The Desert Fox

Rommel's Campaign for North Africa
April 1941–December 1942

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[1.0] Introduction

Desert Fox is a brigade level simulation of the war in North Africa from the arrival of Erwin Rommel in March of 1941 until the end of 1942 when the Allies, landing amphibious forces in Western Africa, blockaded any chances for future Axis offensives in North Africa. The Axis player attempts to secure Libya and Egypt by seizing Alexandria, while the Allied (Commonwealth) player seeks to protect Alexandria and to contain the Axis forces. There are two scenarios in *Desert Fox*: a short, five-turn game, covering the Axis drive on Tobruk in the first few months of the conflict; and a campaign game, recreating the entire war in Northeast Africa.

[2.0] Game Equipment

CASES:

[2.1] GAME-MAP

Desert Fox has a two section 17″×44″ map depicting the area in which the North African Campaign was fought. The map provided with the game is a single 22″×34″ piece. To assemble the map, overlap the western edge of Map E (Egypt) over the Eastern edge of Map L (Libya). When the map is assembled, the coastline should be continuous from Alexandria to El Agheila. Terrain features relevant to desert warfare, and historically significant locations, are shown on the map. A hexagonal grid has been superimposed on the map to regulate movement and other game functions. Each hexagon, or "hex," is numbered. Hexes on the Libya map are referred to with an **L** prefix, and hexes on the Egypt map are referred to with an **E** prefix.

Various tracks, boxes, charts, and tables are printed on the map to facilitate play. Note also that each tenth hex along the Via Balbia (the coastal road) has a milestone mark, indicating distance (in hexes) from El Agheila, to allow for rapid reckoning of distances.
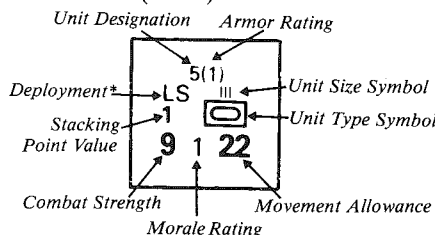
[2.2] PLAYING PIECES

The cardboard pieces, called units, represent the military units which participated in the historical campaign. Various markers have also been provided as aids in play.

[2.21] Sample Units

ARMOR UNIT (Front)

*Units that begin the game on the map are coded **LS** (start on Libya map), **ES** (start on Egypt map), or **RS** (start in Refit Box). See 15.12 and 15.13 for specific hexes of deployment. Reinforcing units have a one or two-digit number in this space indicating the Game-Turn in which they enter; see the Reinforcement schedules on the map. Armor replacement units are indicated with the code **Rpl**; see 13.3.
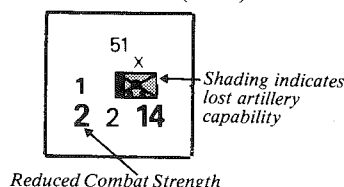
ARMOR UNIT (Back)
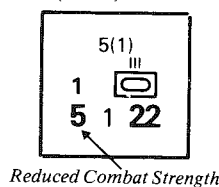
HEAVY WEAPONS UNIT (Front)
With artillery capability
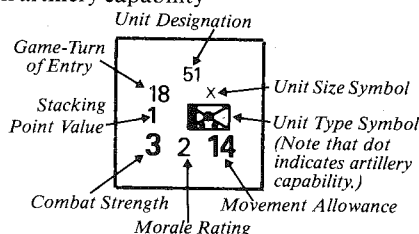
HEAVY WEAPONS UNIT (Back)

Note that the following unit types are considered artillery (and flak) and are subject to the rules of Section 12.0:
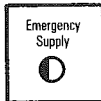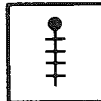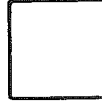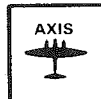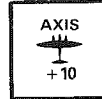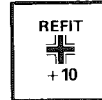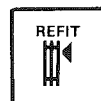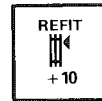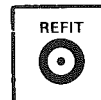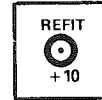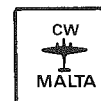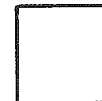
[2.22] Summary of Counter Types
COMBAT AND SUPPLY UNITS

Front		Back
	Infantry Band indicates non-motorized unit	
	Motorized Infantry	
	Armor	
	Mechanized Infantry	
	Artillery See 11.15	
	Flak (Anti-Tank)	
	Reconnaissance	
	Heavy Weapons	
	Heavy Weapons with Artillery Capacity	
	Glider Infantry	
	Armored Car	
	Armored Artillery	
	Heavy Airborne Infantry	
	Mobile Supply Unit (MSU)	
	Supply Dump	

MARKERS

Front	Description	Back
Out of General Supply	Out of Supply	d Disrupt
	Disrupted	
(1)	Fortification	(2)
Captured Supply	Captured Supply	Forced March
	Forced March	
Emergency Supply	Emergency Supply	(pick symbol)
	Under Construction	
(railhead symbol)	Railhead	
AXIS (air)	Air Points	AXIS +10
REFIT	German Refit Points	REFIT +10
REFIT	Italian Refit Points	REFIT +10
REFIT	Commonwealth Refit Points	REFIT +10
Game Turn	Game-Turn	
CW MALTA	Commonwealth Air at Malta	

Certain armor units were historically equipped with significantly different tanks at different times during the campaign. Such units are represented in *Desert Fox* by two or more counters, which frequently have greatly different Combat Strengths and Movement Allowances. Only one counter representing a given unit will ever be on the map at a given time, however. When more than one counter is provided for a unit, each counter has an Armor Rating, the only purpose of which is to determine when a particular counter is used during play. See 13.3

[2.23] Unit Size Symbols

A unit's organizational size is not of direct importance to play, but for those players interested in the history of the campaign, a unit's size is indicated as follows: **II** = Battalion; **III** = Regiment; **X** = Brigade; **XX** = Division.

[2.3] CHARTS AND TABLES

Several charts and tables are used in *Desert Fox* to simplify and condense various game functions. These charts and tables include the Commonwealth Reinforcement/Withdrawal Schedule (5.17), Axis Reinforcement Schedule (5.18), Raid on Malta Table (6.37), Axis Convoy Arrival Table (7.57), Terrain Effects Chart (8.29), Hexside Terrain Effects on Combat Chart (11.37), Combat Results Table (11.8), Refit Chart (13.26), Terrain Key, and the Summary of Supply Sources and Capacities. In addition, information which varies with the Game-Turn is presented in condensed form on the Turn Record Track.

[2.4] GAME SCALE

Each hex on the game-map represents 16 kilometers, and each Game-Turn represents a month. Most of the units portrayed are brigade or regiment-sized, but a few division and battalion-sized units are also depicted. Air Points are abstractions of quality as well as quantity of planes and pilots, and there is no set ratio of planes to each Air Point.

[2.5] UNIT DESIGNATIONS

The Order-of-Battle for *Desert Fox* is quite accurate, given the operational/brigade-level scope of the game. The basic operational and tactical formation of many units was the battalion, not the regiment or the brigade, however. Thus, while the 131/44 Infantry Brigade (131st Regiment/44th Division) was an actual unit which operated under that designation, the 44th Heavy Weapons Regiment is really an amalgamation of several battalions assigned to the 44th: the 6th Chesire Machinegun Battalion, 44th Recce Regiment, 57th Anti-Tank Regiment, 57th Field Artillery Regiment, 58th Artillery Regiment, 65th Field Artillery Regiment, and 30th Light Anti-Air Regiment. There are several such composite units in the game. Note also that the British often used the term "regiment" to describe battalion-sized units. Whenever a question of a unit's true organizational size arises, refer to the designation on the unit's counter.

The following unit type abbreviations are used in the initial set-up and reinforcement schedules: **Armd** (Armored); **Armd Arty** (Armored Artillery); **Armd Car** (Armored Car); **Arty** (Artillery); **Gldr Inf** (Glider Infantry); **Hvy Airbne Inf** (Heavy Airborne Infantry); **Hvy Inf** (Heavy Infantry); **Hvy Wpns** (Heavy Weapons); **Mech** (Mechanized Infantry); **Mtrzd** (Motorized); **Reccon** and **Recce** (Reconnaissance). Units with no type specified are infantry.

The following abbreviations are used in individual unit designations: **Afr** (African); **Ar** (Ariete); **Artclre** (Articelere); **Aus** (Australian); **Bol** (Bologna); **Br** (Bersaglieri); **Brs** (Brescia); **CIH** (Central India Horse); **FF** (Free French); **Folg** (Folgore); **GGFF** (Giovani Fascisti); **Ind** (Indian); **Lan** (Lanceria di Novara); **Lanc** (Lancers); **Li** (Littoria); **Lt** (Light); **Monflll** (III Monferrato Squadrone); **Nizz** (Nizza Cavaliera); **NZ** (New Zealand); **Pav** (Pavia); **Pist** (Pistoia); **Pzr** (Panzer); **QVOC** (QVOC Guides); **Recam** (Raggruppamento Esplorante del Corpo de Manovra); **Royals** (Royal Dragoons); **SA** (South Africa); **Sab** (Sabratha); **Sav** (Savona); **Spt** (Support Group); **Svbd** (Sonderverband); **Tri** (Trieste); **Trn** (Trento); **2DYeo** (2nd Derbyshire Yeomanry). Commonwealth artillery units with single letter designations (e.g., c) are composite units.

[2.6] PARTS INVENTORY

Each copy of *Desert Fox* should contain the following game parts:

One 22" × 34" mapsheet

One sheet of 200 die-cut cardboard playing pieces

One 16-page rules booklet

Two six-sided die (not included) are also required for play.

[3.0] Sequence of Play

GENERAL RULE:

Desert Fox is played in a series of Game-Turns during which the players move their units, engage in combat, and perform other game functions in attempting to attain their game objectives. The players must play each Game-Turn according to a strict sequence. No segment of a turn may be begun until the preceding segment has been completed. The player whose Player-Turn is currently in progress is the *Phasing* player, while the other player is termed the *non-Phasing* player. The player whose Player-Turn is first in each Game-Turn is determined by the rules for Initiative (4.0).

CASES:

[3.1] SEQUENCE OUTLINE

A. Initiative Determination Phase

The players determine who will be the first player according to rules Section 4.0, Initiative.

B. First Player-Turn

1. Reinforcement Phase. The Phasing player brings in any *reinforcements* due him, (5.1), and notes the arrival of any *Refit* and *Air Points* he is due. The Axis player, if it is his Player-Turn, uses the Axis Convoy Arrival Table (7.57) to determine his supply reinforcements. The Commonwealth player, if it is his Player-Turn, receives any supply units indicated on the Turn Record Track. Captured Supply Markers are removed from friendly supply units.

2. Air Allocation Phase. The Commonwealth player, if he is the Phasing player,

may send Air Points to Malta (6.3). The Axis player, if he is the Phasing player, may initiate a raid on Malta.

3. Initial Movement Phase. The Phasing player determines which of his units are in *General Supply* (7.0). He may then move his units within the restrictions of rules Section 8.0, Movement. Supply units may be expended to provide motorized units with General Supply. Enemy units may be *overrun* (8.3).

4. First Enemy Reaction Phase. All eligible non-Phasing units may undertake Reaction Movement according to rules Case 8.4, Reaction. The non-Phasing player may attempt to destroy his own supply units under certain conditions (7.8).

5. First Combat Phase. Phasing units in enemy Zones of Control (ZOC's) must engage non-Phasing units in combat. All attacks are resolved according to rules Section 11.0, Combat.

6. Motorized Movement Phase. The Phasing player determines General Supply for all his units. His motorized units may then move, within the restrictions of the movement rules.

7. Second Enemy Reaction Phase. Non-Phasing motorized units may conduct Reaction Movement.

8. Second Combat Phase. Phasing units attack, as in Phase 5.

9. Refit Phase. Supply Dumps may be converted to *Mobile Supply Dumps* (MSU's), and vice-versa (7.6). The Phasing player may then refit and rebuild previously affected units. Units may then recover from Disruption results (11.67). The Phasing player may attempt to destroy his own supply units (7.8). The Phasing player rolls for attrition of friendly Unsupplied units (7.32). Random supply expenditure takes place (7.9).

C. Second Player-Turn.

The second player becomes the Phasing player and repeats Phases 1 to 9.

D. Game-Turn Indication Phase

If it is currently the last Game-Turn of the scenario, the game ends. Otherwise the Game-Turn marker is advanced one turn on the Turn Record Track, and a new Game-Turn begins.

[3.2] AXIS INITIAL SURPRISE TURN

The Axis offensive into Cyrenaica in the last few days of March, 1941 caught the Allies completely by surprise. The British had estimated that the Germans would not be ready for desert combat until June, and they had begun to strip their units to reinforce Greece and Syria. A number of special rules reflect this intelligence breakdown. These rules apply only to Game-Turn 1 (except rule 5):

1. The Axis player is automatically the first player (there is no Initiative Phase).

2. Phases 6, 7, and 8 are deleted from the Commonwealth Player-Turn.

3. The Axis player receives no supply units as reinforcements (e.g., he does not consult the Axis Convoy Arrival Table, 7.57).

4. The Commonwealth may *not* construct fortifications (14.0).

5. Four is added to the Combat Strengths of

all Axis units during Game-Turns 1 and 2 for the purposes of Supply Overrun *only* (7.7).

6. The Commonwealth player may not attempt to destroy his own supply units (7.8).

[4.0] Initiative

GENERAL RULE:

The Initiative procedure is used to determine which player will move first in each Game-Turn. The player with Initiative decides whether he wants to be the first or second player during a turn.

PROCEDURE:

The Axis player rolls the dice. If the roll is within the span (inclusive) indicated for the Game-Turn on the Initiative portion of the Turn Record Track, the Axis player has Initiative. If the roll is outside the span, the Commonwealth player has the Initiative. The player with the Initiative must choose whether he wishes to be the first or second player.

DETERMINING INITIATIVE

A. The Axis player automatically goes first on Game-Turn 1. He may not choose to be the second player.

B. The Axis player automatically has the Initiative on Game-Turn 2. He may choose to be either the first or second player.

C. Initiative is determined each Game-Turn and never carries over from one turn to the next.

[5.0] Reinforcements

GENERAL RULE:

There are three types of reinforcements: Refit and Air Points and supply units arrive when indicated on the Turn Record Track, and land unit reinforcements arrive as indicated on the players' reinforcement schedules (5.17 and 5.18). Once in play, reinforcements function exactly like any other units. Note that the Commonwealth player must occasionally withdraw units as indicated on his schedule.

PROCEDURE:

Any land units that the Phasing player is due in a Reinforcement Phase are placed in any hex, not in an enemy ZOC (10.0), that is within two hexes of Alexandria (E2234) for Commonwealth units, or within two hexes of El Agheila (L0701) for Axis units. Any Commonwealth units to be withdrawn are to be moved directly from the map, within the restrictions of 5.2. The Refit/Air Point Track is adjusted to indicate the arrival of Refit or Air Points. Supply reinforcements are deployed in the manner described in Case 7.5.

CASES:

[5.1] REINFORCEMENT ENTRY

[5.11] If all entry hexes are occupied by enemy units or enemy ZOC's, land reinforcements may enter on any land hex on the appropriate side of the map (west edge for the Axis; east edge for the Commonwealth). If

all such hexes are blocked by enemy units or enemy ZOC's, any reinforcements due must be delayed. Reinforcements may be delayed voluntarily at the owning player's option.

[5.12] Previously delayed reinforcements may arrive on any turn following the turn they were due to arrive.

[5.13] Reinforcements indicated to arrive in the Refit Box may enter play only via the refit procedure (13.0).

[5.14] Reinforcements are automatically in General Supply until the beginning of Phase 6 of the Player-Turn in which they enter the map.

[5.15] Armor reinforcements always appear at the highest Armor Rating possible, given the turn and the counters available for each unit (13.3). **Exception:** Previously withdrawn Commonwealth armor units return to play with the Armor Rating at which they were withdrawn.

[5.16] Air and Refit Point reinforcements for both players are listed on the Turn Record Track.

[5.17] **Commonwealth Reinforcement/ Withdrawal Schedule**

See charts and tables.

[5.18] **Axis Reinforcement Schedule**

See charts and tables.

[5.2] **COMMONWEALTH WITHDRAWALS**

At various times during the game, the Commonwealth Reinforcement/Withdrawal Schedule indicates that the Commonwealth player must withdraw certain units. All withdrawals must be made during the Commonwealth player's Reinforcement Phase.

[5.21] A unit is available for withdrawal if it is currently in General Supply (i.e., does not have an Out of Supply marker), is on the game-map, and can trace a line of communications (13.2) to Alexandria (E2234) or Tobruk (L2329). If a unit designated for withdrawal meets all these criteria, it must be withdrawn.

[5.22] If a unit designated for withdrawal is not available, another unit must be substituted. The substituted unit must be the same *type* and have a Combat Strength *at least as great* as that of the unit named (when the latter is undepleted). Morale, Movement Allowance and artillery capacity (for Commonwealth heavy weapons units) are irrelevant. Note that two or more units may be substituted for a single withdrawal to achieve a required total Combat Strength. Note also that *any* armor unit may be substituted for any armor withdrawal, regardless of Armor Rating or Combat Strength.

[5.23] If *no* unit of the appropriate type and Combat Strength is available to be withdrawn when indicated, no withdrawal takes place and if the North African Campaign scenario (15.2) is being played, the Axis player gains one Victory Point. Inability to withdraw units has no effect on the Race for Tobruk scenario.

[5.24] Withdrawn units are removed from the map and placed in the Withdrawn Units Box. When a unit is substituted for a scheduled withdrawal, the Commonwealth player should check the Withdrawn Units Box to see if there is a specific space in which the

counterface of the *scheduled* withdrawal is printed. If there is such a space, the substituted unit is placed in it. This procedure is used to keep track of substituted units when a scheduled withdrawal is due to reappear later in the game as a reinforcement (5.25).

[5.25] If a substitution is made for a withdrawal, the substituted unit is returned to play when the original unit is due to return. A unit withdrawn in Depleted status returns in Depleted status, although any Disruption results are removed. If no unit is withdrawn or substituted for a scheduled withdrawal, no unit returns if the scheduled unit withdrawal is later due to return to play.

[5.26] Incoming reinforcements may be used as substitutes for a scheduled withdrawal on the Phase of their arrival.

[5.27] The Commonwealth player may voluntarily withdraw a unit before its withdrawal is required by his schedule.

[5.28] A withdrawn armor unit that later returns to the map, returns with the Armor Rating at which it was withdrawn.

[6.0] Air Support

GENERAL RULE:

Players receive Air Points as indicated on the Turn Record Track. Air Points may be used to support attacks and defense. The Commonwealth player may also assign Air Points to Malta to reduce the number of Mobile Supply Units (MSU's) the Axis player receives each turn, and the Axis player may use his Air Points to raid Malta.

CASES:

[6.1] AIR POINTS

Each Reinforcement Phase, the Phasing player receives the number of Air Points indicated on the Turn Record Track. These Points may be used in all the ensuing Player-Turns until they are eliminated. Players should keep track of available Air Points on the Refit/Air Point Track.

[6.2] USES OF AIR POINTS

[6.21] Air Points may be used once each Player-Turn until they are eliminated (6.23 and 6.3).

[6.22] Immediately before the die is rolled for any combat, the players must decide how many Air Points (if any) they wish to use in the combat. The attacking player must *announce* whether he is allocating any Air Points before the defending player must make his decision. Each Air Point allocated to combat functions exactly like one friendly artillery unit (12.1). Air Points may only *assist* friendly units in combat; they may not attack by themselves.

[6.23] Whenever the final column on the Combat Results Table (11.8) determined for a combat (before any shifts for Air Points, artillery or naval bombardment) is accompanied by an **A**, each player loses one of any Air Points he has allocated to the combat.

[6.24] The Commonwealth player may assign Air Points to Malta, while the Axis player may use his Air Points to raid Malta. Air Points at Malta may not be used to influence combat, and those used to raid may not be used to influence combat during the Player-Turn of the raid.

[6.3] MALTA

The Commonwealth used the strategic island of Malta as an air base from which to harass Axis convoys. Several times during the North African Campaign the Axis attempted to bomb Malta into oblivion; they never completely succeeded, although they did wreak fearful damage.

[6.31] The Commonwealth player may assign one or two Air Points to Malta in any Commonwealth Air Allocation Phase by removing the points from the Refit/Air Point Track, adjusting the Commonwealth Air at Malta Track. A maximum of two Air Points may be at Malta at one time.

[6.32] The Axis player must add the number of Air Points at Malta to his rolls on the Axis Convoy Arrival Table (7.57).

[6.33] The Axis player may attempt to reduce the number of Air Points at Malta by launching a bombing raid on Malta. In any friendly Air Allocation Phase the Axis player may announce a raid, stating how many Air Points are participating, up to a maximum of three. For every Air Point *over one* allocated to a raid, one Axis dump within three hexes of L0701, Tobruk, or Benghazi (L2306) must be expended (removed from the map). A dump may not be used if it is within five hexes of an enemy combat unit, however. A raid may not be announced unless the appropriate number of dumps are eligible for expenditure.

[6.34] Once the appropriate number of dumps for a raid have been expended, the Axis player rolls a die and consults the Raid on Malta Table (6.37). The result on the Table will be given in terms of Axis and Commonwealth Air Points lost. Lost Commonwealth Air Points must be removed from the Air-at-Malta Track. If the Raid on Malta Table indicates that more Air Points are lost than are present at Malta, the excess loss is ignored. Commonwealth Air Points which are not at Malta are never affected by a raid.

[6.35] Only one raid on Malta may be conducted each turn.

[6.36] Commonwealth Air Points allocated to Malta may not be reassigned to the Refit/Air Point Track.

[6.37] Raid on Malta Table

See charts and tables.

[7.0] Supply

GENERAL RULE:

Combat units must be in supply to function efficiently. There are two types of supply: General Supply and Combat Supply. General Supply primarily affects a unit's ability to move, while Combat Supply affects a unit's combat ability. Supply is provided by permanent supply sources and by supply units (mobile supply units and dumps). A combat unit must be within specific ranges of permanent supply sources or eligible supply units to draw supply from them. Commonwealth supply units arrive as constant reinforcements; Axis supply units arrive as indicated by the Axis Convoy Arrival Table (7.57).

Supply units can be captured or destroyed. A summary of supply sources and capacities is provided (see charts and tables) which condenses the information in this Section. The player should refer to this summary while reading this Section.

PROCEDURE:

At the beginning of each friendly Movement Phase, the Phasing player determines whether each friendly unit is in General Supply, by tracing a supply path from the unit to a friendly supply source or unit. A unit that is out of General Supply has an Out of General Supply marker placed on it, and such markers are removed from units which were unsupplied but have returned to a supplied status. A unit is in General Supply at all times, except when it carries an Out of General Supply marker. Combat Supply is determined at the instant before each combat is resolved.

CASES:

[7.1] TRACING SUPPLY LINES

In order to be in supply, a combat unit must be able to trace a supply line to a friendly dump or supply source. Supply lines are traced as if a motorized unit were moving from the hex occupied by the unit whose supply status is being checked to the hex occupied by the supply unit or source to which the supply line leads. A supply line must be free of enemy units and enemy ZOC's, and it may not pass into or through terrain impassable to motorized units.

[7.11] Dumps and other friendly supply sources provide supply to units within a radius of **12** motorized Movement Points. Mobile Supply Units (MSU's) can supply units within a radius of **6** motorized Movement Points, providing that the MSU itself can trace a supply line to a friendly dump, to a supply source, or to another friendly MSU which can itself trace a line of supply to a dump or supply source. Supply lines may be traced through a chain of any number of MSU's so long as the chain is unbroken by enemy units, enemy ZOC's, and impassable terrain, and the chain eventually ends up at a dump or other friendly supply source. **Example:** A unit is within **6** motorized Movement Points of an MSU which is itself within **6** motorized Movement Points of another friendly MSU; this second MSU is within **12** motorized Movement Points of a friendly dump; the unit can therefore trace supply to the first MSU. MSU's may never be used for supply unless they can trace a supply line back to a friendly dump or other supply source.

[7.12] Friendly units negate enemy ZOC's for purposes of tracing supply lines.

[7.13] The ZOC (10.0) of any unit occupying Tobruk extends two hexes from that city for purposes of blocking enemy supply lines. This extended ZOC is negated if an enemy combat unit is adjacent to Tobruk, however; see 10.14.

[7.14] No more than **10** Stacking Points (9.0) of motorized units may ever trace General Supply to any one dump during any given Phase, nor may more than **10** Stacking Points worth of motorized units ever use any one MSU in a supply line during any one

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Movement Phase. Other supply sources are unaffected by this limitation. The number of non-motorized Stacking Points that may trace General Supply to or through a supply unit is unrestricted. If more than **5** Stacking Points worth of motorized units trace General Supply to any one friendly dump during a Movement Phase, that dump is expended (removed from the map) at the end of that Phase. If more than **5** Stacking Points worth of motorized units use any one MSU in a supply line during a Movement Phase, that MSU is expended at the end of the Phase. See 7.16, however.

[7.15] No more than **5** Stacking Points may trace Combat Supply to any one friendly dump during any given Phase, nor may more than **5** attacking Stacking Points trace Combat Supply through an MSU in any one Phase. Any number of defending units may use a dump or MSU for Combat Supply. There is no limitation on the amount of Combat Supply that may be drawn for either attack or defense from L0701, Alexandria, or Tobruk, or from eligible rail hexes. If more than **3** attacking or **6** defending Stacking Points trace Combat Supply to a given dump during the course of a Combat Phase, that dump is expended at the end of the Phase. If more than **3** attacking or **6** defending Stacking Points trace supply through a given MSU in a particular Combat Phase, that MSU is expended at the end of the Phase. Note that, for purposes of Combat Supply, if three or more units worth **0** Stacking Points participate in the same attack, they are treated collectively as a **1** Stacking Point unit. See 7.16, however.

[7.16] During a given Phase, *no more than* 2 MSU's may be expended because of 7.14 or 7.15. If more than 2 MSU's have supply traced through them which would indicate that they be expended, the owning player may choose which 2 MSU's are expended. For example, if **9** Stacking Points of motorized units traced General Supply through a chain of **5** MSU's ending at L0701, only 2 of the MSU's would be expended. Note that this Case refers only to MSU's; any number of dumps may be expended in a Phase.

[7.17] A unit worth **2** or more Stacking Points (also, see 12.17) may trace General and Combat Supply to more than one supply source, exactly as if it were several units of **1** Stacking Point each. When supply is determined, however, the entire unit is Out of Supply if *any* part of it cannot trace supply.

[7.18] A player can always choose not to provide General or Combat Supply to any of his units.

[7.2] SUPPLY SOURCES AND UNITS

[7.21] MSU's are motorized units without Zones of Control. MSU's are always automatically in General and Combat Supply.

[7.22] Dumps have no Zones of Control and may not move. Each dump has a Stacking Point Value of **0**; however, a hex may be occupied by no more than one dump at the end of a Phase. Each dump has a supply radius of **12** motorized Movement Points. Dumps are supply sources and, unlike MSU's, have no need to trace to another supply source in order to provide supply. Dumps are always

automatically in General and Combat Supply.

[7.23] Alexandria and Tobruk are permanent supply sources for Commonwealth units so long as a Commonwealth unit was the last unit to enter them. The supply capacity of these hexes may never be destroyed or depleted, although it may be temporarily suspended if the cities are captured. In addition, any rail hex which can trace a continuous line of completed rail hexes to Alexandria or Tobruk uninterrupted by Axis units or ZOC's serves as an undepletable supply source for Commonwealth units. Hex L0701 is a permanent supply source for Axis units, although its capacity is temporarily suspended if the last unit to enter it was a Commonwealth unit.

[7.24] Any oasis hex occupied by a combat unit with a Stacking Point value of **1** or greater can provide General Supply to friendly non-motorized units within **12** motorized Movement Points. MSU's may not extend the supply radius of an oasis. Oases may never provide Combat Supply, nor General Supply to motorized units.

[7.25] Bardia (E2103) provides unlimited General Supply to all Commonwealth units within a radius of **12** motorized Movement Points if occupied by any Commonwealth combat unit with a Stacking Point Value of **1** or greater. MSU's cannot extend this radius.

[7.26] Dumps and MSU's are never affected by any combat results unless they are alone in a hex. If a dump or MSU is alone in a hex and suffers any combat result, it is eliminated. A player may not initiate attacks against friendly supply units.

[7.3] EFFECTS OF SUPPLY

There are two types of supply: General and Combat Supply. Each has a different function and is independent of the other. It is entirely possible for a unit to be Out of General Supply and in Combat Supply.

[7.31] Units which are not in General Supply at the beginning of a friendly Movement Phase are denoted by Out of General Supply markers. A unit's General Supply status changes *only* at the beginning of a friendly Movement Phase.

[7.32] Each friendly Refit Phase, the Phasing player rolls a die once for each of his units which has an Out of General Supply marker. If a roll is less than or equal to the unit's current Morale Rating, the unit rolled for suffers *depletion*.

[7.33] Motorized units which are out of General Supply may move only one hex (expending a maximum of four Movement Points to do so) in any friendly Movement Phase. The Movement Allowances of non-motorized units which are out of General Supply are halved (round down). Units of any type which are out of General Supply have no ZOC and may not use Reaction Movement.

[7.34] Every unit participating in any combat must trace Combat Supply to function at full Combat Strength. If a defending unit cannot trace Combat Supply, its Combat Strength is halved (round down), and **1** is added to its Morale Rating for purposes of determining the effects of the combat. The Combat

Strengths of attacking units are halved (round down) if they are out of Combat Supply; in addition, units attacking while out of Combat Supply suffer *disruption* in addition to any other results. This additional disruption is applied after all results against the defending force, but before other results against the attacking force. Any reductions of Combat Strength are conducted individually for each unit before the Combat Strengths of the units in a force are totalled. Flak and artillery-type units lose their special combat bonuses (12.0) when they are out of Combat Supply.

[7.35] A unit suffers no penalties for being out of General Supply at the instant of combat.

[7.4] EMERGENCY SUPPLY

A unit with a Morale Rating of **1** may use emergency supply if stacked with a friendly dump at the beginning of a friendly Movement Phase. An Emergency Supply marker is placed on the unit, and the dump with which it is stacked is expended.

[7.41] A unit under emergency supply is in General and Combat Supply until the beginning of the next friendly Initial Movement Phase (at which point the Emergency Supply marker is removed, and the unit will have to trace supply normally).

[7.42] Only one unit may gain emergency supply when a given dump is expended.

[7.43] Emergency supply is determined before General Supply, so dumps expended for emergency supply cannot provide General Supply.

[7.5] AVAILABILITY OF SUPPLY UNITS

[7.51] At the beginning of each friendly Reinforcement Phase, the Commonwealth player receives in Alexandria the number of MSU's indicated for the turn on the Turn Record Track.

[7.52] Each friendly Reinforcement Phase following Game-Turn 1, the Axis player rolls two dice. The number of Commonwealth Air Points at Malta (6.3) is added to the roll, which is then checked against the Axis Convoy Arrival Table (7.57) to determine the number of MSU's the Axis player receives that Phase. One MSU from this number may be brought in at either Tobruk or Benghazi (L2306) if an Axis unit was the last to enter the hex the MSU is brought in on. All remaining MSU's must be brought in at L0701. The Axis player can always choose to bring in all MSU's at L0701 rather than send one to Benghazi or Tobruk.

[7.53] No MSU's may be brought into L0701 or Alexandria when enemy-occupied, and any MSU's that would have been brought in are permanently lost. One Axis supply unit may still be brought in at Benghazi or Tobruk if L0701 is enemy-occupied.

[7.54] If the players need more supply counters than are provided, they may make additional ones. The number provided does not constitute a design limit.

[7.55] From Game-Turn 9 to Game-Turn 14 (inclusive), *subtract* **1** from the Axis roll on the Axis Convoy Arrival Table. From turn 15 on, *add* **1** to the roll (instead of subtracting).

[7.56] Whenever an Axis unit enters Tobruk as a result of advance after combat (11.69),

an Axis dump is immediately placed in Tobruk or in any adjacent hex of the Axis player's choice (9.26). Supply may be drawn from this dump immediately (i.e., no Captured Supply marker should be placed on it; 7.75 does not apply).

[7.57] Axis Convoy Arrival Table

See charts and tables.

[7.6] MSU/DUMP CONVERSION

A player may convert any number of friendly supply units from MSU's to dumps (or vice-versa) at the beginning of his Refit Phase. To indicate such a conversion, simply flip a supply unit over to its alternate status.

[7.7] SUPPLY OVERRUN

Supply units may be overrun in either of two ways: the normal overrun procedure (8.3) or supply overrun, which has fewer restrictions.

[7.71] For purposes of overrun (and combat), any number of supply units stacked together in the absence of combat units are considered to have a total Combat Strength of **1**. Note that a supply unit has a Combat Strength of **0** when stacked with friendly combat units.

[7.72] If the conditions for an ordinary overrun are fulfilled, motorized units may overrun enemy supply units. If a supply unit is overrun via the *normal overrun procedure,* the Phasing player rolls a die once for each overrun enemy supply unit. On a **1, 2,** or **3,** the supply unit is *captured* (7.74). On a **4, 5,** or **6** it is *eliminated.* A player may voluntarily destroy an enemy supply unit rather than try to capture it.

[7.73] Supply units stacked with combat units which are overrun are treated as if they themselves were overrun, as per 7.72. Note that the *supply overrun* procedure (7.74) may not be used against supply units which are stacked with combat units. Only the normal overrun procedure (8.3) may be used against such a stack.

[7.74] In order to conduct *supply overrun,* a unit or stack must be in General Supply, and must be able to expend one Movement Point in addition to the Movement Points to enter the supply unit's hex. A unit need not be motorized to conduct a supply overrun. When conducting a supply overrun, the phasing player rolls a die (when the overrunning units are adjacent to, but have not yet entered the supply unit's hex); if the roll is less than or equal to the number of overrunning Combat Strength Points, the overrunning units enter the hex occupied by the supply unit. The Phasing player then rolls another die for each enemy supply unit in the hex, capturing it on a **1, 2,** or **3,** and destroying it on a **4, 5,** or **6.** A player may choose to destroy a supply unit rather than to capture it. Captured supply units are replaced by friendly supply units in the same state (MSU or dump). If the initial roll for the supply overrun is greater than the number of overrunning Combat Strength Points, the overrunning units suffer a **3d** result (11.6), do not enter the supply unit's hex, and must cease all movement for the remainder of the Phase. Supply units may not be overrun in this manner if they are in a friendly ZOC which cannot be infiltrated (10.3), or if they are stacked with friendly units.

[7.75] Captured supply units may not be moved, converted from their status as an MSU or dump, or used in any way for supply purposes until the beginning of the next friendly Reinforcement Phase. Use Captured Supply markers to denote such temporarily incapacitated supply units.

[7.76] **Four** is added to the Combat Strengths of Axis units executing supply overruns (7.74) against Commonwealth supply units during Game-Turns 1 and 2.

[7.77] If a friendly unit advances after combat (11.69) into a hex occupied by an enemy supply unit, the advancing units are considered to have performed a successful supply overrun against the supply units, and the Phasing player may roll to capture the supply units, as per 7.74.

[7.78] Supply overrun may not be conducted against supply units in city, mountain, or fortified hexes.

[7.8] DESTROYING SUPPLY UNITS

[7.81] In any friendly Refit Phase, the Phasing player may automatically destroy any friendly dump or MSU that is stacked with a friendly combat unit.

[7.82] If a combat unit begins a friendly Reaction Phase in the same hex as a friendly supply unit, it may attempt to destroy that unit. Unlike 7.81, this attempt is not automatic. The owning player rolls a die; on a **1-3** the supply unit is destroyed; otherwise there is no effect, and no further attempt may be made to destroy that unit for the remainder of the Phase. A unit may only attempt the destruction of one supply unit in a given Phase, and may not conduct Reaction Movement in a Reaction Phase in which it attempts destruction of a supply unit. Only motorized units may attempt to destroy dumps during the second Reaction Phase.

[7.9] SUPPLY ATTRITION

At the end of each friendly Refit Phase, the Phasing player must roll the die once for each friendly dump which cannot trace a line of communication (13.2) back to L0701 (Axis), or Tobruk or Alexandria (Commonwealth). If a dump cannot trace an appropriate line of communications, it is expended on a roll of **1, 2,** or **3.** Dumps which can trace lines of communication will never be expended in this manner. MSU's converted to dumps in a Refit Phase must be rolled for in the same Phase if they cannot trace the appropriate line of communication.

[8.0] Movement

GENERAL RULE:

During a Movement Phase, the Phasing player may move any or all of his units which are capable of moving. Units may be moved in any direction or combination of directions, limited only by their Movement Allowances, (expressed in Movement Points, which must be expended to enter terrain), the terrain, and the provisions of this Section. Each unit or stack of units is moved one at a time, and must complete its movement before another unit or stack may move. Overruns take place during a Movement Phase. No combat may occur during a Movement Phase. The Commonwealth player may speed the movement of his units by using rail and sea transport.

PROCEDURE:

Units and stacks are moved one at a time, tracing a path of contiguous hexes through the hexgrid. As a unit enters a hex or crosses certain hexsides it must expend a portion of its Movement Allowance. The Movement Point costs to enter or cross each type of terrain are listed in the Terrain Effects Chart (8.29).

CASES:

[8.1] MOTORIZATION

For movement purposes, there are two types of unit in the game: motorized units and non-motorized units. Non-motorized units are designated by a horizontal stripe across their counter; all units without such a stripe are motorized. Note that MSU's are motorized.

[8.11] The Movement Point costs to enter or cross various terrain features are different for motorized and non-motorized units. Consult the Terrain Effects Chart (8.29) for appropriate costs and differences.

[8.12] Motorized units may move in both friendly Movement Phases and may react in both friendly Reaction Phases. **Exception:** MSU's may never react under any circumstances.

[8.13] Non-motorized units may move only in the friendly Initial Phase of their Player-Turn, and in the first Reaction Phase each enemy Player-Turn. Note that non-motorized units may engage in combat in both the first and second Combat Phases.

[8.14] Motorized units may not enter marsh or sand sea hexes, or cross escarpment hexsides, except by moving along a road or track, or by rail movement (8.6).

[8.2] RESTRICTIONS ON MOVEMENT

[8.21] Movement may never take place out of sequence; players may move friendly units only during friendly Movement or Reaction Phases.

[8.22] A unit may never expend more Movement Points than its Movement Allowance during any one Phase. The expenditure of Movement Points during one Phase does not affect a unit's Movement Allowance during any other Phase. A unit may move only once during a given Phase, however.

[8.23] A unit must be in General Supply to move its full Movement Allowance; otherwise its movement is severely restricted (7.33).

[8.24] A friendly unit may never enter a hex containing enemy combat units unless it is capable of overrunning the units (8.3), nor may it enter a hex containing enemy supply units unless it succeeds in a normal or supply overrun (7.7). Except for stacking limitations (9.2), friendly units do not affect the movement of other friendly units.

[8.25] Whenever there is more than one terrain type in a hex, the greatest Movement Point cost of the terrain types is used. **Exception:** The Movement Point cost to move along a road, trail, or rail line (when using rail movement) may always be used in place of any other terrain in a hex.

[8.26] A unit must stop immediately upon entering an enemy Zone of Control (ZOC); it may move no further that Phase unless it is capable of *infiltration* (10.3). A unit that *begins* a Movement or Reaction Phase in an enemy ZOC may leave that enemy-controlled hex so long as it does not move directly into another enemy-controlled hex (except through infiltration). It must first move to another hex which is not enemy controlled.

[8.27] Any number of friendly units that begin a Movement or Reaction Phase in the same hex may move together so long as the lowest Movement Allowance among the units is not exceeded and the units end the Phase in the same hex. Once one group of units has begun movement, it must complete its movement before any other friendly unit may move.

[8.28] Units may never voluntarily or involuntarily move off the game-map.

[8.29] **Terrain Effects Chart**

See charts and tables.

[8.3] **OVERRUN**

During a friendly Movement Phase, a player may encounter an enemy unit that is so weak that he may eliminate it in passing. Such an elimination is termed an overrun and is treated as part of movement rather than combat. To conduct an overrun, a player moves a unit or stacks of units directly into an enemy-occupied hex, eliminating the enemy unit, which is automatically placed in the Destroyed Units Box (13.2).

[8.31] A unit or stack may continue to move after completing an overrun.

[8.32] Only motorized units may conduct normal overruns; non-motorized units may conduct only supply overruns (7.7). All overruns occur during Movement Phases; they may not take place during a Reaction Phase.

[8.33] A unit must be in General Supply to conduct an overrun.

[8.34] An overrunning unit must pay the normal terrain cost to enter the enemy-occupied hex, plus **2** additional Movement Points. Note that an overrunning unit must pay the normal Movement Point cost for entering the overrun unit's ZOC (if any) when it first moves adjacent to the enemy unit. A unit may not participate in an overrun if it has insufficient Movement Points.

[8.35] A unit or stack must have at least a **10-1** superiority over an enemy unit or stack to conduct an overrrun against it. The total Combat Strengths of the forces are calculated normally (11.0). The supply status of the defending unit (7.3), combined arms effects (11.4), and anti-tank effects (12.2) are ignored when calculating the ratio for an overrun. See 8.39, however.

[8.36] A unit in a mountain, city, or fortified (14.0) hex may never be overrun.

[8.37] If a unit about to be overrun would normally be capable of Reaction in the upcoming Reaction Phase, it may react rather than be overrun. Such reaction is conducted (according to the rules for Reaction Movement, 8.4) immediately *following* the Phasing player's declaration of the overrun, but *before* the Phasing units enter the hex of the overrun or expend the two extra Movement

Points for the overrun. A unit may react before an overrun only if the non-Phasing unit has a Movement Allowance greater than that of the fastest overrunning unit. If a unit does react to avoid overrun, it may not react in the following Reaction Phase, nor may it react before another overrun during the current enemy Movement Phase.

[8.38] A non-Phasing unit that is in the ZOC of another friendly unit may not be overrun unless the friendly unit's ZOC is subject to infiltration by the overrunning unit or stack.

[8.39] Hexside effects (11.37) are included when determining the Combat Strength of an overrunning force (e.g., **19** Combat Strength Points would be needed to overrun a unit with a Combat Strength of **1** if the overrunning force enters the hex of the overrun through a Wadi hexside). **Example:**
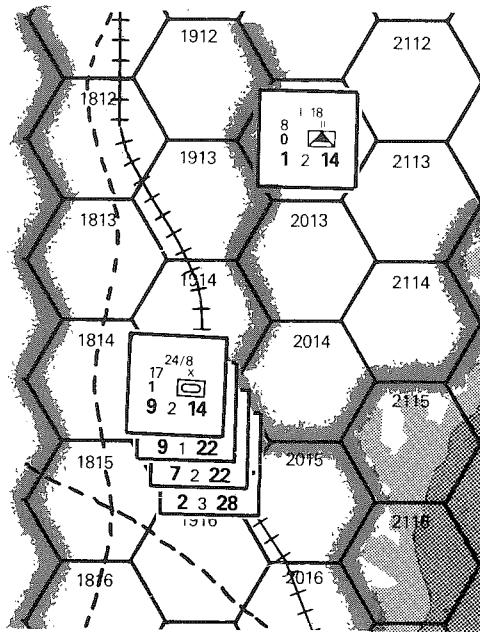
Commonwealth *3/2(1)*, *7/7(2)*, *24/8*, and *9/10 Armd* units move through 1914 (**2** Movement Points), 1913 (**2** Movement Points; if *I/18 Flak* had a ZOC, it would have been **3**), and then move into 2012 to overrun *I/18 Flak* (**7** Movement Points; **3** for the ridge, **2** for the clear hex, and **2** for the overrun). *24/8*, *7/7*, and *9/10 Armd's* Combat Strengths are **3** each, while *3/2 Armd's* Combat Strength becomes a **1**. The total Combat Strength of the overrunning units is thus **10**, just sufficient for the overrun. Note that I/18 Flak may not employ its anti-tank capacity (12.2) when being overrun.

[8.4] **REACTION**

Any non-Phasing combat unit in General Supply that begins a Reaction Phase within two hexes (i.e., there is only one hex between the units, regardless of intervening terrain) of an enemy combat unit may move in that Reaction Phase.

[8.41] Motorized units may engage in Reaction Movement in both Reaction Phases. Non-motorized units may react only in the first Reaction Phase. Supply units, units with parenthesized Combat Strengths, and disrupted units may never react.

[8.42] A unit may expend up to one-quarter of its Movement Allowance (retain fractions) during a Reaction Phase. All terrain costs and normal movement restrictions apply to Reaction Movement.

[8.43] A unit may move adjacent to an enemy unit in a Reaction Phase *only* if that enemy unit is already in a friendly ZOC.

[8.44] Non-motorized units may never react more than one hex.

[8.45] Movement Points expended on Reaction do not affect a unit's Movement Allowance at any later point.

[8.46] At the end of each Reaction Phase, the non-Phasing player must roll a die once for each of his units which reacted. If a roll is *less than* the unit's Morale Rating, the unit is immediately disrupted (11.66). Note that units with a Morale Rating of **1** will never be disrupted by reaction movement.

[8.47] Reacting units may leave enemy ZOC's if they begin a Reaction Phase in them, but they may never move directly from one enemy ZOC to another. They may not infiltrate (10.3). Reacting units may enter enemy ZOC's under certain conditions (see 8.43).

[8.48] Reacting units may not conduct overruns or supply overruns.

[8.5] **COMMONWEALTH NAVAL TRANSPORT**

Beginning on Game-Turn 2, the Commonwealth player can transport units between Alexandria and Tobruk, so long as he controls (was the last player to have a unit in) both cities. He also has a limited transport capacity between Bardia and Alexandria if both of these cities are in his control. Units transported by naval movement are simply picked up and placed at their destination.

[8.51] Each friendly Movement Phase, the Commonwealth player may transport one unit or Stacking Point (whichever is greater) between Tobruk and Alexandria. This capacity may be used in both directions in a single Phase. MSU's count as one unit for this purpose. To be transported, a unit must begin a Movement Phase in Alexandria or Tobruk and may not move during the Phase.

[8.52] In any friendly Movement Phase in which the Commonwealth player does not use his transport capacity between Alexandria and Tobruk, he may transport one MSU from Alexandria to Bardia or from Bardia to Alexandria (but not both).

[8.53] Non-motorized units may not use naval transport in the motorized Movement Phase.

[8.54] Dumps and disrupted units may not use naval transport.

[8.6] **RAIL MOVEMENT**

At the start of the game, there is a railroad between Alexandria and Mersa Matruh (E2118). The railroad may be extended from Mersa Matruh as far as Tobruk, along the line indicated on the map (only). The railroad may be used by the Commonwealth player to transport units, and as a funnel for supply.

[8.61] During each friendly Movement Phase, the Commonwealth player can use the railroad to transport one unit or Stacking Point (whichever is greater) in each direction along the railroad, so long as no units transported enter an enemy-occupied hex or ZOC, and each rail hex used can trace a line of communication (13.2) back to Alexandria or Tobruk through contiguous rail hexes. An

MSU counts as one unit for purposes of rail movement.

[8.62] A unit must expend a total of **3** Movement Points to use rail movement, regardless of the distance travelled by rail.

[8.63] Non-motorized units may not use rail movement during the Motorized Movement Phase.

[8.64] The Commonwealth player may extend the railroad west from Mersa Matruh by placing an MSU in the uncompleted rail hex adjacent to the last completed rail hex. At the end of any Movement Phase in which the MSU has not moved, its hex and one contiguous rail hex become completed and may be used as part of the railroad. Advance the Railhead marker to indicate the last completed hex. The MSU is *not* expended. Only unfinished rail hexes printed on the map may be completed. The railroad may never be extended more than two hexes during one Movement Phase.

[8.65] Rail hexes may never be destroyed. Capture by Axis units has no effect other than to temporarily deny the Commonwealth player use of the hex.

[8.66] Any completed rail hex that can trace a line of communication (13.2) to Alexandria or Tobruk along contiguous rail hexes is an undepletable Commonwealth supply source (7.13).

[8.67] Axis units may never use the railroad in any way.

[8.68] A unit need not begin nor end its movement on a rail hex to utilize rail movement.

[8.69] A unit may begin rail movement or end rail movement in any completed rail hex (it need not move all the way to Alexandria or the other terminus of the railroad).

[8.7] FORCED MARCH

A unit's Movement Allowance may be doubled, at some hazard to the unit, through the use of forced marches.

[8.71] Only non-disrupted combat units with non-parenthesized Combat Strengths in General Supply which do not begin a Movement Phase in a hex adjacent to an enemy unit may employ forced march.

[8.72] Forced marches may not be made during a Reaction Phase.

[8.73] A unit undertaking forced march may not move adjacent to any enemy unit at any time during its movement.

[8.74] Commonwealth units undertaking forced march may not end their Movement Phase in a hex from which they cannot trace General Supply unless they are using Emergency Supply (7.4).

[8.75] Regardless of a unit's basic Movement Allowance, its Movement Allowance can never be increased above **40** by forced march. Thus, all units with a basic Movement Allowance of **20** and above will have a Movement Allowance of **40** when using forced march.
ed march.

[8.76] At the end of any Phase in which a unit has used forced march, the unit is automatically *disrupted*. In addition, at the end of each friendly Movement Phase the Phasing player must roll the die once for each

friendly unit that used forced march. If the roll is less than or equal to the unit's Morale Rating, the unit is *depleted*.

[9.0] Stacking

CASES:

[9.1] STACKING POINTS

Every unit has a Stacking Point Value (see 2.21). The number of friendly Stacking Points that may end a Movement or Reaction Phase in a given hex is limited.

[9.2] STACKING RESTRICTIONS

[9.21] A unit's Stacking Point Value is constant throughout the game.

[9.22] No more than **6** Stacking Points may end a Movement or Reaction Phase in a non-city hex.

[9.23] Up to **9** Stacking Points may end a Movement or Reaction Phase in a city hex.

[9.24] There are no restrictions as to the number of **0** Stacking Point units, MSU's, and informational markers that may stack in a hex (**Exception: 9.26**).

[9.25] Stacking limits apply only at the end of a Movement or Reaction Phase (or Refit Phase, for dumps). If a friendly player finds that enemy units are overstacked, the friendly player may remove the excess units, placing them in the Refit Box.

[9.26] Dumps have a Stacking Point Value of **0**, but no more than one dump may ever end a Movement, Reaction, or Refit Phase in a given hex.

[10.0] Zones of Control

GENERAL RULE:

The six hexes surrounding the hex a unit occupies constitute that unit's Zone of Control (ZOC). Hexes in a unit's ZOC are called *controlled* hexes. The presence of an enemy ZOC may affect movement, precipitate combat, interdict supply, and block friendly retreats. Certain units have no ZOC's. ZOC's do not extend through or into certain types of terrain.

CASES:

[10.1] WHICH UNITS EXERT ZOC's

[10.11] Each combat unit exerts a ZOC except units with parenthesized Combat Strengths, disrupted units, units which are out of General Supply, and **0** Stacking Point units.

[10.12] A ZOC extends into and through all types of terrain, with the following exceptions:

1. A ZOC never extends through escarpment hexsides.

2. A ZOC never extends *into* a city; a ZOC does extend out *from* a city, however.

3. A unit's ZOC does not extend into or through any type of terrain into or through which the unit could not move.

4. The ZOC of a pure armor or reconnaissance unit does not extend into mountain hexes.

[10.13] For purposes of 10.12, 3 and 4, a ZOC does extend extend along roads. Thus, if a unit could enter a hex through a road hexside, that unit's ZOC extends across all road hexsides leading into the hex.

[10.14] If Tobruk is occupied by a combat unit that would normally exert a ZOC, that unit's ZOC extends two hexes out from Tobruk for purposes of blocking supply lines (7.1). The extended ZOC affects supply lines only. If an enemy combat unit is adjacent to Tobruk, however, friendly units lose this extended ZOC.

[10.15] A hex may be friendly-controlled and enemy-controlled simultaneously. Neither ZOC is affected by the presence of the other.

[10.2] EFFECTS OF ZOC's

[10.21] A unit entering an enemy ZOC must stop and may move no further that Phase, unless it is capable of *infiltration* (10.3) or *overrun* (8.3).

[10.22] A unit expends one extra Movement Point to enter an enemy-controlled hex.

[10.23] A unit which begins a Phase in an enemy ZOC may move out of that ZOC, but may not move directly from one enemy-controlled hex to another enemy-controlled hex, unless it infiltrates (10.3).

[10.24] A unit with parenthesized Combat Strengths may enter an enemy ZOC only if stacked with a unit with a non-parenthesized Combat Strength, or if entering a hex already occupied by such a unit.

[10.25] Enemy ZOC's block supply lines (7.1) and retreat paths (11.62). If a friendly combat unit is in an enemy-controlled hex, supply lines may be traced into or through that hex without consideration for the ZOC. The presence of friendly combat units does not negate enemy ZOC's for purposes of movement or retreat, however.

[10.26] A friendly combat unit in an enemy-controlled hex at the beginning of a friendly Combat Phase must engage some enemy unit in combat. Each enemy unit exerting a ZOC on a friendly combat unit at the beginning of a friendly Combat Phase must be attacked by some friendly unit. Supply units may never attack.

[10.27] No form of supply may be traced to or through a supply unit in an enemy ZOC unless that supply unit is stacked with one or more friendly combat units.

[10.3] INFILTRATION

A hex containing a ZOC exerted by 1 Stacking Point of non-motorized units can be infiltrated. Zones of Control exerted by motorized units or by 2 or more Stacking Points worth of non-motorized units cannot be infiltrated. If a hex can be infiltrated, friendly motorized combat units may enter and exit the ZOC, and/or move directly into another ZOC. A motorized unit need not cease movement when entering a ZOC that can be infiltrated. Each time a motorized unit leaves such a ZOC and moves directly into another enemy ZOC, it must expend one additional Movement Point. Supply units and combat units with parenthesized Combat Strengths may infiltrate only if they are moving with units that could normally infiltrate by themselves.

[11.0] Combat

GENERAL RULE:

A Phasing unit that is in an enemy-controlled hex at the beginning of a friendly Combat Phase must take part in some combat during that Phase. Each enemy unit that exerts a ZOC on adjacent friendly units at the beginning of a friendly Combat Phase must be attacked during the ensuing Combat Phase. If a friendly unit is adjacent to, but not in the ZOC of an enemy unit, combat may be conducted at the discretion of the Phasing player. The Phasing player is always termed the attacker, and the non-Phasing player the defender, regardless of the overall situation. The outcome of each attack is determined by the Combat Strengths, Morale Ratings, and supply status of the units involved, the terrain of the battle, and a random die-roll. Air support, artillery, anti-tank units, and Commonwealth naval bombardment may also affect the outcome of a battle. Combat results include retreats, disruption, depletion, and elimination.

PROCEDURE:

For each attack, the attacking player determines which enemy units will be attacked by which friendly units. The following steps are then performed:

1. The Combat Strengths of the units involved are determined, taking into account the effects of supply (7.3), combined arms (11.4), disruption (11.66), hexside terrain (11.3), anti-tank units (12.2), and fortifications (14.22).

2. The total modified Combat Strength of the attacking force is divided by the total modified Combat Strength of the defending force to arrive at a combat ratio, which is rounded off (always in favor of the defending player) to the nearest ratio listed on the Combat Results Table (11.8).

3. The attacking player then finds the row at the top of the Combat Results Table corresponding to the terrain in the defender's hex, and traces across until he finds the combat ratio determined above.

4. Looking down on the column on which the combat ratio was found, he finds a column number.

5. He then rolls a die, and *adds the roll to the column number.* This total, the *adjusted column number,* is the number of the column on which the results of the combat may be found.

6. Column shifts are applied (12.1).

7. The adjusted column is cross-indexed with the Morale Rating of each *defending* unit to find the effects of the combat on that particular unit.

8. The intersection of the adjusted column and the *Effects of Attacking Units* row determines the effects of the combat on the entire attacking force.

A complete example of the combat procedure is given in Case 11.9.

CASES:

[11.1] COMBAT RESTRICTIONS

[11.11] The Combat Strength of an individual unit may not be split between separate attacks. Similarly, a unit's Combat Strength is unitary on defense. An attacking unit may not attack half of a defending unit.

[11.12] One attack must be resolved before another may be initiated.

[11.13] ZOC's do not extend into city hexes, and units in such hexes do not have to attack out of them. If the owning player does choose to have units attack out from a city, not all units in the city need attack, nor need every enemy-occupied hex adjacent to the city be attacked. However, all units in a given hex must be attacked.

[11.14] No unit may attack or be attacked more than once per Phase.

[11.15] A unit with parenthesized Combat Strength may not add its Combat Strength to friendly attacks. A unit's parenthesized Combat Strength may be used only when the unit is attacked *and* is not stacked with a friendly unit with a non-parenthesized Combat Strength. In the latter case, any number of defending units with parenthesized Combat Strengths are considered to have a collective total Combat Strength of 1.

[11.16] An attack may not be made at a combat ratio below those listed on column 1. If a unit or stack would be forced to attack at a ratio below the lowest listed for the relevant terrain type, or if all attacking units have parenthesized Combat Strengths, or Combat Strengths rounded down to **0**, the attacking units suffer **4dD** results, and the defending force is unaffected. Note that this procedure is not considered an attack for the purposes of 10.26. In other words, an attack may not be conducted at a combat ratio below the minimum on the Combat Results Table if it is possible for the Phasing player to allocate his attacks such that all enemy units which exert ZOC's on friendly units are attacked at a ratio at or above the minimum listed for the terrain they occupy.

[11.17] Whenever a unit's Combat Strength is subject to more than one modification, all such effects are cumulative, and are executed for each unit in the order determined by the owning player except where specifically indicated otherwise (e.g., flak effects, 12.2).

[11.18] A defending stack's Combat Strength can never be reduced below **1**. If a defending stack's Combat Strength would ever be rounded below 1, it is treated as 1.

[11.2] MULTIPLE UNIT AND HEX COMBAT

[11.21] A unit may attack units in more than one adjacent hex.

[11.22] Units in two or more different hexes may combine their Combat Strengths to attack any number of defending hexes, so long as all attacking units are adjacent to all defending units.

[11.23] All defending units in a given hex must be attacked as a single entity, totalling their Combat Strengths. Individual units within a stack may not be singled out for attack.

[11.24] Units attacking from a hex may participate in different attacks.

[11.3] EFFECTS OF TERRAIN ON COMBAT

[11.31] The terrain in the defending units'

hex determines the row used on the Combat Results Table (11.8).

[11.32] If there is more than one terrain type in a hex, the defending player chooses which of the terrain types he will defend in. Similarly, if units are defending in more than one hex, the defending player may choose which of the terrain types present in any of the hexes his force is defending in will be used for the defense, and the attack is resolved using the row of the Combat Results Table corresponding to that terrain type.

[11.33] The Combat Strengths of units attacking across various types of hexside terrain are modified, as per the Hexside Terrain Effects on Combat Chart (11.37). Units attacking across such hexsides have their Combat Strengths modified individually.

[11.34] If only part of a defending force is being attacked across hexside terrain, any units attacking any defending units across hexside terrain are subject to the modifications of 11.37. **Example:**
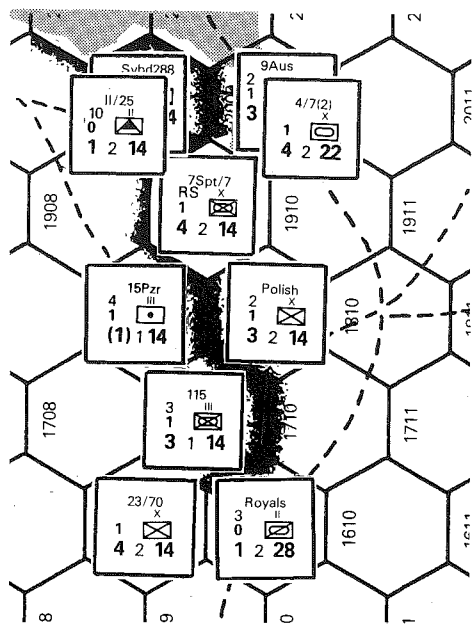
It is the beginning of a Commonwealth Combat Phase. The Commonwealth player allocates his attacks as follows: *23/70, Royals Recce,* and *Polish* attack *115 Mech; 9 Aus Hvy Wpns* and *4/7(2) Armd* attack *II/25 Flak* and *Svbd 288 Hvy Wpns. 7Spt/7 Mech* cannot attack as it is separated from all enemy units by escarpment hexsides. *115 Pzr Arty* need not be attacked because it does not have a ZOC. *Polish's* Combat Strength is divided by **3** because of the ridge, and becomes a **1**. *Royals Recce's* Combat Strength also becomes a **1**, (2 ÷ 3, rounded up). *23/70's* Combat Strength remains at **4** as it is not attacking across a ridge. *4/7 Armd's* Combat Strength is **2**. *9 Aus Hvy Wpns'* Combat Strength is **1**. *II/25 Flak's* ability to reduce the Combat Strength of armor units is unaffected by the ridge, and thus *4/7 Armd's* Combat Strength is reduced to **0**. Similarly, *9 Aus Hvy Wpns'* artillery capacity is unimpaired by the ridge. If it were an Axis Combat Phase and *115 Mech* were attacking *Polish 23/70,* and *Royals Recce, 115 Mech's* Combat Strength would be reduced to **1** because of the ridge, even though *23/70* is not being attacked across a ridge.

[11.35] The effects of fortifications may be used in place of the terrain in the defending units' hex, at the defending player's option (14.2).

[11.36] Units may not attack across hexsides they could not move across (8.29), although they defend normally when so attacked.

[11.37] Hexside Terrain Effects on Combat
See charts and tables.

[11.4] COMBINED ARMS EFFECTS
An armor unit's Combat Strength is halved (round down) unless an eligible infantry unit is stacked with it and participates in the same combat. Infantry units include: Infantry, motorized infantry, mechanized infantry, heavy weapons (both with and without artillery capacity), heavy infantry, glider infantry, and heavy airborne infantry. One infantry-type unit must be present for each armor unit in a stack to fulfill its combined armor needs. For example, if **3** Stacking Points of armor were stacked with **2** Stacking Points of infantry, **1** Stacking Point of the armor (owning player's choice) would be halved in Combat Strength. Defending armor units are affected by this Case, although overrunning units and units being overrun are not.

[11.5] COMMONWEALTH NAVAL BOMBARDMENT
On Game-Turns 3 through 9, inclusive, the Commonwealth player may use naval bombardment.

[11.51] Naval bombardment may be used to influence any one combat per Player-Turn in which any part of the Commonwealth force involved is in any coastal hex east of and including Derna (L2819).

[11.52] The combat effects of naval bombardment are identical to that of one artillery unit stacked with the Commonwealth force participating in the combat (12.1).

[11.6] RETREAT AND DISRUPTION COMBAT RESULTS
The results of combat listed on the Combat Results Table are composed of one or more of the effects listed below and in 11.7. All such effects are cumulative. All results of one combat are applied before the next combat begins. Note that the following Cases apply only to combat units. See 7.26 for the effects of combat on supply units.

[11.61] Units which receive retreat results must immediately be moved by the owning player the number of hexes indicated by the result away from the hex they occupied during the attack (**Exception:** Attacking units may ignore retreat results if all of the hexes that were occupied by defending units are vacated as a result of the attack). If a unit cannot retreat the full amount indicated by the result, it retreats as many hexes as it can (see 11.63, however), and is *depleted,* in addition to any other results of the combat. Within the restrictions of 11.62, a unit may be retreated through any type or types of terrain, without considerations for Movement Point costs. A unit's Movement Allowance during a later Phase is never affected by its having retreated.

[11.62] The following restrictions apply to all combat result retreats:

1. Units may not retreat through enemy units, enemy ZOC's, off the game-map, or through or across terrain prohibited to them.

2. No unit may ever retreat across an escarpment hexside.

3. Motorized units may retreat through or into sand sea or marsh hexes only when following a road. Units may retreat into hexes in violation of stacking limits.

4. Units retreating into a stack which is subsequently attacked do not add to the defense of the stack, but do suffer any adverse results, exactly as if they were defending.

5. If a hex becomes overstacked as a result of a retreat, the owning player has until the end of the next friendly Movement Phase to alleviate the situation, or else 9.25 applies.

[11.63] A player may voluntarily have any of his units ignore a **1, 2,** or **3** retreat result, and suffer depletion instead (in addition to any other combat results).

[11.64] Units in cities and fortified hexes subtract **3** from any retreat results. Thus **1, 2,** and **3** retreat results have no effect against units in such hexes. If a unit's path of retreat leads it through a city, it may end its retreat in the city, and ignore the remainder of the retreat result.

[11.65] When both attacking and defending units receive combat results, all defending units apply their results before any results are applied against the attacking force.

[11.66] Units suffering from disruption are affected in the following ways:

1. They have half normal Movement Allowances and Combat Strengths (round down individually for each unit).

2. They may not participate in overruns or supply overruns.

3. Disrupted anti-tank and artillery-type units lose their special combat abilities (12.0).

4. They do not have ZOC's.

5. Additional disruption results are treated as depletions.

6. Disrupted units may not be refit (13.0).

[11.67] A unit's disrupted status should be indicated by the placement of a Disrupted marker on the unit. Disruption markers are removed at the end of any friendly Refit Phase from all units in city hexes. Axis units may treat L0701 as a city hex for this purpose. A unit may also be undisrupted if it can trace a supply line during a friendly Refit Phase.

[11.68] A dump is expended if a unit traces supply to it for purposes of removing disruption. All disrupted units which can trace a supply line to a single dump may be undisrupted by its expenditure. Dumps may be expended for purpose of disruption removal in the same Phase as they are converted from MSU's. A unit may not be refit in the same Phase as it recovers from disruption.

[11.69] If a defending hex is vacated as a result of combat, up to six Stacking Points of non-disrupted attacking units may advance into the vacated hex at no cost in Movement Points, and without consideration for enemy ZOC's. The advance must be taken immediately, before proceeding to the next combat. Advance after combat is never mandatory. A unit may never advance more than one hex as a result of combat. Units with parenthesized Combat Strengths may never advance after combat. Defending units may never advance after combat.

[11.7] DEPLETION AND PARTIAL DEPLETION COMBAT RESULTS
[11.71] If a full-strength unit suffers a depletion result, it is flipped over to its reverse (depleted) side. If a depleted unit suffers a depletion result, it is eliminated. Depleted flak and artillery type units lose their special combat abilities (12.0).

[11.72] Eliminated units are placed in either the Refit Box or the Destroyed Unit's Box (13.2).

[11.73] When an attacking force receives a partial depletion combat result, one attacking unit of the defending player's choice suffers a depletion result.

[11.74] Whenever any defending unit in a defending force suffers a partial depletion result, any one defending unit of the attacking player's choice in that force suffers a depletion result. Regardless of the number of defending units which suffer partial depletion results, only *one* defending unit may be depleted as a result of *all* of them.

[11.75] All depletions caused by partial depletion results are performed after any other combat results are applied to a force.

[11.8] COMBAT RESULTS TABLE
See charts and tables.

[11.9] COMBAT EXAMPLE
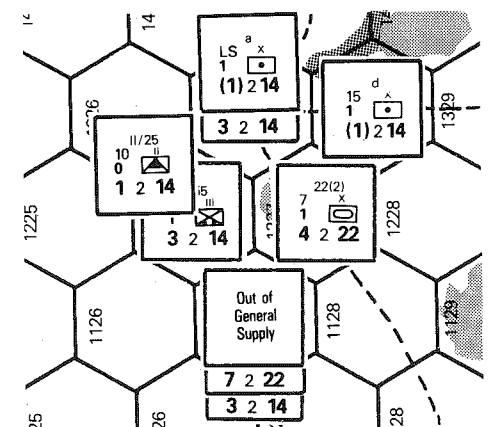
It is a Commonwealth Combat Phase. *"a" Arty, 25/10 Ind Hvy Wpns, 22 Armd, 44 Hvy Wpns,* and *1/2 Armd* are all attacking II/5 and 155 Mtrzd. *"d" Arty* is not adjacent to enemy units, and thus may not participate in the attack. *25/10 Ind Hvy Wpns'* Combat Strength is **3.** *"a" Arty* adds nothing to the Combat Strength of the attacking force. *22 Armd's* Combat Strength is halved because it is not stacked with any infantry-type units (see 11.4, Combined Arms Effects). *1/2 Armd* attacks at full Combat Strength because it is stacked with *44 Hvy Wpns.* The fact that *1/2 Armd* is out of General Supply has no effect on its combat ability. *44 Hvy Wpns* functions at full Combat Strength **(3).** The attacking force's total Combat Strength is thus **3 + 4 + 7 + 3 = 17.** More than 4 of those Combat Strength points are contributed by armor units, however, so Axis II/5 can use its anti-tank ability (12.0) deduct 4 from the total Combat Strength of the attacking force to yield a total Combat Strength of 13. The defending force has a Combat Strength of 4 (3 + 1). The combat ratio is 13/4 = 3.25, which is rounded (in favor of the defender) to 3:1. The defending force is in clear terrain, so the attack is executed on column 6. The Commonwealth player rolls a 3 on the die. Adding 3 to 6 (the column number derived above),

the Commonwealth player determines that the adjusted column number is 9. The Commonwealth player may add up to **2** to this column as a result of artillery shifts (*"a" Arty* and *44 Hvy Wpns* each contribute an artillery shift), for the purposes of determining effects on the Axis forces *only*. Artillery shifts never affect the column on which results against friendly forces are determined. Thus Axis losses will be found on column 11, while Commonwealth losses are found on column 9. Cross-indexing column 11 with each defending unit's Morale Rating, it is determined that each defending unit suffers a **4d** result and must retreat 4 hexes and be disrupted. In addition, the attacking player may apply one depletion result (because of the **p**) against either of the defending units. Cross-indexing column 9 with the Effect on Attacking Units row, it is found that the attacking force suffers a **p** result, and thus the defending player can apply one depletion result against any one of the attacking units.

[12.0] Artillery and Anti-Tank Units

GENERAL RULE:

Flak units and units with type symbols containing dots ("artillery-type units") have special effects on combat, in addition to the normal employment of their Combat Strengths. Artillery-type units affect the column on which the effects of combat are read, while flak units reduce the Combat Strengths of enemy pure armor units. Note that the terms "flak" and "anti-tank" are used interchangeably.

PROCEDURE:

For each artillery-type unit participating in an attack, **1** is added to the column number of the final column on which the combat results to the defending force are found. For each defending artillery-type unit, **1** is subtracted from the column number of the final column on which the combat results to the attacking force are found. For each flak unit in an attacking force, **2** is subtracted from the total modified Combat Strength of defending armor units. For each defending flak unit, **4** is subtracted from the total Combat Strength of attacking armor units.

CASES:

[12.1] ARTILLERY SHIFTS

[12.11] If, as the result of attacking artillery shifts, the defending force's losses would be determined on a column higher than 17, they are determined on column 17. Similarly, if an attacking force's losses would be evaluated on a column lower than 1, they are determined on column 1. Note that this case applies to shifts due to Air Points (6.0) and naval bombardment (11.5) as well.

[12.12] Note that if either the attacking or the defending force has artillery shifts, the effects of the combat to the opposing forces will be determined on different columns, even if each force is eligible for an equal number of artillery shifts. Friendly artillery shifts *only* affect the column on which *enemy losses* are determined.

[12.13] Artillery-type units may be used in the manner described in this Section only if they are in Combat Supply.

[12.14] A player may choose not to take all the artillery shifts to which he is entitled; he makes this decision after he sees the combat die-roll. In all cases, the attacking player announces the number of shifts he will utilize before the defending player does so.

[12.15] Neither player can ever shift the column on which his opponent's losses are read by more than four columns by any combination of artillery shifts, air support, and/or naval bombardment. All such effects in excess of four shifts are ignored.

[12.16] Disrupted or depleted artillery-type units lose the ability to shift the results of combat.

[12.17] Artillery-type units are considered to have Stacking Point Values of **2** for the purposes of Combat Supply (7.15), so long as they retain their artillery capacity (i.e., when depleted or disrupted they consume only **1** Stacking Point worth of supply).

[12.18] Within the restrictions of 12.15, friendly shifts due to Air Points, artillery, and naval bombardment are all cumulative.

[12.2] FLAK EFFECTS

German anti-aircraft guns (the famed 88's) were used with great effect as anti-tank weapons during the desert campaign. Although the British had guns of equal quality, British doctrine required that "anti-air" guns be used against airplanes, not tanks, despite the guns' effectiveness against the latter. Thus the Germans have the only distinct anti-tank units in the game.

[12.21] Any subtractions to the Combat Strengths of enemy pure armor units because of friendly flak units takes place after all other modifications to the pure armor units' Combat Strengths.

[12.22] Flak units may never be used to subtract more from an enemy force's Combat Strength than the total modified Combat Strengths of the pure armor units in the enemy force.

[12.23] Flak units may be used in the manner described in this Section only if they are in Combat Supply.

[12.24] Disrupted or depleted flak units lose the ability to reduce the Combat Strength of enemy armor units.

[12.25] Flak units have no effect on the Combat Strengths of overrunning armor units.

[13.0] Refit

GENERAL RULE:

Both players receive Refit Points as indicated on the Turn Record Track. These points may be used to rebuild depleted and eliminated friendly units.

PROCEDURE:

To bring a depleted unit up to full-strength, a player finds the unit's type symbol on the Refit Chart (13.26), and expends the indicated number of Refit Points. Eliminated units in the Refit Box may be brought onto the map within two hexes of L0701 (Axis) or Alexandria (Commonwealth) in depleted condition if the owning player expends the number of Refit Points indicated to do so on the Refit Chart. Previously eliminated units may also be brought onto the map at full-strength if the owning player expends the sum of the Refit Points listed for the unit's type in both columns of the Refit Chart.

CASES:

[13.1] REFIT POINTS

[13.11] Axis Refit Points are sub-divided into German and Italian points. Points of one nationality may never be used to refit units of the other nationality.

[13.12] Players should keep track of the number of Refit Points available to them on the Refit/Air Point Track. Refit Points may be accumulated from turn to turn. The **+10** sides of the Refit Point markers may be used to indicate stores of **10** to **19** Refit Points.

[13.2] RESTRICTIONS ON REFIT

Whenever a unit is eliminated for any reason, it is placed in the Refit Box, unless it was out of Combat Supply, or could not trace a path of any length through traversable hexes to Alexandria (Commonwealth) or L0701 (Axis) unimpeded by enemy units and ZOC's. Friendly combat units negate enemy ZOC's for this purpose. A path of this type is termed a "line of communication." Non-motorized units that are eliminated and cannot trace a line of communication go into the eliminated motorized unit which is out of Combat Supply or cannot trace a line of communication, the owning player rolls a die; on a **1**, **2**, or **3**, the unit is placed in the Refit Box; otherwise it is placed in the Destroyed Units Box and may never again appear on the map. Motorized units with Morale Ratings of **1**, which are out of Combat Supply or cannot trace a line of communication are placed in the Refit Box on rolls of **1**, **2**, **3**, or **4**, and only go into the Destroyed Units Box on a **5** or **6**.

[13.21] Only units in the Refit Box may be rebuilt from scratch.

[13.22] Friendly units may only be refit during a friendly refit Phase.

[13.23] Axis units may not be rebuilt from scratch if L0701 is enemy-occupied or in an enemy ZOC. Commonwealth units may not be rebuilt from scratch if Alexandria is enemy-occupied or in an enemy ZOC.

[13.24] Supply units and Air Points may not be refitted.

[13.25] A depleted unit must be in General Supply, may not be in an enemy ZOC, and may not have been disrupted at any point during the current Refit Phase to be refit to full-strength.

[13.26] Refit Chart

See charts and tables.

[13.3] UPGRADING ARMOR UNITS

When units with more than one possible Armor Rating (as indicated by the countermix, see 2.22) are taken from the Refit Box to the rebuilt, they are rebuilt at the highest Armor Rating available given the turn (as indicated on the Turn Record Track) and the counters available for that unit. A player may voluntarily upgrade his armor units if they can trace a line of communication to L0701 (Axis) or Alexandria (Commonwealth) by

removing them from the map, placing them in the Refit Box, and rebuilding them as if they had been destroyed. Once placed in the Refit Box, however, a unit may not be returned to the map except through a refit procedure. Note that only one counter for a particular unit may be on the map at a given time. **Example:** During his Refit Phase of Game-Turn 14, the Commonwealth player decides to refit 7/7 Armd. Looking on the Turn Record Track, he sees that the maximum Armor Rating for that turn is **3.** As 7/7 Armd does have a counter with an Armor Rating of **3,** the unit is rebuilt at that Armor Rating. If 7/7 Armd was available with Armor Ratings of only **1** or **2,** it would appear for this example at the highest Armor Rating available (**2**). Similarly, if 7/7 Armd appeared in only one form, without any Armor Rating, it would be rebuilt in that form.

[14.0] Fortifications

GENERAL RULE:

Fortifications represent heavily protected lines, usually composed of concrete defenses and other heavy equipment. Fortifications may be constructed by both players. Fortifications may be of two different qualities: Level 1 and Level 2.

CASES:

[14.1] CONSTRUCTING FORTIFICATIONS

[14.11] Fortifications may not be constructed in mountain, city, sand sea, or marsh hexes.

[14.12] The number of fortifications that may be emplaced is not limited by the counters provided. The players may make additional markers, if necessary.

[14.13] Level 2 fortifications may only be constructed in hexes already containing Level 1 fortification markers, which are inverted when the Level 2 fort is completed.

[14.14] To build one level of fortifications in a hex (from nothing to Level 1, or from Level 1 to Level 2) requires the presence of a combat unit with a non-parenthesized Combat Strength and a Stacking Point Value of at least **1,** and a dump. The combat unit and dump must start a friendly Movement Phase in which the combat unit could move in the hex to be fortified, and may not move during the entire Phase. At the end of the Phase, the dump is expended and a level of fortification is added to the hex. An Under Construction marker should be placed at the beginning of the Phase to denote such activity. Level 2 forts may not be strengthened by further construction.

[14.2] EFFECTS OF FORTIFICATION

[14.21] At the option of the player defending in a fort, the row of the Combat Results Table corresponding to that fort's Level may be used in place of the terrain in the hex.

[14.22] The Combat Strength of any one non-armored unit of the defending player's choice is doubled if it defends in a Level 2 fort.

[14.23] A fortification benefits any force in its hex, regardless of who first constructed it.

[14.24] Fortifications may never be destroyed.

[15.0] Scenarios

GENERAL RULE:

Two scenarios are provided with *Desert Fox*: "Race for Tobruk," and "The North African Campaign."

CASES:

[15.1] RACE FOR TOBRUK

"Race for Tobruk" is a relatively quick simulation of the first few months of the Axis offensive following Rommel's arrival in North Africa. It can be played in an evening.

[15.11] The "Race for Tobruk" scenario is five Game-Turns long, beginning on Game-Turn 1, and ending at the end of Game-Turn 5.

[15.12] Commonwealth Initial Deployment

L0705: 3/2(1) Armd; **L0704:** 2/2 Mech; **Deployed within 3 hexes of L2308:** 24/9 Aus, 20/9 Aus, 'a' Arty; **L2129:** 3 Ind Mtrzd; **Tobruk (L2329):** 26/9 Aus, 'b' Arty, 1 MSU; **Mersa Matruh (E2118):** 23/70 (Depleted), 1 MSU, the Railhead; **Alexandria (E2234):** 16/70, 22 Mtrzd, 2 MSU's. 7 Spt/7 Mech begins the game in the Refit Box, and may only enter play through the refit procedure (13.0).

The Commonwealth player also deploys a Level 1 fort within 2 hexes of Tobruk. Dumps are deployed in L0704, L1404, L1810, L2317, L2819, L2421, L2408, and L2716. No Refit or Air Points are available to the Commonwealth player at the start of the game.

[15.13] Axis Initial Deployment

Mersa Brega (L0702): German: 5(1) Armd, 200 Mtrzd, 3 Reccon, 5 Lt Arty, 3 MSU's; **El Agheila (L0701):** Italian: 132/Ar Armd, 8Br/Ar Mech, Nizz/Ar Reccon, 132/Ar Arty, 27 Brs. The Italian 60 Sab unit begins the game in the Refit Box, and may only enter play through the refit procedure (13.0).

The Axis player begins the game with one Air Point and no Refit Points.

[15.14] Both players receive reinforcements and replacements as indicated on the Turn Record Track and their reinforcement schedules.

[15.15] At the end of the game, The Axis player wins if either of two conditions are fulfilled: **(1)** Any friendly combat unit with a non-parenthesized Combat Strength is in Tobruk and a line of communications (13.2) can be traced from Tobruk to L0701; or **(2)** Both Bardia (E2104) and Sidi Barrani (E2210) are Axis-occupied or were last entered by Axis units and a line of communication can be traced back from these locations to L0701. The Commonwealth player wins by preventing an Axis victory.

[15.2] THE NORTH AFRICAN CAMPAIGN

"The North African Campaign" re-creates the entire war in the North African theatre, from Rommel's arrival until the Allied landings in Tunisia. Campaign scenarios can generally be played in 15 to 25 hours.

[15.21] "The North African Campaign" is 22 turns long, starting at Game-Turn 1, and ending at the end of Game-Turn 22. It is possible for the game to end before Game-Turn 22 if

the Axis fulfills the conditions for automatic victory (15.25).

[15.22] Commonwealth Initial Deployment

See 15.12.

[15.23] Axis Initial Deployment

See 15.13.

[15.24] Both players receive all reinforcements and points indicated by their reinforcement schedules and by the Turn Record Track.

[15.25] The Axis player automatically wins the game if any friendly combat unit with a Stacking Point Value of 1 or greater and a non-parenthesized Combat Strength is in Alexandria at the beginning of a Commonwealth Refit Phase, or at the end of the game (regardless of supply status). Otherwise, victory is determined according to 15.26.

[15.26] For each hex listed below which an Axis unit occupies at the end of the game, the Axis player receives the indicated Victory Points. The Axis player also receives the indicated Victory Points if an Axis unit was the last unit to move into an indicated hex.

HEX	VICTORY POINTS
Tobruk	20
Mersa Matruh (E2118)	10
Bardia (E2104)	6
Benghazi (E2306)	4
Derna (L2819)	3
Sollum (E2004)	2
Sidi Barrani (E2210)	2
Fort Maddalena (E1502)	2
Each Oasis hex (L0115), (E0303), and (E0106)	1

The Axis player also receives one Victory Point each time the Commonwealth player is unable to make a required withdrawal (5.23).

Total the Axis player's Victory Points, and determine who won and by how much according to the following schedule:

VICTORY POINTS	LEVEL OF VICTORY
52+	Smashing Axis
38–51	Substantial Axis
20–37	Marginal Axis
12–19	Marginal Commonwealth
2–11	Substantial Commonwealth
0 or 1	Smashing Commonwealth

DESERT FOX DESIGN CREDITS

Game Design: **Richard Berg**
Physical Systems and Graphics: **Redmond A. Simonsen**
Game Development: **Nick Karp**
Developmental Assistance: **J Matisse Enzer**
Rules Editing: **David James Ritchie, Michael Moore**
Playtesters: **Andrew Eiler, J Matisse Enzer, Peter Herzig, Tony Rosario, Ken Slepyan**
Blindtester: **Eric Ristad**
Production: **Ted Koller, Manfred F. Milkuhn, Michael Moore, Bob Ryer, Ken Stec, Paul Stevens**

Desert Fox Counter Section Nr. 1 (200 pieces): Front

Quantity of Sections of this identical type: 1. Total quantity of Sections (all types) in game: 1.

GERMAN

ITALIAN

COMMONWEALTH

AXIS

REFIT

Game Turn

MARKERS

Out of General Supply

Captured Supply

Emergency Supply

CW — MALTA — REFIT

Desert Fox — Map L

SUMMARY OF SUPPLY SOURCES AND CAPACITIES

SOURCE	ALEXANDRIA, RAIL HEX TOBRUK (CW), LO/DI (AXIS)	OASIS (7.24)	BARDIA (7.25)	DUMP	MSU (As a link only)
Radius	12	12	12	12	6
General Supply					
Non-Motorized (NE)	U	U	U	U	U
Motorized (NE/EX)	U/–	O/–	U/–	1–5/6–10	1–5/6–10*
Combat Supply					
Attack (NE/EX)	U/–	O/–	O/–	1–3/4–5	1–3/4–5*
Defense (NE/EX)	U/–	O/–	O/–	1–6/7+	1–6/7+*
Remove Disruption (NE/EX)	U/–	O/–	O/–	O/U	U/U/–

NE: Supply unit not expended. EX: Supply unit expended. U: Unlimited. (–): Not applicable. *See 7.16.

COMMONWEALTH AIR POINTS AT MALTA

0	1	2

[6.37] RAID ON MALTA TABLE

DIE	PARTICIPATING AXIS AIR POINTS 1	2	3
1	1/0	1/0	0/0
2	0/0	0/0	1/1
3	0/0	1/1	0/1
4	0/0	0/1	0/1
5	1/0	0/1	1/2
6	0/1	0/1	0/2

AXIS SUPPLY EXPENDED

0	1	2

#/#: Axis/Commonwealth Air Points eliminated. See 6.33.

[7.57] AXIS CONVOY ARRIVAL TABLE

DICE	MSU's AVAILABLE	
1–3	4	Add the number of CW Air Points at Malta to the roll of 2 dice. Game-Turns 1–9, *subtract* 1 from the dice roll; Game-Turns 15–22, *add* 1. See 7.55.
4–5	3	
6–7	2	
8–10	1	
11+	0	

[5.18] AXIS REINFORCEMENTS

ITALIAN	TURN	GERMAN
17 Pav; 25 Bol; 55 Sav; 7Br/Trn Mech; 61/Trn; 62/Trn; 102/Trn; 2 Arty.	2	33 Reccon. 104 Mech.
	3	115 Mech; 8 Armd; 155 Mtrzd.
	4	15 Pzr Arty.
	5	361 Afr.
Recam Armd Car.	6	580 Reccon.
	7	
9Br/Tri; 65/Tri Mtrzd; 66/Tri Mtrzd; 101/Tri Hvy Wpns.	8	1/18 Flak.
	10	II/25 Flak; 368 Flak.
133/Li Armd; 12Br/Li Mech; Lan/Li Mech.	11	
	12	114 Flak; I/6 Flak.
	14	Svbd.288 Hvy Wpns.
	15	1 Afr Arty.
	16	190 Arty.
Monf III Reccon. Artclre Armd Arty.	18	Ramcke Hvy Airbne Inf.
16 Pist; Folg Gldr Inf.	19	125 Mtrzd; 164 Reccon; II/5 Flak; 382 Mtrzd; 433 Mtrzd; 220 Arty.
GGFF.	20	

DESTROYED UNITS BOX

TEMPORARILY WITHDRAWN UNITS

Substituted units (see 5.22) must be of the same type and have a Combat Strength at least as great as that of the unit named (when the latter is undepleted). Two or more units may be substituted for a single withdrawal. Note that *any* armor unit may be substituted for any armor withdrawal, regardless of Armor Rating and Combat Strength.

PERMANENTLY WITHDRAWN UNITS

LIBYA — Map L

Jebel Achdar

Desert Fox

Game-Turn 2: Polish; 18 Aus Hvy Inf (enters depleted); 5/4 Ind; CIH Recce; 4 Ind Arty; 9 Aus Hvy Wpns; 9 Aus Recce.
Game-Turn 3: 7/4 Ind; 11/4 Ind; Royals Recce; 6/2 NZ (enters depleted); 1/2 Armd (enters in Refit Box); 5/1 SA; 4/7 Armd (enters in Refit Box). *WITHDRAW:* Polish(3); 3/2 Armd.
Game-Turn 4: 14/70; 4/2 NZ (enters depleted); 5/2 NZ; 2 NZ Hvy Wpns; 1 Army Armd; 150/50 Mtrzd; 1/1 SA; 2/1 SA. *WITHDRAW:* 16/70(4); 23/70(4); 5/3 Ind(3).
Game-Turn 5: 9/5 Ind; 3/2 SA; 6/2 SA; 10/5 Ind; 29/5 Ind. *WITHDRAW:* 14/70(4).
Game-Turn 6: 4/2 SA; 2 SA Hvy Wpns; 4/6 SA Recce. *WITHDRAW:* 150/50 Mtrzd(3); 18 Aus Hvy Inf(5); 9/5 Ind(3).
Game-Turn 7: 22 Armd; 1 SA Hvy Wpns; 16/70*; 23/70*. *WITHDRAW:* 24/9 Aus(2); 9 Aus Recce(1); 9 Aus Hvy Wpns(3); 10/5 Ind(3).
Game-Turn 8: "c" Arty; 14/70*. *WITHDRAW:* 26/9 Aus(2); 20/9 Aus(2).
Game-Turn 9: 2/1 Armd; 12 Lanc Recce; 1/1 Hvy Wpns

Game-Turn 11: 1FF. *WITHDRAW:* Polish(3); 3/2 Armd.
Game-Turn 12: 8/10 Armd; 69/50 Mtrzd; 151/50 Mtrzd; 50 Hvy Wpns. *WITHDRAW:* 14/70(4); 23/70(4).
Game-Turn 13: 161 Ind Mtrzd; 10/5 Ind*. *WITHDRAW:* 4/2 NZ(3); 5/2 NZ(4); 6/2 NZ(3); 2 NZ Hvy Wpns(3); 16/70(4).
Game-Turn 14: 2 FF; 9/5 Ind*; 3/2 Armd*. *WITHDRAW:* 7/4 Ind(2).
Game-Turn 15: "d" Arty; 9/10 Armd.
Game-Turn 16: 20/10 Ind Hvy Wpns; 21/10 Ind Hvy Wpns; 25/10 Ind Hvy Wpns; 10 QVOC Recce; 4/2NZ*; 5/2 NZ*; 6/2NZ*; 2 NZ Hvy Wpns*.
Game-Turn 17: 18 Ind; 23/8 Armd; 24/8 Armd; 2dYeo Recce; "c" Arty; 20/9 Aus*; 24/9 Aus*; 26/9 Aus*; 9 Aus Hvy Wpns*. *WITHDRAW:* 3 Ind Mtrzd(3).
Game-Turn 18: 131/44 Mtrzd; 132/44 Mtrzd; 133/44 Mtrzd; 1 Greek; 152/51 Mtrzd; 153/51 Mtrzd; 154/51 Mtrzd; 51 Hvy Wpns. *WITHDRAW:* 1 Army Armd; 25/10 Ind Hvy Wpns(3).
Game-Turn 19: 44 Hvy Wpns. *WITHDRAW:* 22 Mtrzd(3).
Game-Turn 20: 9/5 Ind(3).
Game-Turn 21: *WITHDRAW:* 20/9 Aus(2); 24/9 Aus(2); 26/9 Aus(2); 9 Aus Hvy Wpns(3).

Numbers in parantheses following designations of withdrawn units indicate the minimum Combat Strength of substitutions for the indicated unit. *Indicates that unit was previously withdrawn.

[11.8] COMBAT RESULTS TABLE

DEFENDER'S HEX	COMBAT RATIO (Attacker-Defender)									
Alexandria	2–1	3–1	4–1	5–1	6–1	7–1	8–1	9–1 OR MORE		
Mountain/Fort 2/ Tobruk/Benghazi	1–1	2–1	▶	3–1	4–1	5–1	6–1	7–1	8–1 OR MORE	
Rough/Fort 1/Bardia	1–2	1–1	2–1	3–1	4–1	5–1	6–1	7–1	8–1 OR MORE	
Clear/Sand Sea/Marsh	1–3	1–2	1–1	2–1	▶	3–1	4–1	5–1	6–1	7–1	8–1 OR MORE

COLUMN NUMBER	1	2	3	4ᴬ	5	6	7	8	9	10ᴬ	11	12	13	14	15	16ᴬ	17
DEFENDER'S MORALE 1	–	–	–	–	–	–	1	1	2	p	d3p	d4p	d5p	d5p	d5D	d4D	d5D
2	–	–	–	–	–	1	2	p	d3p	d4p	d6p	d2D	d3D	d5D	d5D	d4D	E
3	–	–	–	1	2	p	d3p	d4p	d6p	d3D	d4D	d6D	d3D	E	E	E	E
4	–	–	1	2	p	d3p	d5p	d6p	d2D	d4D	d6D	E	E	E	E	E	E
5	–	1	2	p	d3p	d5p	d5p	d3D	d5D	E	E	E	E	E	E	E	E
EFFECT ON ATTACKING UNITS	E	d6D	d5D	d4p	d3p	p	–	1	–	p	1	–	–	–	–	–	–

#: Retreat indicated number of hexes. d: Unit(s) disrupted. D: Unit(s) depleted. E: Unit(s) eliminated. p: See 11.7 for explanation. A: See 6.23. (–): No result. ▶: Indicates that the next higher Combat Ratio is to be found in the next column to the right. Note also that the "no result" entries scattered through the Effect on Attacking Units line are intentional. See 11.6 for the effects of attacking at a ratio below the minimum listed; see 11.6 and 11.7 for detailed explanation of all results; see 11.0 for explanation of use of this table.

[11.37] HEXSIDE TERRAIN EFFECTS ON COMBAT

UNIT ATTACKING ACROSS:	EFFECT ON COMBAT STRENGTH
Wadi	Attacker's Strength halved (round up)
Ridge	Attackers Strength divided by 3 (round up)
Escarpment	Attacker's Strength divided by 3 (round down)

[8.29] TERRAIN EFFECTS CHART AND KEY

TERRAIN TYPE

Motorized Unit: Movement Point cost to enter or cross
Non-Motorized Unit: Movement Point cost to enter or cross

CLEAR — Motorized: 2 / Non-Motorized: 2
ROUGH — Motorized: 4 / Non-Motorized: 2
MOUNTAIN — Motorized: 6 / Non-Motorized: 3
SAND SEA — Motorized: 2 (see 8.14) / Non-Motorized: 2

OASIS — Motorized: 2 / Non-Motorized: 2
CITY — Motorized: ½ / Non-Motorized: 2
MARSH — Motorized: 2 (see 8.14) / Non-Motorized: 3
VILLAGE — Use cost of other terrain in hex for all units.
ROAD — Motorized: ½ / Non-Motorized: 1
TRACK — Motorized: Use half the cost of other terrain in hex. Non-Motorized: 1

RAIL HEX — Use cost of other terrain in hex for all units.
UNFINISHED RAIL HEX — Use cost of other terrain in hex for all units.
ESCARPMENT — Motorized: Prohibited / Non-Motorized: + 5
RIDGE — Motorized: + 3 / Non-Motorized: + 2
WADI — Motorized: + 2 / Non-Motorized: + 1
BORDER — Use cost of other terrain in hex for all units.

DISTANCE INDICATOR — Use cost of other terrain in hex for all units.
VICTORY POINT HEX — Use cost of other terrain in hex for all units.
SUPPLY HEX — Use cost of other terrain in hex for all units.

...to CONDUCT SUPPLY OVERRUN — Motorized: +1 / Non-Motorized: +1
...to CONDUCT OVERRUN — Motorized: +2 / Non-Motorized: Prohibited
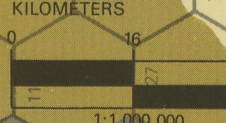**...to INFILTRATE** — Motorized: +1 / Non-Motorized: Prohibited

SEQUENCE OF PLAY

INITIATIVE DETERMINATION
FIRST PLAYER-TURN
1. Reinforcement Phase
2. Air Allocation Phase
3. Initial Movement Phase
4. First Enemy Reaction Phase
5. First Combat Phase
6. Motorized Movement Phase
7. Second Enemy Reaction Phase
8. Second Combat Phase
SECOND PLAYER-TURN
9. Refit Phase
GAME-TURN INDICATION

Map labels

EGYPT
Map E

Qattara Depression

AXIS REFIT BOX
COMMONWEALTH REFIT BOX

MAP SCALE
KILOMETERS
1:1,000,000

TURN RECORD TRACK

See 4.11

CW Refit Points
CW MSU's
CW Air Points
CW Max Armor Rating

Axis Max Armor Rating
Axis Air Points
IT Refit Points
GE Refit Points

AXIS REFIT/AIR POINT TRACK

0	1	2	3	4	5	6	7	8	9

COMMONWEALTH REFIT/AIR POINT TRACK

0	1	2	3	4	5	6	7	8	9

[13.26] REFIT CHART

REFIT ELIMINATED UNIT TO FULL-STRENGTH STATUS
REFIT DEPLETED UNIT TO FULL-STRENGTH STATUS
REFIT ELIMINATED UNIT TO DEPLETED STATUS

Numbers indicate Refit Points that must be expended to refit the specified unit type.

TURN RECORD TRACK

1941

GAME-TURN/MONTH	1 Mar	2 Apr	3 May	4 Jun	5 Jul	6 Aug	7 Sep	8 Oct	9 Nov	10 Dec
REINFORCEMENTS		CW, IT, GE	CW, GE	CW, GE	CW, GE	CW, IT	CW, IT		CW	GE
SPECIAL NOTES	Start: NT	Start: NB			End: RFT			End: NB		
INITIATIVE DIE SPAN	See 4.11	See 4.12	2–10	2–10	2–10	3–9	3–9	3–9	3–9	3–9

1942

GAME-TURN/MONTH	11 Jan	12 Feb	13 Mar	14 Apr	15 May	16 Jun	17 Jul	18 Aug	19 Sep	20 Oct	21 Nov	22 Dec
REINFORCEMENTS	CW, IT	CW, IT	CW	CW, GE	CW, GE	CW	CW, GE	CW, GE	CW, IT, GE	CW, IT	CW	
INITIATIVE DIE SPAN	3–9	3–9	3–9	3–9	3–9	3–9	3–9	3–9	2–7	2–7	2–7	2–7

320P21