attacking faction resolves each and every combat in *any* order. However, a combat *must* be fully resolved, including enemy counter attacks (§12.4.4) and advances (§12.4.7) before moving on to the next combat. A voluntary combat may be cancelled at any time.

Resolution of each battle entails

- Resolve defending units supply status.
- Calculate the defending units DF, and the attacking units AF, both including terrain effects, and determine the CF differential ΔCF.
- The attacker rolls a dice (1d6) and consult the *Combat Resolution Table* (CRT, Table 9) for the result of the combat.
- Eliminate any defending units.
- Calculate the defenders counter attack AF and the attackers counter attack DF, *without* terrain effects, and determine the counter attack CF differential ΔCF
- The defender rolls a dice (1d6) and consult the CRT (Table 9) for the result of the counter attack.
- Eliminate any attacking units.
- If the defending units were entirely eliminated, and their hex or hexes left open, save for supply installations, then the attacking units *may* advance into the hex or hexes.

§12.4.1 Defender's supply status

Each defending unit is checked to see if they are in supply or not (§8).

If a defending unit is no longer in supply, then it is *immediate* marked as OOS (§8.4) by flipping it to its reverse side, optionally with an OOS marker may be placed on it.

If the defending unit has come into supply, and not dismounted (§13.6), then it is flipped to its front side, and any OOS marker removed.

> *Most often, the defending units will be in the same supply state as they were before combat phase. However, through advances of the attacking units, it may come to pass that a unit is either cut off from supply, or a new supply route becomes available.*

§12.4.2 CF differential

Any unit's, attacking *or* defending, CF can never be reduced below 1 due to terrain, feature, or other factors.

Each defending unit contributes its *current* CF to the total Defence Factor (DF), with possible multiplicative factors based on the terrain or features of the hex the unit occupies. The effect on each units DF is summarised in Table 1.

⬡ **Clear** No effect.

⬡ **Rough** Defending unit's CF is *doubled.*

⬡ **Swamp** Axis, and *only* Axis, defending unit's CF is *doubled.*

⬡ **Escarpment** No effect on defender's CF.

⬡ **Bardia** Defending unit's CF is *doubled.*

⬡ **Tobruk** Defending unit's CF is *quintupled.*

⬡ **Road, track, railroad, border** These features have no effect on the defending unit's CF other than the other terrain or features of the hex.

⊜ Transport units *alone* in a hex defends with current CF of one, possibly modified by terrain and features. If a transport unit is stacked with regular units it *does not* contribute to the total DF.

The possibly multiplied defending unit's CFs are then summed for a total DF. Mathematically we can express that as

$$\mathrm{DF} = \sum_{\mathrm{defenders}} \max\left(1, \mathrm{CF} \times \begin{cases} 2 & \text{in ⬡} \\ 2 & \text{in ⬡ and 🌴} \\ 2 & \text{in Bardia} \\ 4 & \text{in Tobruk} \\ 1 & \text{otherwise} \end{cases}\right).$$

All fractions are kept when multiplying and summing the defending CF.

Then, each attacking units modified CF is accessed.

⬡ The only terrain effect on an attackers CF is if the attacking unit is attacking across escarpment hex side or sides. If the attacking unit *solely* attack across escarpment hex sides, i.e., not over any "open" hex-sides, then that unit's CF is halved.

Note that not *all* attackers need to attack over an escarpment hex side for this factor to apply, and this factor may be different for different attackers. And, if an attacker is attacking over at least one non-escarpment hex side, then this factor does not apply.

Supply

- If the attacking unit is in *maximum attack supply* (MAS) (§12.3), then its CF is *doubled.*

Die	ΔCF										
roll	0	1	2	3	4	5	6	7	8	9	>9
1	2	2	3	4	4	6	6	6	8	10	10
2			3	3	4	4	6	6	8	8	10
3			2	3	3	4	4	6	6	8	8
4			2	2	3	3	4	6	6	8	8
5				2	3	3	4	6	6	6	8
6				2	3	3	4	4	6	6	6

Table 9: Combat Resolution Table (CRT). Attacks with ΔCF are considered ineffectual. Attacks with ΔCF greater than 9 are resolved in the '> 9' column. The numbers indicate how many CFs the (counter) attacked units must loose (§12.4.5). An empty cell means no loss of CF.

- Or, if the attacking unit is in *attack supply* (AS) (§8.5), then its CF is unmodified.
- Otherwise, if the attacking unit is in *general supply* (GS) (§8.5), then its CF is halved.
- Finally, if the attacking unit is OOS, it cannot attack at all.

The contributions of every attacking units is summed to get the final AF. Mathematically, this can be written as

$$\mathrm{AF} = \sum_{\mathrm{attackers}} \max\left(1, \mathrm{CF} \times \begin{cases} \frac{1}{2} & only \text{ over } \hexagon \\ 1 & \text{otherwise} \end{cases} \right.$$
$$\left. \times \begin{cases} \frac{1}{2} & \text{in GS} \\ 1 & \text{in AS} \\ 2 & \text{in MAS} \end{cases} \right) .$$

☹ Transport units can *never* attack, whether alone or stacked with regular units in a hex adjacent to some defending units.

The total DF is subtracted from the total AF to give the final CF differential, ΔCF, and round up any fractions.

$$\Delta\mathrm{CF} = \lceil \mathrm{AF} - \mathrm{DF} \rceil .$$

See also Figure 8 for an illustration.

§12.4.3 Result

The final ΔCF is looked up in the Combat Resolution Table (CRT, Table 9). If the final ΔCF is less than zero, then the combat is considered *ineffectual* and has no consequence, *except* the defending faction *may* counter attack (§12.4.4). If the ΔCF is greater than 9, then the '> 9' column is used.

The attacking faction rolls a dice (1d6) and cross indexes the ΔCF with the die roll. The result is the number of CFs the defending faction must eliminate (see §12.4.5).
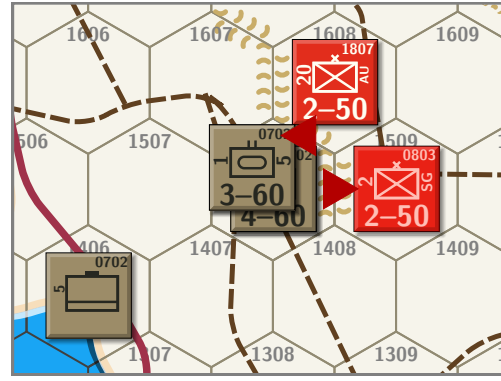

Figure 9: Combat result, continuing Figure 8. We have ΔCF=3. The Axis faction rolls a 2 on the die, resulting in a "3" from the CRT (Table 9). The Allied faction *must* eliminate whole units in a way that comes as close to 3 CF as possible. However, since the Allied faction only has two 2 CF units, it can only eliminate one of them and chooses BR SG/2/IBDE.

Defender		DF
▪	German	×4
▫ ▪	Other	×2

Table 10: Counter attack multipliers.

Once the defender has implemented the result of the attack, it *may* choose to counter attack the attacking units. Note that units stacked with attacking units, but which did not participate in the attack *cannot* be counter attacked.

See also Figure 9 for an illustration.

§12.4.4 Counter attack

The defender's counter attack follows the same principle as the attacker's attack, with some important differences. Note, if the defenders are fully eliminated by the initial attack, they can still counter attack with a final counter attack ΔCF of zero.

First, sum all attacking unit's CF directly to form the counter attack DF,

$$\mathrm{DF} = \sum_{\mathrm{attackers}} \mathrm{CF} .$$

Note that units stacked with attacking units, which did not partake in the original attack, *do not* contribute to the counter attack DF.

Next, sum up all the defender's current CFs with a factor depending on the nationality of the unit. Allied and Italian units have their CF multiplied by 2, while German units have their CF multiplied by four (see Table 10),

$$\mathrm{AF} = \sum_{\mathrm{defenders}} \mathrm{CF} \times \begin{cases} 2 & \text{▪ or ▫} \\ 4 & \text{▪} \end{cases} .$$
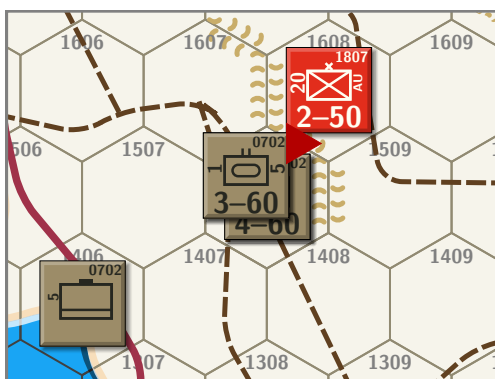
Figure 10: Counter attack, continuing Figure 9. The Allied faction has one unit left with 2 CF. Since this is multiplied by 2, the total counter attack AF becomes $2 \cdot 2 = 4$. When counter attacking, terrain is not taken into account, and the total DF of the two German units is $3 + 4 = 7$. That means the difference comes out to be $4 - 7 = -3$, but since counter attacks are *always* possible at $0 \, \Delta$CF, the final CF differential is 0. The Allied faction could obtain a "2" result, which the German units would ignore since that would not eliminate a whole unit.

☺ A sole defending transport unit *may* counter attack with a CF one. Since a transport unit cannot attack, any transport units stacked with attacking regular units do not contribute to the counter attack DF.

OOS (§8.4) and OOC² (§10.3) *can* counter attack, and do so with their full CF.

The total DF is subtracted from the total AF to give the final counter attack CF differential, ΔCF, and round up any fractions. The counter attack ΔCF can never be smaller than 0.

$$\Delta\text{CF} = \max\left(0, \lceil \text{AF} - \text{DF} \rceil\right) \quad .$$

If ΔCF is less than zero, for example because all defending units were eliminated in the initial attack, then the counter attack can still be made, but must be resolved in the '0' column of the CRT (Table 9).

The defending faction then rolls a dice (1d6) and cross index the ΔCF column with the die roll. The result is the number of CFs that the attacking units must loose (§12.4.5).

See also Figure 10 for an illustration.

§12.4.5 Elimination

In the following, "looser" or "loosing faction" refers to the faction that must implement losses i.e., the defending faction in case of regular attacks (§12.4.3) and the attacking faction in case of counter attacks (§12.4.4).

When a combat result (whether a regular attack or a counter attack) calls for the loss of CFs, then the loosing faction *must* loose as many CFs as possible, up to and including the specified number.

When eliminating units, their front, or nominal, CF value is what counts. That is, even if a unit is OOS, and therefore flipped to its reverse side showing half its nominal CF, it is still its nominal CF value that is lost if the unit is eliminated.

A unit may only be fully eliminated. That is, a unit can not be put into OOS to fulfil loss requirements. If the loosing faction cannot fully eliminate any unit and not exceed the required loss value, then no more units can be eliminated.

For example, the loosing faction is required to loose 3 CF out of two units, both with 2 CF. First, one 2 CF unit is lost. However, if the loosing faction were to eliminate the second 2 CF unit, then that would exceed the required loss of 3 CF. The second unit is therefore not *eliminated.*

On the other hand, if the same loosing faction had a 3 CF unit available to take losses, then that unit must *be eliminated so as to bring the loosing faction losses closest to the required 3 CF. The faction would not be able to first loose a 2 CF unit and then claim no more losses, since the faction had another option to come closer to the required losses.*

Eliminated regular units are moved to the loosing faction's Cadre box on the map (§2.1). From there, they may later be redeployed the faction expending *replacement points* (§13.3). The eliminated unit is placed face-up, and any OOS, OOC², or *dismounted* markers removed,

🛡 A *reinforced* Allied regular unit (§13.4) is immediately stripped of all its reinforcements when it is eliminated. The counter corresponding to the un-reinforced unit must be placed in the Allied Cadre box.

See also Figure 10 for an illustration.

☺ §12.4.6 Elimination of transport units

If *all* units of the loosing faction are eliminated, then *any* transport unit stacked with those units is *also* eliminated.

Eliminated transport units are placed back on the faction's OOB (§2.2) *two turns ahead*, at which point they will automatically arrive as *reinforcements* (§13.4).

An Allied transport unit is eliminated in turn 3. It is then placed in the turn 5 slot on the Allied OOB. In the Reinforcement & Replacement *phase of turn 5, the transport unit arrives as a regular reinforcement.*

§12.4.7 Advance

If, after the defending factions counter attack, *all* defending units were eliminated, *and* there are still attacking units available, then those attacking units *may* advance into the hex(es) vacated by the defender, subject to stacking limitations (§4).

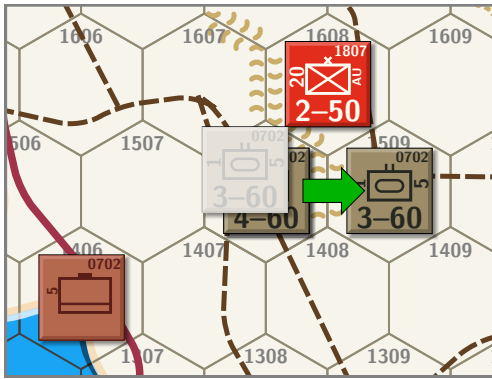If the attack was against multiple hexes, but only a sub-

Figure 11: Advance after combat, continuing Figure 10. The end result of the combat was that one Allied unit was eliminated, vacating 1509. The Axis faction may therefore advance into 1509. The Axis faction chooses to advance DE 5/1/ABN into 1509. The supply installation in 1406 was sacrificed to form MAS, and is therefore eliminated (put back on the Axis OOB). Note that if the supply installation provided MAS elsewhere, it should not be eliminated before all such combats have been resolved.

set of the defended hexes was entirely vacated, then the attacking units may *not* advance.

Units of the attacking faction stacked with the attacking units, but which did *not* participate in the attack, *may not* advance into the vacated hex.

Defending units may *never* advance even if the counter attack vacated one or more of the attackers hexes.

Advance after combat expends no MF, and can be done even if it means moving from one enemy ZOC (§3) to another.

If there are any enemy supply installations in the hex advanced into, then the regular procedure for capture or elimination of enemy supply installations must be followed, as described in §11.1.6.

See also Figure 11 for an illustration.

§13   Reinforcement & replacement

In this phase, the attacking faction receive a number of *replacement points* (RP), and may receive reinforcement units and build replacement units of previously eliminated units. The attacking

🛡 In addition, the Allied faction may reinforce units already on the map, thus increasing those units CF.

§13.1   Arrival

🛡 §13.1.1   Allied arrivals

All Allied reinforcement and replacement units or supply installations arrive in the Alexandria base (all 5 hexes around 1351). If Alexandria is controlled by the Axis faction, then no reinforcements can arrive.

🌴 §13.1.2   Axis arrivals

Axis reinforcement and replacement units or supply installations arrive in the El Agheila base (all 5 hexes around 0702). If the Allied faction has taken control of El Agheila, then no reinforcements arrive.

If the Axis faction has had a regular unit in Tobruk (1925) for a *full* turn, *and* there are no in-supply (§8.4) Allied units within 20 hexes (19 intervening hexes) of Tobruk, then the Axis faction may land *reinforcement* units and supply installations in Tobruk. Note that rebuild replacement units *may not* land in Tobruk.

> *Suppose the Axis faction took Tobruk in the Axis combat phase of turn 5. Then a* full game *turn means that at least one Axis unit* must *stay there for all of game turn 6, up to an including the Axis reinforcement and replacement phase. In that phase, of turn 6, the Axis* can *land reinforcements in Tobruk.*

Axis airborne (⊠) or air assault (⊠) infantry units *may* arrive in any road (⬡) or track (⬡) hex which is in Axis general supply (GS) (§8.5).

🗖 §13.1.3   Stacking and forfeit

At the end of the reinforcement and replacement phase, the stacking limitations (§4) *must* be observed. Excess units are eliminated at the attacking factions discretion.

If reinforcement units cannot arrive, either do to stacking limitations or because their possible arrival points are not in the factions control, then they are lost. Scheduled reinforcements *cannot* be held back to arrive on a later turn.

§13.2   Scheduled reinforcements

The attacking faction consults its OOB (§2.2) for the current turn to see if any reinforcements are arriving this turn. If there is, then those reinforcement units are picked up from the OOB and placed in one of the faction's valid arrival hexes (§13.1).

▭ §13.2.1   Supply installations

The attacking faction receive *one* supply installation on every turn, as long as they are available on the OOB. If there are no supply installations available on the factions OOB, then no supply installation will be received as reinforcement on that turn.

🌴 If the Axis faction decided to try to invade Malta (§9) but *failed*, then the Axis faction will *not* receive any supply installation reinforcements in turns 15 and 16.

⊜ §13.2.2   Transport units

A previously eliminated transport unit will arrive as reinforcement *two* turns after it was eliminated. When the transport unit was eliminated (§12.4.6) it was placed on a turn slot of the factions OOB. The transport unit will arrive on that turn.

The attacking faction receive *one* supply installation on every turn, as long as they are available on the OOB. If there are no supply installations available on the factions OOB, then no supply installation will be received as reinforcement on that turn.

🛡 §13.2.3   Allied withdrawals

On some turns, the Allied OOB stipulates that some Allied units *must* be withdrawn from the map.

Units to be withdrawn *must* match the indicated type (infantry or armoured). If not enough units of the appropriate type can be withdrawn, then the Allied faction immediately looses the game.

Units to be withdrawn *must* be in the Alexandria base (any of the 5 hexes) at the start of the Reinforcement and Replacement phase, *except*, when indicated, they can also be withdrawn from the Allied Cadre box. If there are not enough units of the appropriate type in the Alexandria base, or Cadre where permissible, then the *Axis* faction may pick *any* unit on the board, of the appropriate type, that the Allied faction *must* withdraw. Withdrawn units may be OOS (§8.4) or OOC[2] (§10.3). Withdrawn units must be placed in the designated slots on the Allied OOB. If a withdrawn unit was previously reinforced, then that unit immediately looses all its reinforcements. The counter corresponding to the unreinforced unit must be placed in the withdraw slot on the Allied OOB. Withdrawn units can possibly later be reinstated.

🛡 §13.2.4   Allied reinstate

In some turns, the Allied OOB stipulates that regular units of a specific type (infantry or armoured). Reinstated units may be drawn from previously withdrawn units (§13.2.3) or from previously eliminated units in the Allied Cadre (§12.4.5).

Note, a unit may be reinstated and withdrawn in the same Reinforcement and Replacement phase.

§13.3   Replacements

§13.3.1   Replacement points

The attacking faction receives a number of *Replacement Points* (RPs) at the start of the Reinforcement and Replacement phase, as indicated on the factions OOB.

There are two kinds of RPs: Infantry and Armoured. The different RPs are *not* interchangeable.

♟ RPs are allotted separately for Italians and Germans to the Axis faction. Italian and German RPs are *not* interchangeable.

RPs can be accumulated across turns, but the faction may have no more than 10 RP, of any given type, at the end of the Reinforcement and Replacement phase. RPs in the excess of 10 are lost.

Suppose the Allied faction has 9 RP Infantry RPs at

the start of the phase in turn 8. The Allied faction then receives Infantry 2 RP, for a total of Infantry 11 RP. If the Allied faction does not spend any Infantry RP this turn, then one Infantry RP will be lost.

Factions should use the RP tracks and markers to keep track of available RPs.

Replacement points can be used to rebuild previously eliminated units from the factions Cadre, and for the Allied faction to reinforce units already deployed on the map.

§13.3.2   Replacement units

A previously eliminated unit in the attacking factions Cadre box can be rebuild as a replacement unit be expending as many RPs as the rebuild unit has CF.

The RPs spend *must* match the type of replacement unit. That is, infantry units can only be rebuild using Infantry RPs, and armoured units only by Armoured RPs.

♟ For the Axis faction, the nationality of the RPs spend *must* also match the nationality of the replacement unit. That is, only German Infantry RPs can used to rebuild a German infantry unit.

Replacements arrive in the factions valid arrival locations (§13.1).

🛡 §13.4   Reinforced units

Regular Allied units that are in the Alexandria base at the start of the Reinforcement & Replacement phase can possibly be *reinforced* by expending RPs.

The type of RPs spend to reinforce a regular unit *must* match the type (Infantry or Armoured) of the unit. Each RP, of the appropriate type, increases the unit's CF by one. The Allied faction will swap the reinforced counter of the unit from the OOB, with the unit's counter in the Alexandria base.

A unit *may* be reinforced more than once in a single Reinforcement & Replacement phase, and units may also be reinforced upon arrival from Cadre or Reinforcements. OOS (§8.4) and OOC[2] (§10.3) units may be reinforced.

Depending on the turn, there is a limit to how much a given type of unit, Infantry and Armoured, can be reinforced. This is printed on the Allied OOB. Starting from turn 10, Infantry units can be reinforced up to 3 CF. Armoured units may be reinforced up to 4 CF starting in turn 7, and then from turn 13, up to 5 CF.

When a reinforced unit is eliminated or withdrawn, it immediately looses all its reinforcements and the Allied faction *does not* receive any compensatory RPs.

§13.5   Optional reinforcements

Both the Allied and Axis faction have optional reinforcements available to them. These are marked with the letters 'A' through 'E' for the Allied faction, and 'F' through 'L' (skipping 'I') on the respective OOBs.

It is entirely voluntary for a faction to choose an optional reinforcement, *except* for the Axis 'M' option (§13.5.2), and if a faction decides *not* to exercise an option, then the reinforcement units simply do not arrive on the map.

If a faction *do* execute an optional reinforcement option, then the relevant units *will* arrive, *and* the faction will pay a price in terms of victory points (§13.5.3). The reinforcement option marker (§2.3.3) should be flipped over to show that the option was exercised. The received units are those to the right of the reinforcement letter or within a red-border to the left or below the reinforcement letter, on the OOB.

Depending on the faction and circumstances, there *are* some restrictions on which reinforcement options that can be executed. If a faction chooses a reinforcement option that excludes another reinforcement option, then that excluded reinforcement option (both marker and units) should be removed from the OOB.

🛡 §13.5.1   Allied restrictions

A This option can only be exercised on turn 8.

B The Polish 1ˢᵗ Infantry Brigade may arrive on turn 13 *or* 15, and the option may be exercised on *either* of these turns.

C This option can only be exercised on turn 15.

D This option can be exercised the earliest on turn 14, or any later turn. This option implies that the Allied faction *must* withdraw (§13.2.3) two Indian Infantry brigades on the turn the option is exercised. If the Allied faction cannot voluntarily fulfil this requirement, i.e., the two Indian units *must* be in the Alexandria base, then this option is *not* available.

E This option can only be exercised on turn 17.

B, C, & D These options are *mutually exclusive*. That is, if the Allied faction chooses to exercise any of these options, then the other options are no longer available.

♟ §13.5.2   Axis restrictions

Axis reinforcement options depend on whether the Axis faction attempted the off-board invasion of Malta in turn 15 (§9), and if so, whether invasion was a success or not. The exact options are summarised in Table 11).

F, G, H, J, K, L These options may *not* be exercised until turn 16. *At most* two options may be exercised in a single turn.

The availability of these options depend on the Malta invasion status (Table 11): details.

- In case of a *successful* invasion of Malta, then *all*

Malta invasion	Reinforcements
No attempt	F *or* G *and* H, J, K, *or* L M arrive as indicated
Success	F, G, H, J, *and* K M arrive turn 18
Failure	F, G, *or* K M does *not* arrive No 📦 on turns 15 & 16

Table 11: Axis optional reinforcements.

of these options are available to the Axis faction.

- In case of a *failed* invasion of Malta, then *one* of F, G, or K may be exercised, and H and J are *not* available.

- If no attempt was made to invade Malta, then the Axis faction can choose *either* F *or* G, and one of H, J, K, *or* L.

M This is not really an option, and the Axis faction will *not* pay a victory point cost (§13.5.3) for this option. If the Axis faction did not attempt the invasion of Malta, then the M reinforcements arrive as regular reinforcements. If the Axis faction *did* attempt the invasion but failed, then these reinforcement *do not* arrive at all. If the invasion succeeded, then the arrival of these units is postponed to turn 18.

If the Malta invasion was attempted but *failed*, it also has consequences for Axis supply installation reinforcements (§13.2.1).

§13.5.3   Cost of reinforcement options

Choosing a reinforcement option comes at a price. When calculating the total number of CFs each faction has on the map for victory purposes (§14), then 1½ times the sum of the optional reinforced units' CF is deduced from the score.

The total penalty CF, $CF_{penalty}$, for a reinforcement option X is

$$CF_{penaltyX} = \sum_{\substack{X \text{ option} \\ \text{units}}} CF \quad .$$

Suppose the Axis faction exercises reinforcement option 'F', and DE 10/1/ABN *(3 CF),* DE 10/2/ABN *(3 CF),* DE 8/ARECBN *(2 CF), and* DE 28/AIREGT *(4 CF) arrive on the map, for a total $CF_{penaltyF}$ of 12.*

◯ §13.6   Dismount

All regular units are generally at least *motorised*, meaning the have support lorries to transport men and material across the map.

Thus, if a faction has units corresponding to 10 CF or more adjacent and all on the same road (⬡) or track

Ratio of in-supply CF 🛡 to 🌴 CF_{ratio}	Alexandria	El Agheila	Winner	Level
$\text{CF}_{\text{ratio}} \geq 5$	🛡			D
$5 > \text{CF}_{\text{ratio}} \geq 3$	🛡	🛡		D
			🛡	S
$3 > \text{CF}_{\text{ratio}} > 2$	🛡	🛡		S
				M
$2 \geq \text{CF}_{\text{ratio}} > 1$	🌴 either			M
$1 \geq \text{CF}_{\text{ratio}}$	🌴 either		🌴	S
	🌴 both			D
D: Decisive S: Substantive M: Marginal	Hold Tobruk > 21 faction turns: …, M→S, S→D			

Table 12: Victory conditions.

($\langle\rangle$), then those units may *dismount* from their support lorries to free up these to transport supply installations. Both OOS (§8.4) and OOC[2](§10.3) units may dismount.

The friendly units are flipped to their reverse side and a dismount marker (§2.3.3) is placed on them. The newly created transport unit (⊜) is placed adjacent to the dismounted units, on the road or track.

If there are no transport units available on the attackers OOB, then no new transport unit can be created. This limits the number of transport units available to each faction to three. Previously eliminated transport units that are scheduled to arrive at a later turn *can* be rebuild this way, but then the later reinforcement is forfeited.

Dismounted units are considered OOS (§8.4), with all the consequences entailed (no move, no attack, half CF, etc.). A dismounted unit is *always* considered OOS, even if it can trace a valid supply line (§8).

Units can re-mount by reversing the above procedure. The attacking faction moves an in-supply transport unit adjacent to the dismounted units. In the reinforcement and replacement phase, the dismounted units remount. The dismounted units are flipped to their face-up side, if they are in-supply (§8.4), and dismounted markers are removed. The transport unit is removed from the map and placed back on the attackers OOB.

§14 Victory

Should the Axis faction control (§5) Alexandria at the end of the Axis turn, then the game ends and victory is calculated immediately.

Otherwise, game ends at the end of the Axis turn of turn 20, November 1942, and victory is calculated.

§14.1 Victory calculation

Both faction sum the CF of all in-supply units (§8.4) present on the map, i.e., not including units in Cadre boxes, units that are OOS, or dismounted. This the is the total on-map CF,

$$\text{CF}_{\text{on-map}} = \sum_{\substack{\text{in-supply} \\ \text{on map}}} \text{CF} \quad .$$

Then, for any reinforcement option exercised (§13.5), each faction then sum the CFs received from these options to get the total penalty CF from these reinforcement options

$$\text{CF}_{\text{penalty}} = \sum_{\substack{\text{exercised option} \\ \text{options}}} \sum_{\text{units}} \text{CF} \quad .$$

Suppose the Allied faction had exercised options 'C' and 'E', and thus received 2 CF and 11 CF from these options, respectively. Then $\text{CF}_{penalty}$ would be 13.

The factions then calculate their adjusted on-map CF as the total on-map CF minus 1½times the penalty CF from exercised reinforcement options, rounding up any fractions,

$$\text{CF}_{\text{victory}} = \text{CF}_{\text{on-map}} - \left\lceil \frac{3}{2}\text{CF}_{\text{penalty}} \right\rceil \quad .$$

The factions then calculate the ratio of the Allied adjusted on-map CFs to the Axis adjusted on-map CFs,

$$\text{CF}_{\text{ratio}} = \frac{\text{CF}^{\text{🛡}}_{\text{victory}}}{\text{CF}^{\text{🌴}}_{\text{victory}}} \quad .$$

The value of CF_{ratio}, together with which faction controls Alexandria (1351) and El Agheila (0702), is looked up in Table 12, to determine the winner and the level of victory.

If none of the factions satisfy the condition for victory, then the game is considered a draw.

A draw can happen if the Axis faction has at least as many adjusted on-map CFs as the Axis faction, but the Axis faction does not control El Agheila nor Alexandria. Another possibility, is that the Allied faction has at least twice as many adjusted on-map CFs as the Axis faction, but the Axis faction controls Alexandria.

Note that the Allied faction promotes its victory level if it controls El Agheila in addition to Alexandria.

If the game ends on turn 20, *and* if a faction has controlled Tobruk (1925) for at least 21 consecutive faction turns (i.e., half game turns), then the victory level is

promoted on step in that factions favour. The 21 faction turns need not be at the end of the game, but they *must* be consecutive.

Suppose the Axis faction had scored a marginal victory based on adjusted on-map CFs and control of the bases, but the Allied faction had managed to hold on to Tobruk for 21 consecutive faction turns. Then that marginal Axis victory would be turned into a draw.

Similarly, if the Allied faction had scored a substantive victory, but the Axis faction had held Tobruk long enough, then that Allied substantive victory would be demoted to a marginal victory.

⋀ *This latter possibility to change victory levels based on holding Tobruk for the majority of the game was introduced in the 1982 AHGC version of the game, and was not present in the original 1971 edition from SPI. Factions may decide to* not *use this possibility.*

§15 Optional rules

§15.1 Reaction movement

In the opponents combat phase, just before a combat is resolved (§12.4), the defending faction may attempt to reinforce the defending units with other units already on the map. A unit may reinforce the defending units, provided

- it is *not* OOS (§8.4) *nor* OOC[2] (§10.3),
- not in enemy ZOC (§3),
- have not been attacked themselves,
- can move to one of the hexes being attacked, *and*
- in doing so, does not violate stacking limitations.

Italian infantry *may not* perform reaction movement. All armoured units, except Italian armoured units, can spend at most 6 MF to move to the attacked hex. All other units, Infantry and Italian Armoured units, can spend at most 3 MF to reach the attacked hex.

If these conditions are met, then the defending faction rolls a dice (1d6) for *each* unit attempting a reaction movement. Axis units succeed on a roll of 2, 3, 4, 5, or 6, and Allied units on a roll of 3, 4, 5, or 6. If a unit fails its roll, when trying to reach one combat, does *not* prevent it from trying reaction movement in *another* combat. However, a unit may only do *one* reaction movement per enemy combat phase.

If the reaction movement succeeds, then the units join the defending units in their hex or hexes, and the combat's CF differential must be recalculated (§12.4.2).

§15.2 Italian infantry reliability

First, any German regular unit or Italian Armoured unit, is considered a *supporting unit* (SU) for this rule. For this rule, the Axis faction must count number of lost Italian Infantry CFs eliminated. This count, ICF, accumulates over turns and is never decreased, even if Italian

Infantry units are rebuild as replacements (§13.3).

- When ICF is 10 or greater, then Italian Infantry units may not attack unless they are AS or MAS (§12.3) or stacked with SUs.
- When ICF is 20 or greater, then Italian Infantry units *may* surrender if attacked (§15.3), *unless* stacked with or adjacent to SUs. Furthermore, Italian Infantry units *not* stacked with SUs do no excerpt ZOC (§3). Enemy units may *not* move into the hex the occupy unless via an overrun (§11.4).
- When ICF is 25 or greater, then Italian Infantry units *may* surrender if attacked (§15.3), *unless* stacked with SU. The cost of overrunning such units is reduced to +5 MF.

§15.3 Surrender

Italian Infantry units that are subject to surrender, *must* roll a dice (1d6). On a roll of 1, 2, or 3, the unit surrenders and is placed in the Axis Cadre box on the board.

If the optional reaction movement rule (§15.1) is used, then a successful reaction move by an SU will prevent the surrender.

Italian Infantry that does not surrender *must* be attacked as per normal (§12.4). If the surrender of units caused the hex or hexes to be vacated, then the attacking units may advance into the hex or hexes as per normal advance rules (§12.4.7).

If all attacked units surrendered, then advancing attacking units are not considered to have conducted combat and can engage in other, permissible, manoeuvres.
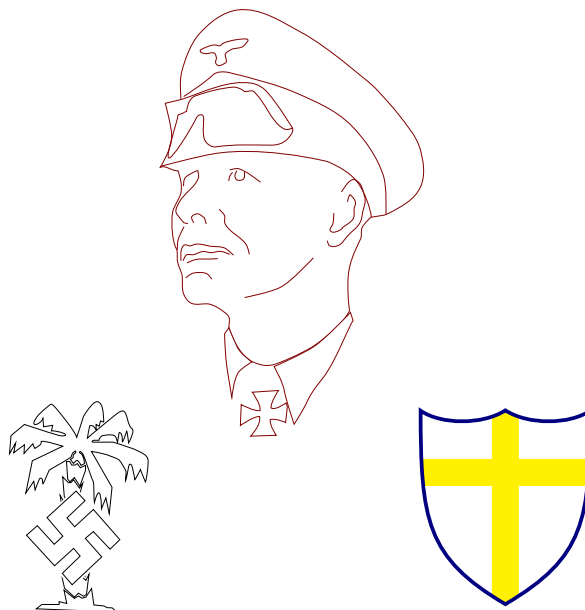
PANZERARMEE AFRIKA
ROMMEL IN THE DESERT, APRIL 1941 – NOVEMBER 1942

Turn Sequence

🛡 **Allied turn**
Supply
C²
Movement
Combat
Attack supply
Resolution
Replacements & reinforcements
🌴 **Axis turn**
Supply
Movement
Combat
Attack supply
Resolution
Replacements & reinforcements

🛡 C²

Die roll	Hexes ✹	Hexes ⋀
1	1, 3, 7	1, 7
2	2, 4, 8	2, 8
3	3, 5, 9	3, 9
4	4, 6, 0	4, 0
5	5, 7, 1	5
6	6, 0, 2	6

✹ & ⋀ columns are mutually exclusive

Distances in MF Along Coastal Road

Eastern → / Western ↓	El Agheila	Benghazi	Derna	Gazala	Tobruk	Bardia	Sidi Barrani	Matruh
Alexandria	73	57	41	35	32	26	19	12
Matruh	61	45	29	23	20	14	7	
Sidi Barrani	54	38	22	16	13	7		
Bardia	47	31	15	9	6			
Tobruk	41	25	9	3				
Gazala	38	22	6					
Derna	32	16						
Bengazi	16							

Combat Resolution Table

Die roll	ΔCF 0	1	2	3	4	5	6	7	8	9	>9
1	2	2	3	4	4	6	6	6	8	10	10
2			3	3	4	4	6	6	8	8	10
3			2	3	3	4	4	6	6	8	8
4			2	2	3	3	4	6	6	8	8
5				2	3	3	4	6	6	6	8
6				2	3	3	4	4	6	6	6

Effect of Supply Status

State	MF to 🧳	MF	AF	DF
OOS	> 20	0		×½
General	≤ 20		×½	
Attack	≤ 8	×1	×1	×1
Max attack	≤ 8 & 🧳 spent		×2	

Terrain & Feature Effects

Terrain or feature	MF □	MF 🚚	Combat effect
Clear	3	—	
Rough	10	—	2× DF
Swamp	10	—	2× DF†
Escarpment	+10‡	—	½× AF
Bardia*			2× DF
Tobruk			5× DF
Fort ZOC¶			
Road§	1		
Track§	2	8	
Change	+2	—	
Railroad#	—		
Overrun	+10	—	
Border			
Prohibited	—		

† 🌴 only   ‡ In addition to other costs
* At most 2 □ may stack
¶ *Must* attack enemy in ⬡
§ Nullifies other cost when moving *along*
# 🛡 🚃 transport *any* distance

Counter-attack Multiplier

Defender	DF
🟫 German	×4
🟨 🟥 Other	×2

🌴 Malta Invasion Attempt

Die roll	In-supply 🚃 None	in Libya 🚃 Some
1	Success	Success
2	Success	Success
3	Success	Success
4	Success	Failure
5	Failure	Failure
6	Failure	Failure

🌴 Reinforcement Options

Malta invasion	Reinforcements
No attempt	F *or* G *and* H, J, K, *or* L / M arrive as indicated
Success	F, G, H, J, *and* K / M arrive turn 18
Failure	F, G, *or* K / M does *not* arrive / No 🟫 on turns 15 & 16

🧳 Capture

Die Roll	Turn 1	Turn 2+
1–2	🟥 🟫	🟫
3–4	🟥	—
5–6	—	

Nations

DE	German	IT	Italian
UK	British	IN	Indian
US	American	AU	Australian
NZ	New Zealand	SA	South African
FR	French	PL	Polish
GK	Greek	BE	Belgian

NATO Symbology

Infantry	⊠ Infantry
	⊠ Motorised infantry
	⊠ Airborne infantry
	⊠ Air assault infantry
Armoured	⊠ Mechanised infantry
	⊘ Mechanised reconnaissance
	◻ Armoured
	🧳 Supply installation
	🚚 Transport unit
	× Brigade (2000-4000 men)
	⊔⊔⊔ Regiment (1100-3200 men)
	⊔⊔ Battalion (600-1000 men)

Turn — Nation — CF — Reinforced — Identifier — Hex Type — MF — Echelon Parent