DESERT FOX Deluxe

Support Booklet



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INTRODUCTION

Desert Fox Deluxe is a wargame covering the WWII campaign in North Africa. It encompasses, though does not necessarily embody, all the following material.

- (The) Desert Fox by Richard Berg, published in Strategy & Tactics #87 (©SPI 1981) covering Rommel's campaign in eastern Libya and western Egypt from March 1941 through December 1942.
- Operation Herkules by Eric Sven Ristad, published in Moves #58 (©SPI 1981) is an optional rule 16.0 for Desert Fox regarding the Axis invasion of Malta.
- Detachments by J Matisse Enzer, published in Moves #58 (©SPI 1981) is an optional rule 17.0 for Desert Fox enabling players to form small units for the purpose of slowing enemy movement.
- Desert Patrols by Richard Berg, published in Moves #58 (©SPI 1981) is an optional rule 18.0 for Desert
 Fox enabling the Commonwealth (Allied) player to form long-range desert patrols.
- Commonwealth Variable Withdrawals by Richard Berg, published in Moves #60 (©SPI 1981) as an optional rule 5.3 for Desert Fox modifying rule 5.2 regarding the withdrawal of Commonwealth units to other theaters.
- Axis Use of Tobruk by Richard Berg, published in Moves #60 (©SPI 1981) as an optional rule 5.4 for Desert Fox allowing Axis reinforcements to land in Tobruk.

- Rommel by Richard Berg, published in Moves #60
 (©SPI 1981) is an optional rule 8.8 for Desert Fox
 bringing a Rommel counter into the game.
- Fox Killed by Steven Copley, published in Strategy & Tactics Special #1 (©SPI 1983). This is a new scenario covering the Italian invasion of Egypt from September 1940 through March 1941.
- Trail of the Fox by Douglas Niles, published in Strategy & Tactics #97 (©TSR 1984), extends
 Desert Fox in time and space to cover the fight for Tripolitania and Tunisia from November 1942 through July(-ish) 1943.
- Unpublished material on Operation Torch, by Douglas Niles.
- Unpublished material by Ulrich Blennemann and Hank Meyer, and their teams, in unfinished versions of **Desert Fox Deluxe**

I am conscious of, and grateful for all that was done before I took on the job of finishing **Desert Fox Deluxe**. I compiled this booklet in the course of the design and (re)development process. Its purpose is to explain the rationale for rules, background for map, counter, and player aid decisions, and discussions of this game and gaming in general; think of it as my "developer's junk drawer."



CREDITS

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DEVELOPER'S NOTES

The original **Desert Fox** (ODF) was and remains a classic. **Trail of the Fox** (OTF) and **Fox Killed** (OFK) were probably inevitable follow-on games, extending ODF both temporally and spatially. **Desert Fox Deluxe** (DFD), the grand combination of them all, was equally inevitable. The idea has been kicking around for many years, Ulrich Blennemann and the late Hank Meyer both heading up the project at one time.

My intent on starting this project was to leave the system presented in ODF intact to the greatest extent possible, but some systemic changes were warranted. These first paragraphs contain some general notes, with specifics discussed below in the order encountered in the rules.

GENERAL NOTES

A few changes were needed owing to minor differences between ODF and OTF. Two changes made by the latter were doubling defenders in mountains (OTF 11.35) and deleting emergency supply (ODF 7.4). None was a major obstacle, but they had to be addressed, and OTF's solution of using the different rules on associated maps was not acceptable.

I felt certain aspects of the game did a poor job modeling mobile warfare generally and desert warfare in particular. There were many, discussed below through most of the game mechanics (5.0 through 11.0), plus unit ratings (2.4) and the turn sequence (4.0).

Another of my pet peeves is special rules. Other than those necessary to set up a scenario, I have always found them irritating, almost an acknowledgment that the basic game mechanics don't actually portray the situation realistically, forcing play to be bumped one way or the other to make it work out right. Examples in the originals include the German surprise on ODF Turn 1 (ODF 3.2, 4.0A & B, and 7.76), the Tobruk double zone of control (ODF 10.14), and the OTF Axis command rule for the panzer divisions (OTF 16.0). Wherever possible, I reworked the basic system to account for them.

More counters and rules space allowed DFD to be broadened and deepened. The air system (19.0) in the original was underdeveloped, the naval system (20.0) almost absent. Both have been significantly expanded, allowing for greater impact as well as greater nuance. Entirely new systems include events (5.0), off-map theaters (22.0), new combat unit types (2.4, 15.0), and desert raiders (16.0).

I should also note the massive amount of new research that had to be incorporated into the game. Three sources in particular had a great effect:

- the work of Jack Greene and Alessandro Massignani in peeling back the curtain on the Italian military;
- The Mediterranean Air War by Robert S. Ehlers, Jr. on the role of airpower; and
- the Wehrmacht Lexikon (<<http://www.lexikon-derwehrmacht.de>>) for German unit histories.

Finally, I was dedicated to presenting a game in which all the mechanisms are integrated, so the action is portrayed appropriately at every level, from a single hex to the full campaign.

2.0 COMPONENTS

ODF had twelve pages of rules (equal to fourteen with our more open format and larger font), one full map, and 200 counters. OTF added another map, but of its sixteen-page rules booklet roughly eleven were used to repeat the game system rules, and one each was used for a cover illustration, an image of the countersheet, and a long definitions section. So there was only about two pages of new material: special rules, victory conditions, and set up. The same applied to its 200 counters, with (depending on how you count them) 103 duplications from ODF. OFK added just a few paragraphs of set up and victory conditions, plus 23 counters (shown but never published).

All told, the original games included about 16 pages worth of rules, two maps, and as few as 320 unique counters. For DFD, I had 32 pages of rules space, 2¼ maps, and 560 counters, so there was a great deal of scope for expansion and nuance. I will say I gained respect for the original designers, who obviously had to make a lot of compromises.

2.2 Maps

Three big additions and one significant changes were made to the original maps, otherwise the only real changes are cosmetic.

The first addition is Map A-Algeria, extending the hexgrid to Algiers with off-map boxes stretching all the way to Casablanca and Marrakesh. This allowed a more complete examination of the Torch operation, and puts the Allies in the position of dealing with the entire Vichy apparatus and having to divert strength to pacify the region.

Second is the deep desert, the string of oases far south of the main campaign area. I had recently developed Joseph Miranda's **Long Range Desert Group** mini-game and was newly-alive to the possibilities and importance of the sub-campaign.

Together with new counters (16.0) it allows a minor but important part of the campaign to be included.

Third is the new Map D-Display. I actually had put it together as a mockup during development; it helped me keep track of the larger picture even when working on small portions of the complete map set. With just a few small changes, I found it allowed me to play the larger campaign using just the map(s) currently in play.

The big change was the removal of "charts, tables, tracks, and displays" (CTTD in our shorthand) from the maps. There certainly is room in the macro sense, but equally certainly not on every map. That would force players to have other maps handy for reference when playing smaller scenarios, a cumbersome solution at best.

Finally, for what it's worth, I had originally intended to use continuous hexgrid numbering as I have done in other games, to preclude the need to identify hexes by map. Alas, it was not possible due to the length of the map; we would have had to go to a five-digit hex ID, and unanimously rejected the idea.

2.4 & 2.5 Counters

The DFD counterset is the most obvious change from the originals, both in number and appearance.

I kept the background colors comparable to those in the original, though I found the CW orange was a bit too dark. We used bigger fonts and a lot more color, partly for aesthetics, partly for ease of reading and nationality identification, and partly just because we could.

Most of the new counters were used to include units not presented in the originals, or to present larger organizations in more detail. To cite just one example, the composition of 15th Panzer Division has gone from 5 counters and 10 steps in ODF to a maximum of 9 counters with 13 steps (see box); this was greatly aided by allowing one step units (discussed below). The orders of battle for the entire game are presented on pages 12–19 using the counter set.

15th Panzer Division

One addition I did *not* make was to convert the Italian and French foot infantry divisions to regiments, as had been done with the Italian motorized divisions. I tried it in an early playtest version but quickly found the Italians gained too much flexibility in their deployments. The Vichy French divisions were problematic because of the rapid turnover of *regiments de marche* comprising them, especially as many of the regiments were barely the size of battalions.

The following sub-sections (Roman numerals added here for reference purposes) give details on major differences between DFD and the originals (see also 8.0). A counter-by-counter comparison is located at pages 22–31.

2.4-I—One-Step Units

ODF made all units two steps. This worked fine in terms of applying combat results because all were treated equally, but created two countervailing problems.

First, since all units had two steps, all were equally durable in combat; a recon battalion would survive as much damage as a full brigade. Second, it led to some strange results on the refit chart. For example, the three German recon battalions (3, 33, 580) actually cost more refit points to rebuild after elimination (3 RP each, 9 total)

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than the four tank battalions of the two German Panzer regiments (4 RP each, 8 total).

The real question in both cases was just what a step represented, especially relative to what disruption represented (see discussion in 8.2 & 8.3). My resolution—steps equal strength, disruption equals loss of cohesion—allowed me to make some units just one step. That allowed for much greater granularity in building larger organizations, though it needed a modification on the CRT to allow partial elimination of a group of one-step units (discussed in 14.0 below; see also 8.0).

2.4-II—Unit Types

ODF had numerous unit types but only a few—armor, artillery, anti-tank, and, in one sense only, all infantry types together—were distinguished in any meaningful way by unique capabilities. All units were also classed as either motorized or non-motorized.

I wanted to clarify and enhance unit distinctions to give players more tools to use in solving operational dilemmas. This was done in four broad ways:

- more specialist unit types and more precision about special capabilities and/or weaknesses; (see 15.0);
- more movement classes with greater differentiation in capabilities (2.4-III);
- differentiation of infantry into standard, heavy, and light (2.4-IV); and,
- a rationalization of infantry combat factors (2.4-V).

2.4-III—Movement Classes

The ODF classification of all units as motorized or nonmotorized was a standard SPI-era rule. It is just too simple and ignores other distinctions, but I did not set out at first to add multiple classes.

What brought me to that point was the treatment of most CW brigades as non-motorized. While true in the strict sense, I cannot find a single instance of a CW division marching for days or weeks to reach the front.

As a practical matter, there were enough trucks to provide at least administrative (read: operational) lift for them. Certainly there is no reason to distinguish the mass of brigades from those of the British 44ID, 50ID, and 51ID, all present as motorized. OTF properly treated them all as motorized. On the other hand, the mass of brigades was not comparable to truly motorized units—those with vehicles assigned to each subunit—such as the British motor brigades and German *Schützen* regiments.

I needed a way to differentiate them, and the result was the new **mobile** class. This represents units both equipped and trained to operate in fluid situations, rush in and out of combat, to pursue, and above all to fight on the move. You will note all units in a German Panzer division are so trained, while in British armoured divisions only the tanks are. It is a critical difference and will affect tactics.

While I was at it, I also noted the need for more granularity between wheeled and tracked, air-transportable or not, and so on.

The mechanized class was necessary to show the difference between tactical mobility on rough terrain (tracked vehicles high, wheeled vehicles low) and speed

over distance on roads (wheels high, tracked low). The fastest units in ODF, for example, were the recon units, generally equipped with light tanks and armored cars. Name notwithstanding, the latter are specialized trucks designed for off-road movement and not necessarily at their best on long road marches. The fastest units on the map should be road-bound wheeled vehicles: trucks and motorcycles. I wanted to keep the movement allowances comparable to those in the original games for continuity purposes, so this was accomplished with different modifiers for road travel (13.2).

As a side note, bearing in mind all units now move in every phase, I considered dropping the standard foot movement allowance from 14 to 7 to emphasize the dissimilarity between foot and motorized. They would be sped on long distance moves using the road march rules. I chose against it to maintain compatibility with the original game.

2.4-IV—Infantry Types

ODF recognized no actual difference in combat between the various infantry types. The first step I took was to codify infantry into three categories.

- Standard (aka line or regular) infantry represented infantry battalions and regiments/brigades as complete organizations, equipped largely with rifles and machineguns, with a few infantry support weapons like mortars.
- Heavy infantry would be the same plus the addition of more and heavier support weapons, chiefly artillery.
- Light infantry would be those with fewer and lighter support weapons, primarily for ease of transport (especially by air) or mobility in rough terrain.

Unsupported standard or light infantry is halved in the desert while heavy infantry is not. This takes into account the much longer lines of fire in the featureless desert; "clear" terrain incorporates irregular ground, streams, woods, and settlements, enabling infantry to move under cover until relatively close.

The real impact of this definition is to give actual value to CW brigade groups and similar mixed arms organizations (23.1 ALC-20). Several CW units in ODF—14/70, 16/70, 23/70, 20/10Ind, 21/10Ind, 25/10Ind, and 18 Aus—clearly were intended to represent brigade groups, which they were. Their strength was roughly double that of the standard infantry brigades, so I just extended the idea.

One infantry type I discarded was mechanized infantry, represented in ODF by the German 104 and 115 Schützen (later Panzergrenadier), the British 2 and 7 Support Groups, and, oddly, the Italian *Bersaglieri*. OTF added just Combat Command C of 1st Armored Division. All but the last are incorrectly classed. The German regiments had a few companies in halftracks, but most of the "mechanized" units were really truck-borne. That reality is recognized in the movement factors of all the units except CCC and, still more oddly, the *Bersaglieri*. I incorporated what I think is the intended effect—the ability to keep up with tanks while under fire—into mobile movement and classed each unit appropriately.

2.4-V—Infantry Strength

There were two essential difficulties facing me regarding infantry unit combat strength:

- The first was the wide range of infantry strengths in ODF
- The second problem arose when OTF was brought into the mix.

The average infantry unit in ODF had a strength of 2 or 3, anywhere from one-half to one-quarter the strength of a tank unit. This was not entirely unreasonable given the nature of desert fighting, but it did not allow for much differentiation between units, nor did it translate well into the more constricted terrain in Tunisia. For that reason (I assume) Doug Niles increased infantry strengths in OTF to the 4-to-5 range. While each is logical enough on its own, it does mean the desert units come off as much weaker than their Tunisian counterparts. The standard-vs.-heavy infantry restored the "balance" of infantry strengths between ODF and OTF.

There are also a number of comparisons within each original game that do not bear up to scrutiny. The German Ramcke Brigade and 200th Regiment were the principal outliers. The former represents four small but elite battalions of paratroopers and one of light artillery. The latter was a regimental HQ assigned to control a number of subordinate units, namely the 2nd and 8th Machinegun battalions, I/75 Artillery, 39th Panzerjäger, and 605th Panzerjäger. While powerful units, they were not four or five times as strong as the average Commonwealth infantry brigade portrayed in ODF. Neither were the other German regiments—only two battalions each—half-again as strong.

On the whole, there did not appear to me to be a clear pattern to infantry strengths in ODF. I therefore took the OTF numbers as the baseline, meaning the ODF units had to be increased by 50 to 100 percent. The impact of this has been lessened by additional differentiation of infantry types and terrain effects discussed in 2.4-IV above.

3.0 SCENARIOS

The original games had two scenarios each, one primary and one secondary, each of which was used as the basis for one of the DFD scenarios.

Primary Scenarios

- OFK 15.3 Italian Campaign covering the Italian invasion of Egypt and Operation Compass (September 1940–February 1941). This is now 24.0 Fox Killed.
- ODF 15.2 The North African Campaign on Rommel's stint in the Western Desert (March 1941—December 1942). Its DFD doppelganger is 27.0 Desert Fox.
- OTF 17.0 Trail of the Fox covers the Tunisian campaign, including the pursuit of Rommel across Tripolitania (November 1942—July 1943). The DFD equivalent is 31.0 Tunisian Campaign.

Secondary Scenarios

- OFK 15.4 The Extended Campaign joined OFK Italian Campaign and ODF The North African Campaign to cover the entire desert war (September 1940— December 1942), with special rules covering the March 1941 bridge between them. This is mirrored by 28.0 Desert War.
- ODF 15.1 Race for Tobruk (March—July 1941) looked just at Rommel's first strike in Cyrenaica using the same setup as the full campaign (ODF 15.2) but with different victory conditions. The DFD version is 26.0 Sonnenblume.
- OTF 18.0 African Campaign joined ODF The North African Campaign and OTF Trail of the Fox (March 1941—July 1943) to cover Rommel's entire stint in North Africa, again with special rules covering the overlapping turns. In DFD this is handled by 32.0 Rommel's War.

New Scenarios

The remaining DFD scenarios are variations on the same themes.

- O'Connor's War (25.0) offers an extension, both physical and temporal, to Fox Killed to model the potential drive on Tripoli.
- Run for Tunis (29.0) and Trail of the Fox (30.0) each look at a segment of the Tunisian Campaign, and offer the best scenarios for initiation into the game.
- North African Campaign (33.0) pulls together every component and aspect into a single game covering the entire war in North Africa.

Unseen by the player, the events and arrival matrix made all the above possible virtually without special rules other than set up and victory conditions. In the future, I hope to provide short scenarios covering some of the key battles, aiming for games of 1–3 turns and using just one or two maps.

4.0 TURNS

I made some major changes to the sequence of play in the interests of making it more realistic and more interactive.

The first major alteration was getting rid of the sequential movement phases by the same player (regular and motorized), and the corresponding distinction between the two types of movement phases. These were standard SPI mechanisms I never liked even back in the '70s.

The problem is the arrangement creates temporal compression, especially when combined with all the other phases. The active player receives reinforcements, then conducts operations—to include motorized units lashing out and pulling back before the opposition can do more than make the limited reactions allowed—then recovers from the battle damage just incurred, all while the other player sits and watches. Too much happens without enemy interference.

We have witnessed the arrival of many elegant game mechanisms since the end of the SPI era, almost all of which emphasize the interleaving of play and the addition of chaos into operations. I have tried to incorporate that conceptually into the basic operational structure.

A turn now includes one group of mutual phases for reinforcement, air allocation, and so forth, and a

pair of interleaved player turns (impulses) with nondifferentiated movement phases. Refit and recovery have been pushed into the movement phases; this has become one of my standard design tools on the grounds both take a good deal of time in reality but carry no movement or operational cost if done in a separate phase.

One thing that was lost by making the change was the ability to use the motorized movement phase to exploit a breakthrough in the first combat phase. I compensated by adding mobile combat (14.9.2) and increased overrun capabilities (13.4).

5.0 & 23.0 EVENTS

There's an old joke about the "short version" of Avalon Hill's classic **Afrika Korps**. The game always seemed to come down to a 2-to-1 German assault on Tobruk, so you can skip the rest of the game and just roll the die for the final assault

The joke illustrates the bane of virtually all North Africa games: the fixed nature of the reinforcement schedules and of the withdrawal schedule for the Allies. The parent games of DFD all fall into that category. Rich Berg himself noted that for ODF it was largely the result of having to fit it into the standard magazine format. He later came out with a variable withdrawal schedule, but the reinforcement rate was never addressed.

The historical rate of reinforcement was partly subject to the availability of units and materiel, but also partly to the situation on the battlefield. Churchill, for example, probably would not have risked Operation Tiger, the May 1941 convoy of tanks (refit points in game terms) across the Mediterranean, had Rommel not just cleared Cyrenaica and put Tobruk under siege. Using fixed historical reinforcement schedules known to both players means unit arrival *drives* events on the map rather than *being driven* by them—both players make plans knowing exactly when units will reach the front. This problem is bad enough in a short scenario like OFK or OTF, but was a real problem in ODF and would be that much greater in DFD.

I took a step back for a long view of the campaign, which as I see it was a German (not Axis) delaying action, seeking to put off the Allied return to the European mainland as long as possible. The Allies, the Americans in particular, have the opposite goal in the long term, while in the early going the Commonwealth has to fight in the desert with one hand tied behind its back while stabilizing the broader Middle East situation.

My solution was to install a "steady state" level of reinforcement, replacement, and supply for each army, based on the idea that an army necessarily possesses a pipeline of support to keep it in the field. That pipeline can be altered by a set of events for each player, the declaration and timing of those events to be in the control of the players. As a rule, additional resources come at a cost—time: either shortening or lengthening the game—on the assumption the high commands providing the resources will want some kind of return on their investment. That puts the players in the position of a theater commander, weighing the cost and benefit of any new accretion of strength.

The flip side of the arrivals were the frequent withdrawals of Commonwealth units from the desert to deal with crises in other theaters. My solution was to use an off-map track and marker to record the current situation for each campaign. The Commonwealth (Allied) player chooses what strength to commit to a track; the more strength committed the greater the reduction of strength in the desert, but the faster the situation on the track is resolved. Once again the effect is to give the Allied player control over the situation, which can be balanced against that in the desert—historically most withdrawals were made when the desert situation had been stabilized.

Constructing the events matrix was an incredibly complex and time-consuming process, but I am happy with the overall result. Among other things, it made construction of scenarios go smoothly and easily.

High Command Appeals (ALC-11 & AXC-4)

This is an idea I took from Joseph Miranda's **Mare Nostrum** game (*World at War#*44), which I developed.
It gives both players the ability to receive an emergency boost to take advantage of an opportunity or recover from a disaster.

Ultra (ALC-13)

There was no way I could omit Ultra, which really is a catch-all for the extensive Allied codebreaking networks and the way their output was brought to bear in critical situations. There was considerable discussion during playtesting about giving the Axis a comparable ability, but I felt that was already built into the Axis advantage in initiative and recon units, and I like the asymmetry this rule brings.

Taranto (ALC-12)

This event reflects the decision to broaden the Middle East war by scouring the Mediterranean of the Italian fleet. It brings the Allies additional resources, but still reflects a *Commonwealth* rather than *British* view of the war, meaning the focus is on holding the Middle East rather than working toward a return to Europe. It also brings with it the undesirable (for the Allies) antagonism of Vichy France and Germany.

Eighth Army (ALC-15)

One of the keys to the events matrix is the breakdown of reinforcements into blocs, each denoting a fundamental change in the view of the desert war. This event changes the campaign from a defense of Egypt into one bent on the conquest of Libya.

The mandatory replacement of the WDF leader unit (read: O'Connor, but it could be Gott) was put in place because of my take on the British way of war, and was much discussed in playtesting. The British army has always had, and occasionally celebrates, eccentric leaders, of whom O'Connor was one (and so, for that matter, was Churchill). These leaders thrive on the outskirts. The creation of a full army in the desert, complete with a regular command hierarchy and a robust supporting tail, would lead to a de-emphasis of the eccentric in favor of the mainstream (staid) British pattern.

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Greek Campaign (ALC-16) & Syrian Campaign (ALC-17)

These are two of several rules listing specific requirements in dealing with other theaters and the commitments necessary to them, to include the arrival of specified reinforcements. Not really events in the strict sense, they have been "parked" in this section and the events matrix to create a unified process for outside occurrences.

Australian Corps (ALC-18)

The withdrawal of 9th Australian Division from Tobruk in late 1941 is inexplicable in game terms without this requirement (or adding some kind of fatigue rule, but I rejected that almost as soon as I considered it). I preferred to leave the timing open to the Allied player so it could be executed at a convenient time as was done historically. The corps, under Gen. Blamey, had existed from the start of the war but was dispersed in the face of operational realities.

Pacific Theater (ALC-19)

This is another parked event, though in this case a ticking clock outside the control of the players.

The units withdrawn in the historical campaign were 70th British Division (14 BG, 16 BG, 23 BG), 7th Armoured Brigade (7 Arm), 6th Australian Division (16 Aus BG, 17 Aus BG, 19 Aus BG, 6 Aus Cv), and 7th Australian Division (18 Aus BG, 21 Aus BG, 25 Aus BG, 7 Aus Cv). As Egypt was still in danger 9th Australian Division was left behind, but must be withdrawn if the Australian Corps is not formed, a nice dovetailing that encourages ALC-18 without forcing the event.

Brigade Groups (ALC-20)

The issue of mixed-arms vs. pure units was central to the desert war, and none had a greater impact than the British experiment with the brigade group (2.4-IV). The arrangement gave each infantry brigade a slice of the divisional assets—artillery, anti-tank, engineer, and so on, though not usually reconnaissance (see pp. 18–19).

This event broadens the re-concentration of divisional assets with the next stage in development of British mobile war doctrine, so motor brigades and improved close air support are included in the new units available. It occurs automatically, but timing and speed of implementation are left to the Allied player.

Operation Torch (ALC-21, 22, 23 & 24)

Torch is probably the single biggest event in the game, and comes at great cost to the Allied player, as it did historically (I'm confident George Marshall is still scowling about it). The nature of this game precluded leaving it built into the arrival schedule, and, as discussed below, opens several fresh cans of worms for the Allied player.

US Inexperience (ALC-25)

The initial problems faced by the Americans originated as a special rule in OTF. There unfortunately was no way round this one without creating a complete second US counterset. The mnemonic counter helps, and the massive rewards for gaining experience—the

arrival of all the TF counters—prods the Allied player to push his US units to the front. The requirement for US units to bear the brunt of battles precludes corseting them with too many Brits, and reflects the absolute requirement up and down the US chain of command to remain independent.

Commonwealth Withdrawal (ALC-26)

This covers another set of withdrawals with no obvious military value; in other words, if not required by game rules, no rational Allied player would do it. The victory at Alamein, Churchill's "End of the Beginning," was the last time Egypt was in danger and therefore ended the rationale for Commonwealth involvement in the desert. The last Australians (9th Division) were released to the Pacific, while the remaining South Africans were sent home to recover from massive losses.

Vichy Accord (ALC-27) & Soft Underbelly (ALC-28)

Without these after Torch, there would be no motivation for the Allies to track down French units in Morocco, nor for the Allies to withhold two US divisions (2AD, 3ID) from the Tunisian campaign.

Parallel War (AXC-5, 6 & 7)

I debated building in this set of reinforcements as the entire campaign was set in motion by Mussolini's insistence—over his generals' objections—to invade Egypt. In the end I decided to balance this against Taranto for the grand campaign game. The first few months of the campaign should see the players jockeying for position, waiting to the last moment to pull the trigger and thus delay the opposing reaction.

Fifth Army (AXC-8)

This is another parked event, needed to explain the slow release of the Italian divisions from Tripolitania. Without it, the Axis player will rush the whole force to Tobruk and overwhelm the Western Desert Force (which might make a good "what-if" scenario).

Axis in Egypt (AXC-9)

This started life as a condition on two of the MEC Tracks and appeared in a scenario victory condition. I decided it was easier to redefine it as an event for purposes of consistency.

AfrikaKorps (AXC-10, 11 & 12)

Like Torch for the Allies, this is a major decision for the Axis player since it adds so much time to the game. If the Italians can make a better showing in the early stages, it may not be necessary. For the record, it never *didn't* happen in playtesting.

Arab Revolt (AXC-14)

Another parked event, this is one of those threads that comes up in every description of the campaign without actually affecting play. The addition of the Middle East Command tracks, in this case Syria, Levant, and SW Asia, and the inclusion of Crete as a staging area, bring this chapter into the flow of the game.

Egyptian Revolt (AXC-15)

This is another situational event, giving the Axis player an intermediate objective short of total victory, and a *raison d'etre* for Sonderverband 288.

C3/Herkules (AXC-16 & 17)

As every wargamer knows, Herkules was the biggest blown opportunity of the war for the Axis. Or was it? My feeling is that the operation, although bound—almost—to be successful, would have required such a massive effort by Axis air forces and navies, especially the Italians in both cases, that it would have brought heightened expectations for the war in North Africa.

Whether Malta had as much logistical effect on Rommel as is usually supposed is doubtful. The evidence is pretty clear the total amount of supplies landed in Africa was more than adequate. What Rommel really lacked was enough trucks to bring them forward, and taking Malta would not alleviate that problem.

Aida (AXC-18)

This initially was part of Herkules (AXC-17), but in reality it was a completely separate decision. It was based on Rommel's belief that an invasion of Egypt could succeed, whereas Herkules could have been canceled for other reasons.

Fall Braun (AXC-19 & 20)

The Axis response to Torch is another parked reinforcement event. Its real value is the delay (or filtering) of reinforcements.

6.0 INITIATIVE

In keeping with much of the previous discussion, I rejected the pre-set initiative ranges for the entire game—players just should not know two years ahead of time who will have the initiative edge. The new version opts for a standard range, subject to modification by action of the players. I gave the Axis a slight structural edge to reflect German operational aggressiveness and the excellent codebreaking work by both the Italians and Germans. Ultra was added as a counterpoise; its use in the initiative process indicates Allied command emphasis.

6.2 Surprise

This was an ODF special rule, with a batch of particulars, needed to help Rommel to victory in the opening stages of his first campaign. (There was also talk at one time of deleting an entire hexrow on the ODF-Libya map because the Germans couldn't quite make it to the line they reached historically.) It will come as no surprise I wanted to chuck it entirely, but on further consideration I noted there were several times when one side pulled off an unexpected coup to gain the upper hand: Compass, Eighth Army's resurrection during Crusader, Gazala, and Kasserine among them. I therefore expanded the rule, made it part of the initiative process, and made it available to both sides.

7.0 REINFORCEMENTS

Reinforcements and withdrawals, as noted above, are now made according to events rather than a predetermined schedule. The other major change is how they arrive. The expansion of the naval rules put limitations on how much can arrive in a given port on a given turn. The decision to add this rule was driven by several turns in the original where more units arrived than could have done given the available port facilities. Players decide what lands on what turn. See also the discussion in 12.0 below.

The "steady state" arrival of supply and refit points was derived from ODF. The Axis player received on average two supply units per turn, the Allies slightly more. The permanent and infinite supply at El Agheila and Alexandria complicated matters, but it gave me a starting point.

Refit points went through a similar analysis. Each side in ODF received on average enough RP to build two steps per turn (one each for the Italians and Germans), with maybe a smidgen more for the Commonwealth during the desert portion of the campaign. That again provided a starting point.

An army's support pipeline would have been filled with the resources needed to sustain expected operations and losses. As an army grew, so would its pipeline.

7.4 Allied Withdrawals

In addition to incorporating decisions about other campaigns into the current desert situation, the Allied player generally also has complete control over which units to send.

8.0 COMBAT UNIT STATUS

This section is a reorganization of bits and pieces from other rules, including supply, combat, and refit. There are some noteworthy alterations.

8.2 Disruption & 8.3 Depletion

As noted above, there is a real question as to what disruption and depletion represent in the original game. Each has a combination of qualitative and quantitative diminution.

- Disruption affects unit performance, but doubledisruption causing depletion (step loss?) suggests each disruption amounts to a half-step.
- Depletion affects certain capabilities (artillery and anti-tank) but also shows a reduction in strength.
 On the other hand, even the smallest unit (single battalion) has a depleted side.

Most indications, especially the refit process, point to depletion as strength related, while disruption is mostly about unit discombobulation. I have made that distinction official: disruption is now strictly a morale issue while depletion is strictly a loss issue.

Recovery from disruption has been made both harder—it takes place during movement and the recovering unit may not be in an EZOC—and easier—it requires no supply expenditure. Depletion no longer has qualitative effects: depleted anti-tank units are still anti-tank units, though their ratings may be reduced (even to zero). This was a crucial step toward adding one-step units.

8.4 Upgrades

The upgrading of armor units in ODF was a necessary nod to the length of the campaign and the organizational and weaponry changes that took place, though it affected more than just the few selected tank units in ODF.

I will also state, as an old tanker myself, that I think the combat strengths of tank units should have less variety than in the original. I take combat strength in this (and most) games to be a measure of a unit's ability to contribute to the contest for a particular piece of ground. The essential strength of tanks is their ability to take on enemy infantry, and that ability does not change appreciably because of a slightly longer cannon or slightly thicker armor. Those factors are tied to tank/anti-tank combat.

I initially experimented with the anti-tank procedure I used in **Operation Shingle** (*World at War* #33), a subroutine preceding combat. I liked the result, but the additional round of combat was burdensome, and, as pointed out by some of my playtesters, not entirely appropriate at this scale. The anti-tank rating in ODF had more or less the same effect (reducing the tank unit's contribution to the combat) so I extended it to some tank units.

8.5 Training

I added this mechanism to explain why a few units were held out of action for no perceptible reason after their arrival (British 1st Armoured Division), or performed poorly when first committed (18 and 161 Indian). This once again gives players the maximum flexibility in weighing the pros and cons of early commitment.

A Note About Divisional Integrity

This concept—a special rule in OTF (16.0), though not using the term—is discussed here as it is the most logical place for it.

The rule was extremely limited, putting a brake on cooperation between German panzer divisions for a brief period, ostensibly to portray the in-fighting between Rommel and Arnim. I thought about broadening the idea to all divisions of all armies, which would add another layer of nuance.

I jettisoned it in the end for two reasons. First, it was burdensome. Second, and more importantly, it made little sense. Divisions in all armies (except the Italian) routinely swapped units between, or even during, battles. There was no way to track those changes without adding a pile of markers and/or boxes.

As with the anti-tank discussion, month-long turns mean units would have time to establish a working relationship with new arrivals. Even in the case of the German spat, the effect lasted a matter of days and is lost over even a single turn.

10.0 STACKING

I was greatly pleased to be able to delete the stacking point rating from the counters. There are three modified rules in this section.

First was the standardization of stacking values by type. The most notable change was converting armor units from one stacking point to zero. I did this because

tanks physically just don't take up the same amount of room as infantry units. It also gives them an extra game impact by making them more of a force multiplier; I'm thinking particularly of infantry tanks moving forward with infantry, but a tank-artillery combination works just as well

Second was dropping the limitation of one dump per hex. I saw no real reason for the rule in the first place, since in even the most extreme case a player could stack any number of MSU in one hex, then convert one per turn thereafter. The addition of bases has supplanted one of the primary purposes of dumps, so this change has less effect than it might.

Finally, I changed the effect of overstacking to just disruption. I have never liked the idea of units being eliminated because of overstacking. A single hex contains dozens of square miles, enough room to accommodate any number of units. Crowding affects their ability to fight, but not their survival.

11.0 ZONES OF CONTROL

The nature of zones of control (ZOC) is a long-standing debate in wargames. Do they represent actual presence or just the ability to project combat power into an adjacent hex? The question becomes critical when the subject is infiltration; I intensely dislike most infiltration rules, ODF 10.3 being no exception, precisely because they fail to resolve the issue clearly.

I have opted to treat ZOC as representing actual presence along the lines of detachments or forays into the hex in reaction to enemy activity. The unit counter represents its main body or center of gravity, a denser and more permanent form of occupation. I allow motorized units to ignore non-motorized ZOC because their speed allows them to avoid/evade foot-mobile forays; i.e. motorized units operate inside non-motorized OODA loops.

I also extended ZOC to all units, a construction giving recon units the ZOC they lacked in ODF. This makes a lot more sense to me as a thin line of recon units should be able to slow an enemy advance—a good example would be the German screen south of Sidi Omar during Crusader. They are weak enough that a serious attack (like Crusader) can roll over them by using or threatening overruns.

11.5 Night Movement

As mentioned above, a stationary unit either can or cannot stop a moving unit, and except as noted above I opted for stoppage. On the other hand, there were instances of units escaping under cover of darkness (e.g. British 50th Division and 1st Free French Brigade at Gazala), which effectively negates EZOC. On the *other* hand, moving at night was problematic, units often getting disoriented, scattered, and/or lost, so paying with a disruption seemed about right.

12.0 SUPPLY

It's the desert: supply matters. The original rules did the job, but they were written at the height of SPI's number-crunching era. Conceptually sound, they were tedious and a bit clunky. They also represent a simple design technique to overcome limits on design time and rules space: substitute player work for design work

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("Mr. Churchill, why do you design such long games?" "Because I don't have time to design short ones.")
Several important changes have been made, but the impact of supply on the game remains the same.

12.2.1 Dumps & 12.2.2 MSU

MSU and dumps are still printed on opposite sides of the same counter, but I thought the original system gave the supply infrastructure too much mobility and flexibility. Players now must choose one mode or the other at the time of entry. Once chosen, the counter remains in that mode until eliminated or—in the case of dumps—used. The limitation on the number of MSU the Axis player can take does much to model Rommel's real shortage: trucks.

12.2.3 Bases

In the original games, each player is given permanent and infinite supply sources rather than utilizing the supply units for all purposes everywhere. That almost certainly is a product of the physical limitations of a magazine game. The expanded scope and scale of DFD allowed me to jettison the permanent sources, though especially for the Axis some kind of replacement was needed.

I initially tried allowing the Axis a single base (Hank Meyer's team had tried something similar) but found it too limiting. The final form has the base as something of a cross between permanent sources and dumps. I extended it to both sides to give the Axis some flexibility in siting the heart of the logistical network, and the Allied player the ability to pull the logistical tail closer to the front as it moves west.

12.2.4 Primary Axis Base

The permanent ODF supply point at EI Agheila (really representing deliveries to Tripoli) had to be replaced both for supply and refit purposes. It could not be tied to a single port to account for the 1942 shift to Tobruk and the 1943 move to Tunis.

12.4 Tracing Supply Lines

I changed supply radii from 6 for MSU and 12 for dumps, to 7 and 14 respectively, conforming them to all the other movement rates in the game (except tanks).

12.4.2 Lines of Communication

This was added primarily to enable the distinction between OOS and isolated units, essential when determining status at the time of elimination.

12.5 General Supply

The most tedious part of the original game was counting stacking points for supply expenditure (and violating one of my basic life rules: *if you're counting fifths of anything, it had better be Scotch*). The process was also short-circuited by limiting MSU expenditure to no more than two per phase, probably done to preclude the wholesale slaughter of MSU for a widely divided army but still something of an oddity.

As any veteran of ODF will know, two dumps is enough to supply your entire army for a turn, as long as it is in a reasonably tight grouping, while a pack of four dumps will provide supply without requiring the expenditure of any. One of many "tricks" in ODF is to get

that pack of supply together; if well guarded, it will provide supply indefinitely. I used that trick as the rationale for allowing bases to supply any number of units, a rule that greatly speeds play and is more intuitive.

Another streamlining rule is allowing a dump to supply just one hex, but to supply the entire hex regardless of stacking points.

12.5 Isolation & 12.5.1 Supply Attrition

The rules on supply attrition are looser and less drastic because few units actually expired due to supply issues. Isolation was added to account for those units that did so succumb, such as the Axis garrisons on the Libya-Egypt border after Crusader, and to keep a player from taking ahistorical chances.

12.6 Combat Supply

Supplying units in combat remains the game's chokepoint; players must take the time to accumulate supply for a big push, which in turn signals to the opposing player what is coming and where.

Here too, the counting of stacking points has been discarded in favor of expenditure by hex (which goes back conceptually to ODF's forebear, Dunnigan's **Panzerarmee Afrika** from *S&T* #40). I prefer to think of supply dumps as not just the physical placement of actual materiel, but a representation of command emphasis and staff time. As in the real campaign, players are rewarded for concentrating their forces.

One other change in combat supply is the way it affects attackers: they are no longer halved and no longer automatically disrupted. This was done solely to avoid separate rules for the attacker and defender. In their place is a new line on the CRT for unsupplied attackers, with considerably heightened losses (both physical and morale).

12.7 Emergency Supply

ODF included this rule, but restricted it to units with a morale of 1 (i.e. Germans). OTF deleted it and I initially intended to follow suit. Once again I came round because playtesting showed it to loom large in certain circumstances. It remains, but has been broadened to all units with possible consequences based on morale.

13.0 MOVEMENT

The standard movement rules remain largely the same, though some changes have been made to the way certain unit types move. The new movement classes were discussed in 2.4-III.

13.1 Movement of a Stack

The odd wording of this rule was used because the usual wording for stack movement—move at the speed of the slowest unit—caused too many issues with different unit type effects in different terrain: in some cases it is hard to say which unit is actually the slowest. Since each impulse effectively lasts two weeks, I felt units with different movement rates in a given hex (see 13.3 below) would be able to work things out so they ended up at the right place at the right time.

13.2.1 Reaction Movement Allowance

This is really just a formal definition of an ODF rule. I extended its importance by tying it to unsupplied units and exploitation, minimizing the number of separate rules needed

13.2.3 Road March & 13.2.4 Forced March

This pair is a bifurcation of the forced march rule in ODF. I see no reason for disrupting a unit that spends its entire turn moving (not attacking), akin to the "strategic movement" rules common in the early days of the hobby. Forced march, on the other hand, posits an extra effort and should come at a cost.

13.3 Terrain & Movement

As part of the expansion of unit types, I wanted to incorporate their capabilities in different terrain.

The most important of these was the aforementioned (2.4-III) distinction in road speed between wheeled and tracked. Both were motorized in ODF and paid the same ½-MP on roads, exacerbating the higher MA of most tank units. Now the wheeled vehicles pay only ¼-MP on primary roads while mechanized units pay a full MP; wheeled units will leave tanks and even armored cars behind on a long road march. That reflects not only the generally slower traveling speed of tanks, but their much greater incidence of mechanical breakdown—they just aren't built for long hauls.

13.4 Overrun

I have always liked overrun rules, but I really like them when they portray faster tempos of combat rather than (as in ODF) what used to be called "automatic victory" in the Avalon Hill era. DFD uses the broader version of overrun seen in **Panzergruppe Guderian** (*S&T #57*). It is standard combat carried out during movement, but its hurried nature affects combat power except for the new mobile-class units (read: panzer divisions) because the units have no time to prepare—mobile units are trained for hasty attacks.

I also merged ODF's separate supply overrun into the standard rule, purely for simplicity.

13.5 Reaction

Reaction was one of the best ideas in ODF, but I found it too limiting. Rather than rewrite the rule altogether, I added reserve status to allow for more options. The new rule greatly expands the reach and capability of the right unit in reserve (once again, read: panzer division), and with a little forethought can make a seemingly weak line nearly impregnable.

14.0 COMBAT

Combat remains essentially the same as in ODF, with some minor modifications adding considerable nuance to the mechanism.

One point needing some emphasis is the question of declaring all combats before resolving any. The active player generally is not required to announce all combats before beginning combat resolution. There are certain instances where it will be necessary to declare several

combats prior to resolving one. In those circumstances, once a combat is declared, it must be executed.

14.2 Participating Units

The major change here is making combat voluntary, which reinforces the effect of the change in ZOC. There were just too many instances of opposing units in close proximity coexisting quietly (in game terms) for months at a time.

14.2 Multi-Hex Combat

ODF allowed units in one hex to attack defenders in multiple hexes, while OTF prohibited it. I resolved this in favor of the original rules because the OTF version created a rules conflict when a lone unit was adjacent to opposing units in more than one hex; either this rule had to be violated or the requirement to attack all adjacent defenders had to be.

I retained mandatory combat once a unit attacks because I dislike being able to single out one hex for attack while ignoring others nearby.

14.3 Combat Strengths

This is another collection of ODF/OTF rules for ease of reference. The changes to specific calculations are dealt with elsewhere.

One rule I cut from ODF altogether is the combined arms rule (ODF 11.16), which halved "pure" armor units not stacked with infantry. This is another 1970s SPI standard rule I never liked. Certainly combined arms is a major topic in the period and game, but that rule is too generic: any infantry unit can support any tank unit in any combat, regardless of training. One particularly nonsensical combination in ODF, pointed out to me by one of our playtesters, was to combine German panzers with Italian Bersaglieri, since German motorized infantry could not keep up with the tanks cross country, while the "mechanized" Italians could. It never happened, never mind the counters were wrong (the Bersaglieri were truck-borne). In any case, the real combination of import in the desert was tanks and artillery.

The ODF rule has been replaced by a variety of type-specific strength modifications based on terrain and opposing unit types, in keeping with my preference for calling the concept "combined effects" rather than "combined arms." One I particularly like is artillery and air support reducing the effectiveness of anti-tank guns, rewarding players for a combined arms (actually *joint*) operation without so defining it.

14.4 Terrain & Combat

Another ODF/OTF discord—doubling defenders in mountain hexes—had to be resolved. The OTF doubling made sense given the nature of the massifs in Tunisia. I initially added a new terrain type—dorsales—to represent some of the mountain hexes in Tunisia; units would be doubled in dorsales, not in "ordinary" mountains. That morphed into the current system with crests and passes instead, which gave us greater control over the mix of terrain at any given point.

I made a major alteration to the effects of ridges.

Though playing a major role in ODF, desert ridges really are not significant features, being neither tall nor ragged. Their real impact is to block line of sight in the otherwise

featureless desert. The combat effects have been altered accordingly. We toyed with the idea of having them block ZOC but they just didn't have that kind of impact at the time and distance scales of the game.

14.5 Combat Resolution

The combat procedure is unchanged, but some alterations had to be made to the CRT

- to account for loss application to one-step units;
- for clarity—I disliked the distinction between "d" and "D" on the original;
- to account for effects of forts and other terrain types;
- by adding columns for overrun and mobile battle to replace the ODF 10–1 "automatic victory," another concept I reject outright; and
- · to alter attacker effects.

One other issue to be resolved was a minor change made on the table for OTF: line 3 had different results in the 8 and 9 columns, while line 4 results were shifted one column right starting with column 6. I saw no great advantage to either so stuck with the ODF version.

14.5 (3) Attacker Combat Results

Attacker losses and effects were downplayed too much in ODF. The attritional fighting at Alamein, for example, cannot be replicated in the original system. I also wanted to delete the automatic effects on unsupplied attackers (see above), more in the name of simplicity than anything else. The outcome was the addition of substantially increased attacker losses and disruption, especially for unsupplied attackers.

14.6 Step Losses

The step loss process is not different, but minor modifications were needed to account for one-step units, and to extend the selection of the first step loss—another of my favorite rules in ODF—to both players.

14.7 Retreat

After extensive play of the original, I still do not see any massive difference between retreats of different lengths. The fact the retreat takes place, and the fact of disruption, are the important considerations. I therefore gave players more control over retreat length.

14.9 Special Combat Forms

This rule was added solely for the purpose of increasing a player's choices in combat, and to emphasize the effects of different unit types. Deliberate battle accentuates the value of artillery and air support, while mobile battle gives the nod to properly-trained (i.e., "mobile") units. Mobile battle also fills the gap between regular combat and overrun, since the extended pursuit amounts to additional movement; play Sonnenblume and you'll see what I mean.

The broad expectation is that the Commonwealth, at least in the Montgomery era, would favor deliberate battle to take advantage of their artillery and supply superiority, the Germans would prefer mobile battle, and the US will be somewhere in between.

15.0 SPECIAL UNITS

This section started life as ODF 12.0 (Artillery and Anti-tank Units). I first expanded it by incorporating the airborne and special forces rules from OTF, then gradually added to it as more unit types were given additional capabilities. Most are straightforward and need no discussion, but a few require explanation.

15.1 Artillery

The addition of an artillery rating on the counters precludes the necessity of remembering which units had the capability. It also allowed me to alter ratings to reflect particularly strong or weak units; the offensive-only capability of the German *Nebelwerfers* is a personal favorite. In some cases, particularly the Italian divisional artillery, I substituted combat strength for the rating because of the nature of equipment and training.

The addition of defensive support fire grew out of the need for it in Tobruk (which I have long thought needed a three-hex perimeter). Like the reserve rule, it allows a player to strengthen a line by backing it properly.

15.2 Anti-Tank

Like artillery, AT values got added to the counters because it allowed expansion of the rule to other units (chiefly CW infantry division support units), and because it allowed considerable nuance.

AT units also get differentiated by type on attack and defense, again adding tactical nuance and combined arms (effects) issues.

A late addition was to add the capability to forts (representing minefields), which had the happy effect of eliminating a special rule regarding armor attacking forts.

15.3 Recon Units

Recon units were only marginally useful in ODF (one of the reasons, I think, Doug Niles was able to jettison them in OTF, though counter space clearly was a factor as well). The impact of the new rules gives a real edge to the Germans, whose recon battalions were always heavily armed and aggressive. The British compensated by assigning *three* armored car units to each armored division in the desert, which in game terms will give them a slight edge. Recon units were undervalued in ODF. The rules in this case give them real utility, but it takes practice to put the new capabilities into play.

15.4 Special Forces

OTF introduced these units for limited but necessary purposes. I saw no reason not to expand it to include other units, including the perennial favorite KG Hecker, which potentially gives the Axis player the option of conducting a landing behind Eighth Army.

15.6 Special Leaders

The first question most players asked about ODF was "Where is Rommel?" (to which I would add "...and O'Connor?"). Rich Berg later added a **Rommel** variant, and I have seen a number of house rules bringing him in.

My fundamental concern with this rule was the danger of over-identifying leadership with particular persons, especially dealing with them becoming casualties. Yes, Kasta is Rommel and WDF is O'Connor, but it's more than that in both cases: the leader units

DEVELOPER'S NOTES

represent the overall character of the organizations rather than the special genius of particular men.

The Mobile-cum-7th Armoured Division was put together over the course of two years. Its leadership at every level was imbued with the concepts of highly mobile warfare. O'Connor's loss (as happened during Sonnenblume) did nothing to destroy that capability. What did affect them, as I discussed earlier (23.1 ALC-15), was the huge expansion of the desert force into a complete army, which necessarily imposed the more mainstream British doctrine on the few mobile-trained units. My feeling is the capabilities of 7th Armoured would have been degraded even if O'Connor/Creagh/Gott remained in command—they would have been constrained by authorities and forces greater than themselves.

Rommel, too, should not be seen as irreplaceable. The German *Panzerwaffe* had its greatest relative superiority at this point in the war. Almost any other experienced panzer commander—Thoma, Crüwell, Stumme, or Model (commander of 3rd Panzer Division when it was being prepared to go to Africa and from which 5th Light Division was drawn)—likely would have achieved the same kind of operational success as Rommel, though perhaps being less willing to buck the chain of command.

16.0 DESERT RAIDERS

The sand sea campaign cried out for inclusion in ODF but there just wasn't room. Rich Berg did add variants, but his units were just slightly modified recon units with no special functions.

The DFD desert units have decidedly different functions and capabilities. The addition of the sand sea boxes to the map extends the playing area into the deep desert, following the line of oases used by desert operators. This allows them to bypass the main fighting front without fear from much larger conventional units. If they can sweep aside enemy desert groups on the oasis line, it opens the possibility of raids deep behind enemy lines.

As in the historical campaign, the raiders will not change the course of the war, but they give players one more weapon to destabilize their opponent's position and equilibrium.

17.0 REFIT

The big change here, moving RP onto the map instead of using a track, was driven as much as anything by events during Crusader. The British had a depot (might be a base in game terms) out in the desert, just missed by Rommel during his "Dash to the Wire." Among other things, the depot contained a large number of spare tanks, used to replenish British armor after the disastrous battles around Sidi Rezegh.

I toyed with the idea of allowing players to "stuff" combat units by attaching a refit point directly to one, representing the presence of additional manpower and weapons; the refit point could be used to absorb the first step loss for the unit, enabling it to retain full combat power. I still might add this as a variant.

17.2 Refitting Destroyed Units

This is an addition to the game I felt was necessary. I wanted to draw a distinction between units used up in combat, representing loss of front-line combatants, and those whose entire infrastructure (headquarters, logistics, etc.) had been eliminated or captured. The Italian divisions in Operation Compass are a good example of the latter. Rebuilding units in the Destroyed box represents the additional effort needed to rebuild that infrastructure.

The advantage for CW brigades and US regiments, able to return to play directly from the Destroyed box, is a product of their large size, as much as double the numbers of an average German regiment. If the Sicily-Italy extension of this game passes feedback, I will add the ability for the Germans to do something similar, since they airlifted key personnel for each regiment out of Tunisia to enable rapid rebuilding.

17.2.1 Refit Limitations

The restrictions on non-British Commonwealth nationalities was added because they all came from shallow manpower pools. In the case of India that shallowness was a matter of policy; the British government did not want a large pool of trained-but-unemployed soldiers on the subcontinent.

18.0 CONSTRUCTION

This again is an expansion of an original rule (ODF 14.0 Fortifications) to include related cases previously scattered through the rulebook.

18.1 Fortifications

Forts have been much altered, generally for the purpose of enhancing their effect on play. One major change is the loss of attack and movement capacity of the units in them, representing the time needed to deploy into, or redeploy out of, a more dispersed defensive posture.

The biggest single change was the addition of fort Level 0, which really amounts to a measurement of intent and preparation rather than serious physical construction. Its impact is to preclude overruns and mobile battle.

The other levels of fort have been given additional capabilities, all based on the level number. The most important of these are giving units combat supply and allowing them to avoid a retreat result.

One other addition I particularly like is allowing the use of existing forts for the supply needed to create new ones. Without this rule, the Tobruk perimeter could not be gutted, as was done historically to build the Gazala line (and making the fortress an easier nut to crack).

18.3 Road Construction

This is the lone rules contribution of OFK. It was necessary in that game to restrict the Italian advance to Sidi Barrani, and to explain the diversion of so much Italian effort to finish the stretch of road. I figured as long as the rule was in, I might as well extend it to the Tobruk bypass, another project that held up Axis operations but that had to be left out of ODF.

19.0 AIR OPERATIONS

ODF simply lacked the rules space and counters needed to give the air war its due, even if the impact of air operations had been completely understood at the time, which it was not. Upgrading the air war was one of my first objectives for DFD.

Generic air points (track-and-marker) have been replaced by named units. Each represents approximately 100 to 300 aircraft, equivalent to an Italian *Stormo*, Commonwealth Group, German *Fliegerkorps* or *Geschwader*, or US Wing (aka "Command"). Unit capabilities are not precisely equal, reflecting both number and type of aircraft assigned. There are no separate fighter organizations as all units are presumed to have at least some attached.

Ground support remains the primary function (other missions are described below) and is carried out in more or less the same way as in ODF, though the non-phasing player has slightly more restrictions. (Another rule I detest in games generally is giving either player the ability to overturn carefully laid plans by "beaming in" air or artillery support at the last minute. These things had to be planned well ahead of time.)

Aircraft units are never really lost, but may be put out of action for one or two turns. This mimics the attritional nature of air warfare. Combat units are the business end of a pipeline of replacement aircraft and aircrew, plus spare parts, fuel, ammunition, and so on. Losses are ongoing, but as long as they don't exceed the flow through the pipeline the unit remains in action. Damage to the unit in game terms means losses have exceeded the flow of replacements, so the unit has to stand down while its strength is rebuilt.

19.1 Air Unit Deployment

The addition of new missions required a procedure to commit air units. The "standard" mission remains ground support, with the "standard" basing being in North Africa

19.1.3 Airfields

OTF added airfields, each granting the controlling player an air point. There was just no way to make that work on the larger scale, but I liked the idea of nearby airfields affecting operations. They represent formal infrastructure: buildings, fuel tanks, control towers, and, in some cases, metaled runways. This is in contrast to most airfields, which were just dusty strips in the desert serviced by specialist trucks. Rather than generating air points as in OTF, they enhance the combat power of air missions conducted in close proximity, reflecting faster turnarounds and higher sortie rates.

19.2 Air Superiority

This is one of the ways a player can affect initiative rolls, and it provides a method to play a "long game" to whittle down enemy airpower. It represents mostly air raids and fighter sweeps intended to knock out aircraft on the ground.

19.6 Interdiction

This new mission was added because it was the primary (and eventually most successful) Allied tactic in the actual

campaign. They gradually wore down the Axis logistical pipeline to starve the front line of fuel and ammunition, and limit the ability of Axis units to react quickly.

19.8 Aerial Bombardment

Bombardment is just a way of allowing aircraft to strike logistical installations and airfields (another widely used Allied tactic).

19.9 Naval Strikes

The expansion of shipping into lanes and ports brought with it a need for a mechanism to attack them, and not just for Malta. We were deep into playtesting before we realized the necessity of splitting naval strikes between oceanic and coastal strikes.

20.0 NAVAL OPERATIONS

The representation of the naval aspect of the campaign has grown even more than that of the air war. Its primary purpose is to determine the timing and location of the arrival of units, replacements, and supplies, and its vulnerability to air and naval attack.

20.1 Ports & Shipping Capacity

As noted earlier, I wanted to put limits on the total volume of resources arriving via a particular route or to a particular port. This forces players to prioritize cargoes based on operational requirements, but also allows them to choose which assets to bring on first.

20.2.1 & 20.2.2 Axis Shipping From Sicily

The Sicily boxes represent the short route from Sicily and southern Italy to nearby Tunisia. Safe from Maltabased attacks, they were vulnerable to Allied air units in Tunisia, and had been all-but shut down by the end of the campaign.

20.2.3. 20.2.4. 20.2.5 & 20.2.6 Allied Shipping

The choice between the safe but long route around Africa (Cape Route), and the fast but dangerous Mediterranean route (taken by Churchill's "Tiger" convoy in May 1941) gives the Allied player a classic choice. The short route would not be used again after Tiger because the Germans had seized Crete, giving them an ideal base for attacking future convoys.

The route is only available if the Allied player declares an appeal to the High Command, the turn sequence giving the Axis player a chance to deploy air units to attempt an interdiction.

20.4 Naval Units

ODF included a naval bombardment capacity, with no marker or other function. The multi-faceted capabilities of the new fleet units greatly expand naval capabilities, the Allies benefiting more than the Axis.

20.5 Amphibious Landings

OTF included landing rules to account for Allied and Axis landings, and this is basically just an expansion of them. In tandem with the port capacity rules, the restrictions play a big part in determining how much can be landed at a particular place at a given time.

21.0 WEATHER

There was no weather in ODF, again probably because of space limits. This is unfortunate as rainfall provided critical breathing spaces for retreating Axis forces during each of the three winters of the campaign. The winter rule in OTF was necessary, if a little too harsh. I had considered making some kind of die roll for winter effects, but the game scale just didn't allow for it.

The *Ghiblis* did affect operations on occasion, so while I thought they were a good addition, they needed to be uncommon and so were tied to the initiative roll to make them somewhat random.

22.0 OFF-MAP AREAS

ODF had several off-hexgrid areas, including Malta, the permanent supply sources at either end of the map, and the various holding boxes. OTF added the holding box for Axis units awaiting transit to Tunisia. Most of the areas in DFD except the MET are really just expansions of these originals.

22.1 Nile River Valley

NRV is just a formalization of Commonwealth offmap areas in ODF, and provided a convenient way of controlling CW transfers between MET theaters.

22.2 Middle East Tracks

The MET are a major addition to the game, encompassing all the diversions for the Allied player that had been built into the ODF reinforcement and withdrawal. I like the fact the Allied player can test different strategies for handling the outside theaters.

22.3 Crete

Crete was added solely for its influence on the air, sea, and MET mechanisms, the latter including the potential for assistance to anti-Allied forces in Syria and Iraq. It also provided a convenient holding area for certain Axis units.

22.5 Fall Braun & 22.6 Sicily

These boxes are just a control mechanism for Axis arrivals in Tunisia, and force the Axis player to make choices on reinforcement destinations.

22.7 French North Africa

The FNA boxes were added to complete coverage of the campaign. The sheer distance involved (almost half as far as the rest of the map) precluded a hexgrid treatment, but as a practical matter the fighting was limited to major towns. Without these boxes, US participation could only be controlled by a reinforcement schedule and special rules.

29.0 RUN FOR TUNIS & 30 TRAIL OF THE FOX

Most of the scenarios are self-explanatory, but these two require some introduction. Both look at the earliest phases of the Tunisian campaign, effectively being transitions from Torch and the post-Alamein pursuit. They were effectively separate campaigns by separate organizations until early February, when Rommel reached Tunisia well ahead of Montgomery and gave the Axis a brief opportunity for a victory in detail.

I thought each deserved its own scenario. As a practical matter, it also offered me an easy way to get a couple of small and short games to act as learning scenarios.

Historical Torch Landings

For those who wish to replicate Torch, the actual Torch landing forces at each point are listed below. Actually conducted over the course of several days, in game terms they would be simultaneous.

- Casablanca (starting 8 November): US 2nd Armored, 3rd Infantry, and 9th Infantry (-39 RCT) Divisions.
- Oran (starting 8 November): US 1st Armored Division, 1st Infantry Division, and 1st Ranger Battalion, with 2/509 Parachute Infantry dropping inland.
- Algiers (starting 8 November): US 34th Infantry
 Division and 39th Infantry Regiment (9th Division),
 British 78th Infantry Division (-36 Brigade), 6th
 Armoured Division, and 1 Commando.
- Bougie (11 November): British 36 Brigade (of 78th Infantry Division).
- Bone (11 November): British 6 Commando and 1 company of paratroopers (invisible in game terms).
- Souk el Arba (hex T5909, 12 November): British 1st Parachute Brigade.

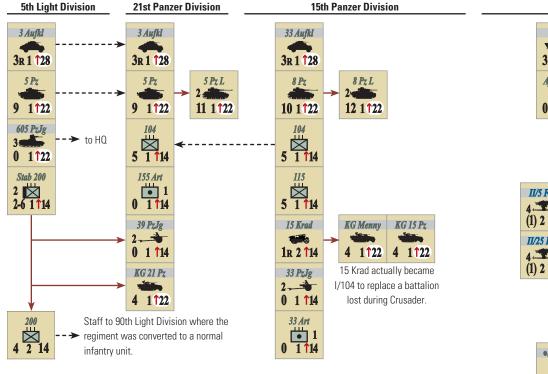
ORDERS OF BATTLE

ROMMEL'S DESERT COMMAND

Deutsches AfrikaKorps (DAK) ----- Panzergruppe Afrika

→ Panzerarmee Afrika

Originally intended as a two-division blocking force (Sperrverband), the German portion of Rommel's command would grow to the equivalent of five small divisions.



German Panzer Divisions on paper were comparable to armored forces of other countries (see page 17), including the reduction in the number of tank battalions from earlier iterations. What made the German organization so spectacularly successful was its flexibility. Regiments rarely fought as complete or pure organizations, instead cross-attaching units into combined-arms *Kampfgruppen* (KG). The combination of tanks and aggressive use of anti-tank guns and artillery was particularly effective against the British. Like all German divisions, the reconnaissance battalion was heavily armed and expected to fight for information.

Rommel's Panzers got by with less infantry support due to the nature of desert combat. In the fall of 1941, 15th Panzer swapped 104th Infantry Regiment to 5th Light for 2nd Machinegun Battalion, leaving each division with one recon, two panzer, three infantry, one *panzerjäger*, and three artillery battalions.

90th Light Division



90th Light and all its subordinate units were ad hoc affairs. Schützen Regt (SR) 155 consisted of the staff of IR 155, plus battalions from three other regiments: III/241, III/258, and III/268. SR 200 had the staff of IR 200 from 5th Light Division, plus III/347 and III/155 (ex-III/268). SR 361, also called 361 Afrika, included German nationals from the French Foreign Legion. The other units were formed slowly from bits and pieces. The division's first Panzer unit was diverted to a Panzer division in Russia and the second to Tunisia after Torch.

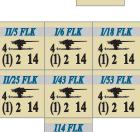
164th Light Division



164th Light, part of the Crete garrison, was specially reorganized for the desert. Each infantry regiment left one battalion on Crete, while the remaining infantry companies were given heavy mortars and a full battery of anti-tank guns (represented by the KG), either German 75mm or captured Soviet 76.2mm.



Headquarters Units





(1) 2 14



German Infantry Divisions started the war organized in the standard infantry pattern (see page 18). Each consisted of three infantry regiments, one artillery regiment, and a battalion each of reconnaissance troops, antitank guns, and pioneers (combat engineers). The infantry regiments had three infantry battalions and one company each of anti-tank guns and light cannon. Motorized (Schützen, later Panzergrenadier) and light units, which included almost all infantry sent to Afrika, generally had only two battalions but retained the full complement of heavy weapons. Infantry was as adept at forming KG as the Panzers, always built around at least a few heavy weapons.

GERMAN FORCES IN THE TUNISIA BRIDGEHEAD

90 Armeekorps ---> Fifth Panzerarmee

The bridgehead was to be held by an all-motorized force of three Panzer and three motorized infantry divisions, in addition to Rommel's army. Only two complete and three partial divisions made it, though the army also received 21st Panzer, transferred from Rommel, and the equivalent of a small division of paratroopers.

10th Panzer Division

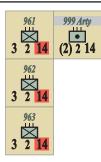


The division had no recon battalion in Tunisia

334th Infantry Division

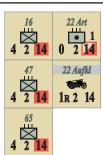


999th "Afrika" Infantry Division



Thrown together (from penal battalions among others) for deployment to Tunisia, only the 961st and 962nd arrived before the campaign ended.

22nd Infantry Division



The division had been trained for airlanding earlier in the war but was now a standard infantry division. After replacing the 164th on Crete, it was tapped for the Tunisian emergency. Only IR.47 was sent.

Operation Herkules was put together to help the Italians invade Malta in 1942. The units forming the German portion of the landing force were dispersed after cancelation of the landing, those on the top line going to Rommel in the desert, those on the bottom to Tunisia, FK II to Sicily.



Collectively these were probably the best units in the campaign. Many were irreplaceable specialists: Fallschirmjäger (FJ) Lehr was the Luftwaffe's paratroop instruction unit, 5 FJ was the converted Sturm regiment that had led the German assault on Crete, and 11 Pioneer Battalion (11 indicating it was a corps-level unit for XI *Fliegerkorps*, the parachute command) comprised the demolition teams who had taken the Belgian fortress of Eben Emael in 1940. Ramcke's command was pieced together from I/2 FJ, I/3 FJ, II/5 FJ, and a battalion of light artillery. Barenthin commanded yet another ad hoc formation, this one having manpower quality of the first order: a cadre of parachute veterans fleshed out with failed Luftwaffe pilot candidates: it was considered by the Allies to be the best German unit in Tunisia.

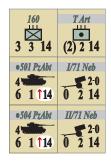
KG Schmid (Hermann Göring Division)



Still in the process of expansion from an infantry brigade to a full division (and soon thereafter to a panzer division), only the units listed here reached Tunisia. They fought under the command of a staff officer (Schmid). 5 FJR, (renamed HG *Jäger* Regiment), was attached during the campaign.

Division von Broich

(later von Manteuffel)



This unit was extemporized for the Tunisian emergency around a spare adminstrative headquarters. The order of battle shown here is nominal. At one time or another the division controlled nearly every non-divisional Axis unit in Tunisia, plus IR.47 from 22.ID.

ORDERS OF BATTLE

COMANDO LIBICHE (LIBYAN COMMAND)

Italy took the defense of Libya seriously, stationing an army on each border. Fifth Army, facing French Tunisia, received the bulk of the available manpower until the fall of France.

Italy's field generals were well aware the army was deficient in all the necessary accourtements for mechanized warfare and resisted Mussolini's orders for an offensive into Egypt. The debacle of 1940 forced the deployment of motorized forces, which gradually improved through the war.

Fifth Army			
17 Pavia	55 Savona	1 CCNN	
8 3 14	8 3 14	7 2 14	
25 Bolgna 8 3 14	60 Sabrtha	2 CCNN XX 7 2 14	
27 Brescia	61 Sirte	2 Libyan	
8 3 14	7 3 14	6 3 14	



Garrisons					
Po	rts	Borders		Oases	
•Barce	• Tobruk	● Egypt	● Gadamis	● Jalo	
	1				
3 3 0	3 3 0	2L 3 0	0L 3 0	0L 3 0	
• Bardia	• Tripoli	● Tunisia	● Giarabub	• Kufra	
X	2				
3 3 0	6 3 0	2L 3 0	OL 3 0	0L 3 0	
• Benghazi	•SanMrco		I/Sahara	II/Sahara	
	t		4	4	
3 3 0	2 _L 2 14		OL 1 (28)	OL 1 (28)	

Italian infantry divisions were small compared to those of all other powers. The corps was to be the primary operational headquarters and received considerable numbers of additional artillery and (usually light) tank battalions, grouped for game purposes in a *raggruppamento* for each higher headquarters.

Italian infantry was triangular (three-plus-one) at company and regimental levels, but binary at division and platoon level. Divisions had only two regiments so more divisions could be created (increasing corps flexibility). Infantry platoons dispensed with three rifle and one heavy weapon squad in favor of two sections, one each of light machineguns and riflemen. The former was to cover the movement of the latter in the attack, and form the main line of resistance on defense.

Divisions sent to North Africa (*Tipo Africa Settentrionale*) had a battalion of machineguns in lieu of the usual mortars, and vehicles replacing all horses. The infantry marched, though corps headquarters nominally had trucks to provide long-distance lift (in practice used mostly to haul supplies). Like all Italian infantry units, they were inadequately provided with heavy artillery and anti-tank runs.

Blackshirt militia (CCNN from *Camicie Neri*, the consonants doubled in the Italian fashion to indicate a plural) was the armed wing of Mussolini's Fascist party. Organized in small regiments ("legions") of two battalions ("cohorts") and a heavy weapons company, they generally were not as well trained as regular infantry but had better morale. Each standard infantry division nominally had an attached legion to lead the way.

Controlling the Battle

Italian divisions of all types are often disparaged for their small size, but it was intentional. Battles were to be controlled by corps headquarters, with divisions rotating in and out of combat frequently. Army headquarters chiefly provided logistical support and apportioned available units.

To enable them to maintain control and provide additional combat power, headquarters received signal and engineer (construction) units, plus numerous (but variable) units of artillery, reconnaissance, and *Guastatori* (assault engineers).

Additional combat units were often assigned as well, usually in the form of *raggruppamenti*, ad hoc units of generally long-term standing rather than ephemeral like German *Kampfgruppen* or US Task Forces.

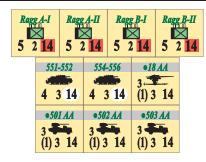








Tipo Africa Settentrionale 42



Tipo Africa Settentrionale 42 (North African Division Type 1942, or TAS42) was approved in 1941 as the shortcomings of the standard infantry division for desert fighting became apparent. The shortage of weapons and industrial capacity made it difficult to cure the problems quickly, but increasing numbers of heavy weapons, especially much-needed anti-tank cannon, reached the front.

Division organization changed as well. Like all desert combatants, the Italians learned that the longer ranges demanded heavy firepower in even small units. Weapons accordingly were pushed down the chain of command, each infantry company (ideally) having a platoon each of riflemen, machineguns, anti-tank rifles, and light cannon for both fire support and anti-tank missions.

The Giovani Fascisti

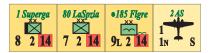
The *Giovani Fascisti* (Young Fascists or GGFF), were intended to form the core of the 136th GGFF Armored Division, but it was never completed. A division of sorts was formed around the regiment in mid-1942. It included a hodge-podge of a *Bersaglieri* armored car battalion, the remnant of 55th Savona Division organized as an infantry battalion, and a couple of artillery units.



Operazione C3

Operazione C3 was the Italian plan to invade Malta, but they never collected the necessary resources to see it through. The three divisions below formed part of the ground component, respectively its seaborne (part), airlanding, and parachute elements. The operation was later subsumed into Herkules, and canceled along with it.

All three went to North Africa: Folgore to Rommel at Alamein, La Spezia to Tripoli, and Superga to northern Tunisia after the Torch landings. The aircraft remained on Sicily, support the aerial assault on Malta and later the Tunisian bridgehead.



Last Reserves

The units below trickled in to Tripoli during the fall of 1942. Too late to join Rommel in Egypt. *Pistoia* reached the front at Mersa Brega during the retreat, while the rest moved into southern Tunisia after Torch.



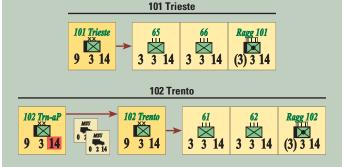
Corpo Armata di Manovra (CAM; Mobile Army Corps)

Motorized units that were belatedly rushed to Libya after the destruction of Tenth Army were mostly the motorized units that might have prevented the defeat. The officially were concentrated in a single corps (XX, aka CAM), but after German practice were regrouped as needed.

131 Ce	ntauro	132 Ariete		133 Littorio	
31 Cent 5 2 22	5 Ber 4 2 14	132 Ariete 6 2 22	8 Ber 5 2 14	133 Litt 5 2 22	12 Ber 5 2 14
131 Cel (3) 3 14	Monfrrto 1R 3 28	132 Cel (3) 3 14	Nizza 1R 3 28	3 Cel (3) 3 14	Novara 1R 3 28

Italian armored divisions were probably the best-balanced of their type early in the war. Smaller than those of other powers, they were intended for pursuit rather than breakthrough, but suffered from poor equipment for either purpose. Troop quality was high, however, and when given objectives commensurate with their strength fought well. *Centauro* arrived late in the campaign, still incomplete.

The reconnaissance battalions were all third squadrons (battalions) of cavalry regiments, the first two still being horsed.



Italian motorized infantry divisions were standard infantry divisions except for the provision of trucks for the infantry. *Trento's* infantry were stripped of their trucks to motorize corps and logistics assets.



Corps assets

In addition to the usual support units, CAM also controlled a pair of *Bersaglieri* regiments and a specialized reconnaissance unit.

The *Bersaglieri* were nominally assigned to the motorized divisions—7th to Trento, 9th to Trieste—but generally were detached to form a reserve or spearhead.

The Raggruppamento Esplorante (RE) had been created to give CAM a stronger and faster recon group than standard infantry corps. It comprised one battalion each of tanks and tankettes, a pair of artillery battalions, plus a few companies each of armored cars and motorcycle troops.

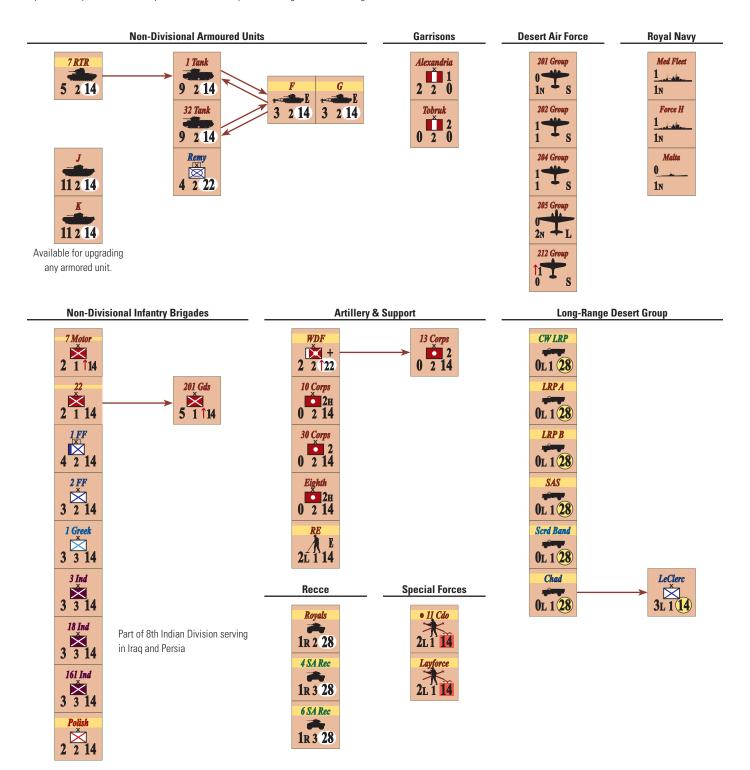
ORDERS OF BATTLE

EIGHTH ARMY

Britain's sprawling Middle East Command eventually collected units from Britain, the Commonwealth, and several associated Allied nations. The main combat formation, guarding the western approach to the Nile River and Suez Canal, grew from a division-sized collection of mobile units in 1939 to an army of 12 division-equivalents by late 1942. Nearly another dozen had passed through its ranks during

the period. All the while the army struggled to perfect the tactics and doctrines necessary to subdue Rommel.

The army's composition is displayed on this and the next three pages, with this page focusing on corps, army, and theater assets.



British Armoured Divisions went through a number of organizational changes during the war, illustrated by the permutations of 7th Armoured below and echoed in the changing lineup of the other divisions.

The first iteration followed pre-war British doctrine, which envisioned a mass of tanks — up to 300 in six regiments (battalions) — maneuvering independently around a "Pivot Group" (later "Support Group"). The latter consisted of two or three regiments (battalions) of artillery, a mix of field and anti-tank, plus one or two battalions of infantry for protection. It was not intended to maneuver with the tanks. The scheme worked poorly in the broken terrain of Europe, but was well suited to the desert environment, at least against the poorly-equipped Italians. The Germans invariably inflicted heavy losses on the unsupported tanks.

The organization changed incrementally, first by adding a portion of the Support Group to each tank brigade to form an Armored Brigade Group (see page 18) but the various arms still tended not to work well together.

Eventually the division lost half its tanks and gained a full motor brigade, bringing the mix more in line with German divisions, but the British never achieved the smooth integration of the Panzers.

7th Armoured Division



9 2 22

Crusader November 1941 9 2 22



 $3 \ \overline{2} \ 14$

1R 2 28

[attached for Crusader]

from 1AD



Gazala May 1942

4 Arm

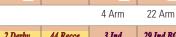


[attached during Gazala]



Second Alamein October 1942

2128





[attached during Alamein]



Tunisia early 1943

22 Arm

4 Arm 131 [attached] (later moved to NZ Div)

1st Armoured Division



2nd Armoured Division

The division never served as a complete unit, the 1st Armoured Brigade going to Greece while the rest, badly understrength, went to meet Rommel. The division was disbanded in the aftermath of that encounter; the organization below is nominal.



late 1941

8th Armoured Division



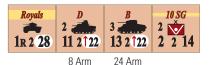
Nominal; never served as a complete unit. Its support group was broken up and dispersed to other units.

10th Armoured Division



1941

Formed in Syria from 1st Cavalry Division after the Syrian campaign.



Second Alamein October 1942

ORDERS OF BATTLE

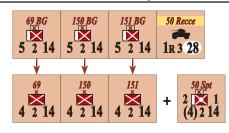
BRITISH & COMMONWEALTH INFANTRY DIVISIONS

The striking power of Eighth Army was in its armor, but its real strength lay in infantry and artillery. The Commonwealth was the prime source of the infantry, especially in the early stages of the campaign. Heavy losses and the outbreak of the Pacific War pushed the burden onto British divisions by the end of 1942.

44th (Home Counties) Infantry Division



50th (Northumbrian) Infantry Division



51st (Highland) Infantry Division



56th (London) Infantry Division



Arriving too late for Alamein, the division made an epic march to reach the front in Tunisia. Its recce regiment had been left behind and later joined 78ID.

Infantry in nearly every army in World War II used a three-plus-one arrangement, with the "one" being progressively heavier weapons at each level of command. A platoon, for example, would have three rifle squads plus a machinegun or a light mortar, while a company would have three rifle platoons plus one heavy weapons platoon with mortars, machineguns, and/or anti-tank weapons, and so on up to the division level, where the weapons would be centered on field artillery. The scheme conceptually gave each commander the ability to maneuver subordinate units and to either concentrate or distribute additional combat power.

This worked well in Europe as units operated in sufficiently close proximity. It broke down in the desert, however, because of the distances over which units were spread and the longer range of engagement allowed by the flat, open terrain. Lightly-armed infantry was especially vulnerable to enemy armor and artillery. As the desert campaign continued, every army began decentralizing heavy weapons to create small units more capable of fighting independently, without the need for coordination by or support from higher headquarters.

British and Commonwealth infantry generally followed the standard three-plus-one infantry pattern. Because of the unique British regimental organization, however, there were no heavy weapons at the brigade level (equating to other armies' regiments, which generally had mortar, light artillery, and/or anti-tank companies).

A division's three infantry brigades were backed by a wealth of supporting units: three battalions of artillery, plus one each of reconnaissance, anti-tank, engineer, and machineguns. The latter—comprising 48 machineguns, tripod-mounted for accuracy and water-cooled for sustained fire—was the British answer to regimental heavy weapons.

The decentralization of infantry weapons took two forms in Commonwealth divisions

The first was an ad hoc group known as a "column" or "force" named for the commander or mission, e.g., StopCol or MobFor). The most famous were the penny-packet Jock Columns.

The second and far more important was the brigade group (BG). A BG was formed by breaking up division assets (except reconnaissance) to create brigades capable of operating independently. The drawback to the concept was the inability of the division commander to mass support at a key point. Montgomery would break up the brigade groups before Alamein, but he had the advantage over his predecessors of commanding a larger army manning a shorter front.

70th Infantry Division



The tortured history of 70ID had its roots in Britain's pre-war deployment in the Middle East. There were four infantry brigades—14, 16, 18, and 19—controlled by two division headquarters—7ID and 8ID. Pre-war Egypt was defended by 18 Brigade around Cairo, a "Canal Brigade" along the Suez, some battalions in Mersa Matruh, and by the experimental Mobile (later the Armoured) Division in the Western Desert. All personnel were regular army.

The coming of war brought repeated organizational changes. Reinforcement arrived, among them 1st Cavalry Division (4, 5, and 6 Cavalry Brigades), plus divisions from India (4th), Australia (6th), and New Zealand. The British disbanded 8ID along with 18 and 19 Brigades. The Matruh garrison became 22 Brigade, the Canal Brigade was

renumbered 23, and several spare battalions were formed into 7 Motor Brigade. 7ID was renumbered 6.ID, then disbanded. Its headquarters was converted into the corpsequivalent Western Desert Force, the brigades operating independently.

A new 6ID headquarters was formed in February 1941. After brief service against Rommel's first incursion, was used in the Syrian invasion to control a mix of British, Indian, and Free French units. Renumbered again that October to 70ID as a deception, it went to Tobruk with the brigades shown above.

After the outbreak of the Pacific War, the division was sent to India. Nominally in reserve, its brigades once again were used individually at crisis points. In late 1943, the division was disbanded again, its brigades being retrained as Chindits.

Australian Divisions were formed out of the Second Australian Imperial Force (AIF; the First AIF having been raised for WWI) created at the beginning of the war. Battalions were designated with a "2/" to indicate this, but division and brigade numbers were made consecutive to those of the first war.

Australian civilian and military leaders were committed to the Commonwealth and the defense of the Middle East, but were sensitive to what they saw as British (read Churchillian) high-handedness in the use of Australian units. They therefore pressed for all three divisions to be used as a single corps.

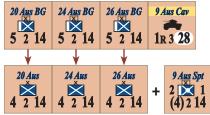
South Africa contributed nearly its entire armed force to the desert war and paid a heavy price. 5th brigade was destroyed during Crusader (November 1941), then 4th and 6th Brigades surrendered at Tobruk (July 1942). After Alamein, all South Africans returned home. It would take a full year to field two new divisions.

6th Australian Division



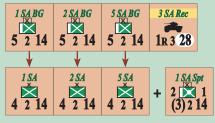
7th Australian Division

s BG | 19 Aus BG | 6 Aus Cav | 20 Aus BG | 24 Aus BG | 26 Aus BG



9th Australian Division

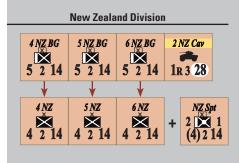
1st South African Division







1R 3 28

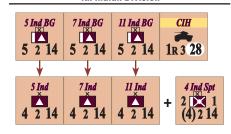


New Zealand's expeditionary force (like the Australian, numbered 2 to distinguish it from the WWI NZEF) consisted of the only complete division the country would raise in the war. Initially unnumbered, it would later be numbered "2" as part of a deception plan. It had one extra infantry battalion, the 28th Maori, used for scouting and assault work. After the 4th Brigade was wrecked during Crusader, it was out of action for a year while converting to an armoured unit.

India sent three divisions and three separate brigades to the desert, in addition to two other divisions (7th and 8th) serving in southwestern Asia. The 5th and 10th Divisions and two of the brigades suffered heavily during the retreat from Gazala, putting them out of action for a considerable time.

Most of these units would remain in the Middle East or Mediterranean for the remainder of the war, the 4th Division in particular being a mainstay of the Allied effort in Italy.

4th Indian Division



5th Indian Division



10th Indian Division

20 Ind BG	21 Ind BG	25 Ind BG	1 DOY
5 2 14	5 2 14	5 2 14	1R 3 28

ORDERS OF BATTLE

EISENHOWER'S COMMAND

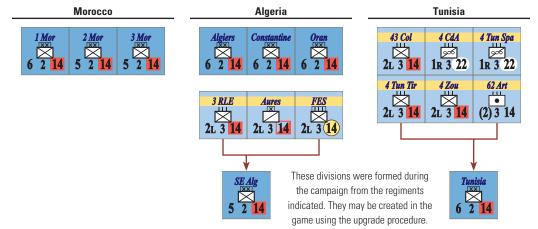
US Gen. Dwight Eisenhower was put in command of a mixed group of Allied units tasked with liberating French North Africa and forming the western prong of the effort to trap Rommel's forces.

In theory, all the units on these pages were subordinate to Eisenhower's sole field command, British First Army, but in practice each nationality retained direct access to him.

French 19 Corps

Morocco, Algeria, and Tunisia were part of Metropolitan France and formed the 19th Corps area. Districts based in major cities controlled numerous units, all understrength and poorly equipped. During and after the Torch landings, each district would field an ad hoc *Division du Marche* (DM) formed from a rotating array of its regiments. A DM could

have as many as fifteen battalions at any one time. The infantry was generally good but the divisions were woefully short of artillery and hopelessly outclassed in tanks and anti-tank guns.



At Large





BLM (*Brigade Légere Méchanique*) was a collection of weak mechanized units from all districts with a wide variety of mostly obsolete equipment.

CFA (Corps Franc Afrique) was an equally motley collection of volunteers: French and native residents of French North Africa, Spaniards, and—for game purposes—some deadly Moroccan Goums.

British First Army

For most of the campaign the army consisted of the British 5 Corps, US II Corps, and French 19 Corps, with the British 9 Corps coming into line near the end. The British divisions below sported the latest organization and doctrine. Well-equipped but lacking

recent combat experience, they generally looked down on their American and French colleagues (one reason the latter turned to Eisenhower) and were in turn denigrated by their seasoned fellow Brits in Eighth Army.

6th Armoured Division



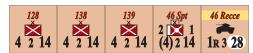
1st Infantry Division



Army Assets



46th (North Midlands) Infantry Division



A second-line Territorial unit, this division had been slated for conversion to a mixed division and had given up its 137 Brigade. The decision was reversed, and 128 Brigade was transferred in from 43ID for Torch.

4th Mixed Division



The British mixed division had one of its infantry brigades replaced with an infantry tank brigade. Part of the ongoing experimentation seeking the ideal combined arms mix, it was not a success and was already being discontinued when the Tunisian campaign began.

78th Infantry Division



Like 70ID, this unit was extemporized largely from high-quality units; even the Territorial 36 Brigade had been through the Battle of France and Dunkirk. The division was put together in May 1942 with Operation Torch in mind, and had at least an inkling of amphibious operations.

United States II Corps

The US committed six divisions to North Africa, to be controlled by two corps: I Armored and II. The Armored Corps HQ was soon sidelined, to be converted into Seventh Army headquarters to control the projected invasion of Sicily.

Il Corps was left unmanageably large with six divisions and a number of independent units. To ease the burden, 9ID fought largely with the British, while 2AD and 3ID were left in Morocco to subdue the area, check Spanish designs on French

territory, forward replacements to the fighting front, and eventually form the nucleus of Seventh Army.

The US Army had had the luxury of sitting out the first two years of the war, allowing it to watch military developments closely. Its divisions accordingly were organized with mobile warfare in mind, and were lavishly equipped by US industry. Experience, however, had to be gained while under attack by Rommel's crafty veterans.

US Armored Divisions were intended to be as flexible as the German panzers. Assigned regiments were not to fight as whole units, but grouped as a mix of armor, infantry, and artillery comparable to German KG. In theory the mix would be mission specific, but quickly devolved into a standard pattern.

The intention was to form two major groups, to be controlled by the division's two combat command headquarters (CCA and CCB). Unassigned units would remain in the charge of the division HQ as a reserve, or formed into battalion-sized mixed-arms task forces (TF). Some of the TF were referred

to as combat commands (as many as three at one time), leading eventually to the addition of CCC (to be called CCR for Reserve after armored divisions were downsized in 1943).

US armored infantry battalions were probably the best-equipped units in the campaign, with all infantrymen and a multitude of heavy weapons mounted in halftracks.

US Infantry Divisions followed the standard triangular organization (see page 19) on paper. In keeping with the combined arms approach seen as essential, however, US regiments were formed into Regimental Combat Teams (RCT) with the addition of an artillery battalion and smaller units of engineers and other support.

Unlike the comparable British brigade groups, the RCT were retained throughout the war, the divisional assets being replaced from the plenitude of support units, especially artillery. Extensive communications assets enabled a concentration of fire support even when artillery battalions were dispersed.

The TF counters represent the wealth of divisional and assigned assets.

1st Infantry Division

16 RCT	18 RCT	26 RCT
4 2 14	4 2 14	4 2 14
TF 16 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	TF 18 2 3 2 22	TF 26 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

3rd Infantry Division

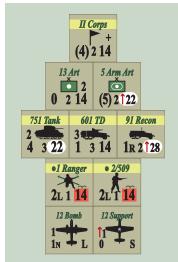
7 RCT	15 RCT	30 RCT
4 2 14	4 2 14	4 2 14
TF 7 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	TF 15 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	TF 30 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

9th Infantry Division

39 RCT 4 2 14	47 RCT 4 2 14	60 RCT 4 2 14
TF 39	TF 47	TF 60
3 2 22	3 2 22	3 2 22

34th Infantry Division

133 RCT	135 RCT	168 RCT
4 3 14	4 3 14	4 3 14
TF 133 2 2 22	TF 135 2 2 22	TF 168 2 3 2 22



Support Units. With manpower needed for industry, the Army restricted itself to 90 divisions. They were to be kept as "lean" as possible, with a dizzying array of support units assigned to divisions in action to maximize combat power.

The artillery groups (brigade-sized) in Tunisia were only the first of many to be formed. Not strictly combat units, they really were pools of independent battalions to be assigned to divisions as needed.

Tank and tank destroyer battalions were also nominally formed in pools usually called groups. The units shown here were unusual in fighting as complete units, most in Tunisia being broken up to support individual RCT or CC.

Tank destroyers ran the gamut from towed anti-tank guns through halftrack-mounted cannon to self-propelled vehicles. In all cases, they were less effective than they should have been because US anti-tank doctrine was flawed—it had anticipated

whole battalions ranging ahead of the main battle line to pick off German tanks.

Reconnaissance was a weak point, with only a company in each ID. The recon battalion shown here was stripped from the 1st Cavalry Division to bolster II Corps. The Army would soon form mechanized cavalry groups (really renamed regiments of two squadrons) to be assigned to corps and army HQs, but they were usually misused to hold quiet sectors.

The 2/509 had been repeatedly redesignated before receiving its final ID (despite the "2" it was the only battalion in the regiment). Containing a large number of parachute instructors, it was, and was used as, an elite unit for critical operations.

1 Ranger Bn was an experimental unit formed largely from 34ID volunteers. Lightly-equipped, it was ideally suited to fighting in the Tunisian mountains.

COUNTER COMPARISON: DFD VS. ORIGINALS

The next nine pages display the counters from the three original games with the corresponding counter from DFD below it, along with notes regarding them.

I have remade the original countersets for clarity (scans just got too muddy), so they may not be exact replicas of the printed versions. The counters are displayed in the order presented on their counter sheets for ease of reference.

Duplications across the three games have been deleted, with the original **Desert Fox** (ODF) being kept as intact as possible. The deletions are marked with an "×" and the ODF notation below it. Exceptions have been made for units with multiple versions, or, in the case of markers, to increase the available pool.

New DFD counters are placed at the bottom of each page, as closely related to the original counters on that page as possible.

The following abbreviations are used in the associated notes.

d.#: developer's note in the front section of this booklet

n.#: note in this section

p.#: page number in this booklet

ABBREVIATIONS ON DFD COUNTERS

AA: Anti-aircraft

Abt: Abteilung (battalion-sized unit)

aP: a Piedi (dismounted)

Arm: Armor
Art or Arty: Artillery
AS: Aero Stormo (wing)

Aufkl: Aufklärung (reconnaissance)

Aus: Australian

Auto: Autoblinda (armored cars)

Ber: Bersaglieri (elite infantry)

BG: brigade group

BLM: Brigade Légere Méchanique (light mechanized

brigade)

Bolgna: Bologna

Bomb: Bombardment Command (wing)

Brand: Brandenburger

CAM: Corpo Armata di Manovra (mobile army corps)

Cav: Cavalry

CC: Combat Command

CCNN: Camice Neri (Blackshirts)

CdA: Chasseurs d'Afrique (French North African light

nfantry)

Cdo: Commando

Cel: Celere (motorized artillery)

Cent: Centauro

CFA: Corps Francs Afrique (Free Africa, corps referring to

a "body of men")

CIH: Central India Horse

Col: Colonial
Ctnzaro: Catanzaro

Derby: Derbyshire Yeomanry

DOY: Duke of York's

Eighth: Eighth Army

FES: Front Est Saharien (East Saharan Front)

First: First Army

FJ: Fallschirmjäger (paratrooper) **FK**: Fliegerkorps (air corps)

FLK: FLAK (Flugzeugabwehr Kanone; anti-tank cannon)

Figre: Folgore
FF (CW): Free French

FF (GE): Fliegerführer Afrika (air commander in North Africa)

Gds: Guards

GGFF: Giovani Fascisti (Young Fascists)

Gren: Grenadier

Guast: Guastatori (assault engineers)

HG: Hermann Göring (Luftwaffe ground troops)

Imper: Imperiali (name of commander)

Ind: Indian

Kasta: Kampfstaffel (combat headquarters)

KDG: King's Dragoon Guards

KG: Kampfgruppe

Krad: Kradschütze (motorcycle infantry)

La Spzia: La Spezia Lanc: Lancers LRP: Long Range Patrol

Lt: light Litt: Littorio

Mrmrica: Marmarica Med: Mediterranean Montfrrto: Monferrato Mor: Moroccan

MSU: Mobile Supply Unit (trucks)

Neb: Nebelwerfer ("fog thrower;" multi-barrel mortars)

NZ: New Zealand

Para: Parachute **Pz:** Panzer

Pz L: Panzer Lange (indicating some vehicles armed with

long-barrelled tank guns)

PzJg: Panzerjäger ("tank hunters;" anti-tank)

Pio: Pioneers (assault engineers)

Pist: Pistoia

Ragg: Raggruppamento (unofficial but long-term

mixed group)

RCT: Regimental Combat Team
RE (CW): Royal Engineers

RE (IT): Raggruppamento Esplorante, a

reconnaissance unit

Recce or Rec: Reconnaissance (Regiment)

RLE: Régiment du Marche de la Legion Étrangère (ad hoc

Foreign Legion Regt)

RTR: Royal Tank Regiment

SA: South African **Sabrtha:** Sabratha

SanMrco: San Marco Marines **SAS:** Special Air Service **SG:** Support Group

Scrd Band: Sacred Band

Sdvb: *Sonderverband* (special purpose unit) **SE Alg**: Southeast Algerian Front (ad hoc division)

Spa: Spahis

Spt: divisional support group **Stab:** Staff (regimental HQ)

StG: Stuka Geschwader (dive-bomber wing)

Tank: Army Tank **TD:** Tank Destroyer

TF: Task Force (ad hoc battalion-size group)

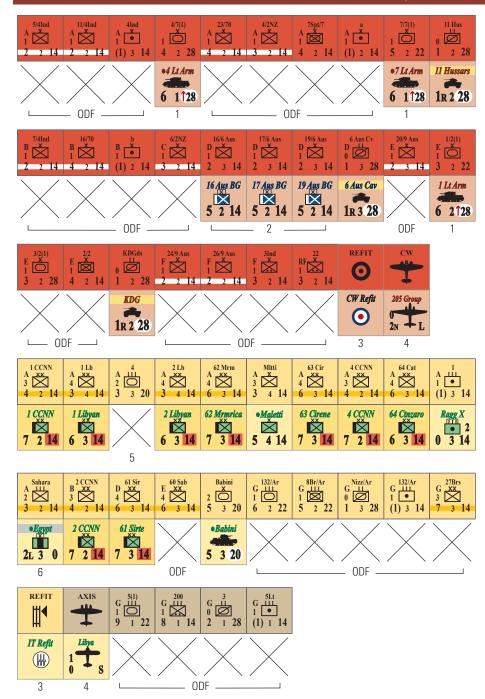
Tir: Tirailleurs ("shootes," one of many French terms for

light infantry) **Tun:** Tunisian

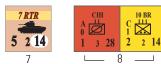
WDF: Western Desert Force HQ

Zou: Zouaves

MY VERSION OF THE ORIGINAL FOX KILLED COUNTERSET (EXCEPT MOST MARKERS)



Additional counters for the Fox Killed portion of the campaign



- **1:** ODF had upgrades of certain CW and GE (n.9) armored units to indicate more effective tanks. They were identified by (1), (2), and (3) ratings, which I always thought of as "generations." The CW generations are:
 - (1) light tanks like the A9 and A10.
 - (2) Cruiser III and Crusader tanks.
 - (3) units largely—but never exclusively—equipped with American tanks.

DFD identifies CW units with "Lt" (Light) for Gen (1) and the unmodified brigade ID for Gen (2); e.g., 4 Lt Arm upgrades to 4 Arm. Gen (3) is handled with substitute counters (n.32) as in ODF.

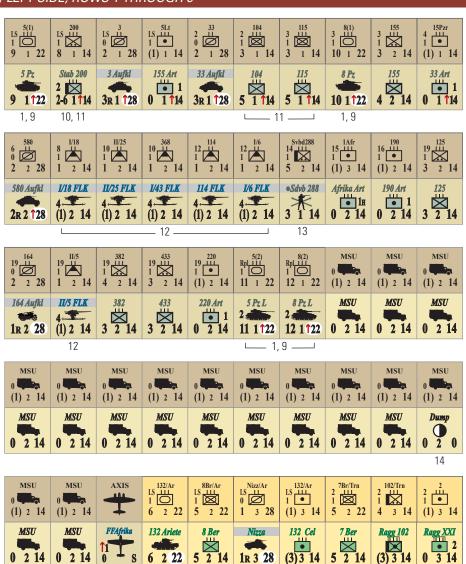
In the case of the three units noted on this page, their lowest generation in ODF was (2), so OFK "backdated" them to (1).

- 2: The brigade group issue (see d.2.4-IV, d.5.0 and pp.18–19) was largely avoided in ODF due to counter limits. Most CW infantry in DFD may make the switch as an upgrade (see also n.26). Units leaving the theater before, or arriving after, the changeover, like the Australian 6th Division noted here, are presented in only one version. Counters have been included for brigades destroyed prior to the switch (150, 11 Ind, 4 NZ, 4 SA, 5 SA, and 6 SA,) but whose divisions remained in the desert.
- **3**: On-map refit points replace of the track-and-marker arrangement of ODF.
- **4:** On-map air units replace the track-and-marker arrangement of ODF. They are named for Italian Stormos, Commonwealth Groups, German Fliegerkorps, and US Wings (aka Commands), each representing a front line strength of 100 to 300 aircraft.
- 5: 4th Armored Regiment was an ad hoc formation built around several tank battalions taken from 132 Ariete Division. It was wrecked in the early stages of Operation Compass without affecting the battle (its remnants joined Ragg. Babini) and has been omitted in DFD.
- **6:** The addition of Italian garrisons was an easy way to account for the myriad border and fortress units without giving the Italians too many additional maneuver units.
- 7: The Matildas of 7 RTR were a key part of O'Connor's success during Operation Compass. Its omission should be considered errata for OFK.
- **8:** These units were both present during Operation Compass; I include them in my OFK counterset and present them here solely to note their presence in the early part of the campaign.
- CIH was part of 4th Indian Division and arrived with it (see p.26).
- 10 Bersaglieri arrived just in time to be destroyed as part of Ragg. Babini. I kept it separate, increasing the strength of each unit per the rationales in d.2.4-V and d.6.4. The regiment was rebuilt and took part in the defense of Tripolitania (p.29).

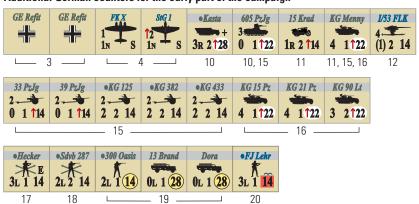
COUNTER COMPARISON: DFD VS. ORIGINALS

ORIGINAL DESERT FOX COUNTERS, LEFT SIDE, ROWS 1 THROUGH 5

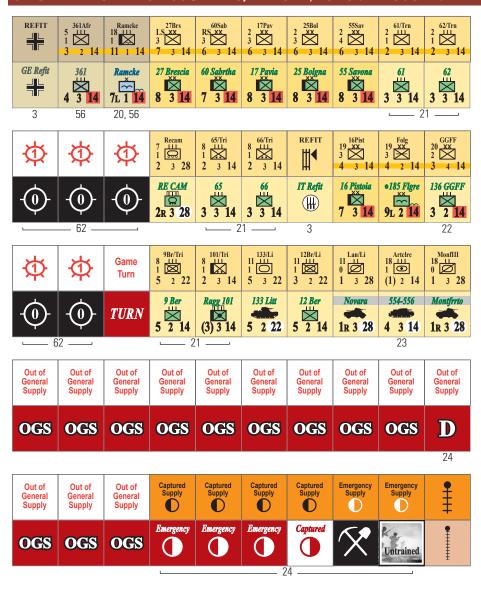
- **9:** German panzer upgrades represent the addition of small numbers of tanks with longer cannon rather than a complete replacement of vehicles like the CW.
- **10:** ODF's overstrength IR200 included 605 PzJg and Kasta, presented separately in DFD. It upgrades to a number of additional units, including the new IR200 (p.28).
- **11:** The infantry component of German panzer divisions was grouped in a *Schützen* brigade, consisting in most cases of two regiments and a *Kradschütze* (motorcycle) battalion. 15 Krad is added to complete 15 Panzer Division. It later upgrades to KG Menny, named for the commander of 15 Schützen Brigade (though it actually was used to rebuild I/104 after Operation Crusader).
- **12:** The six FLAK battalions of the original have been expanded to seven. I/43 replaces 368, which was a searchlight unit.
- **13:** Sonderverband 288 was a heavily-equipped unit—either a large battalion or a small regiment—to be inserted into Egypt to raise a rebellion. It later converted to the standard two-battalion motorized regiment Afrika (p.12).
- **14:** As in ODF, MSU are backprinted with dumps, one of which is shown here.
- **15:** Aggressive use of anti-tanks guns was a hallmark of German tactics, so the individual battalions of panzer divisions have been added. KG 125, 382, and 433 represent the unusually heavy anti-tank armament of 164th Light Division (p.12) The AT guns were essentially irreplaceable, hence the KG status and cadre marker.
- **16:** The KG have been added to give the German divisions more flexibility and to field more strength when available.
- 17: Hecker represents a small engineer unit equipped with specialized landing equipment. Never used as intended, it served alongside Rommel's other engineers.
- **18:** Sonderverband 287 had been put together to help raise a revolt in the Middle East. Never committed, it was later converted to a regular infantry unit.
- 19: The war in the deep desert was conducted by small, self-contained units in every combatant army. The Germans raised five oasis companies from men who had been in the desert before the war. Heavily armed and equipped with water purification units, they were intended as oasis garrisons in the deep desert, but instead fought until captured in the fortified line near Sidi Omar in late 1941.
- 20: FJ Lehr was probably included in the Ramcke Brigade in OFD due to counter limits, making the lightly equipped paratroopers too large (four battalions) and too strong (5x a CW brigade) relative to other infantry units. The battalion was slated to be part of Ramcke's command for the Malta invasion, but was sent to Rommel as an independent unit.



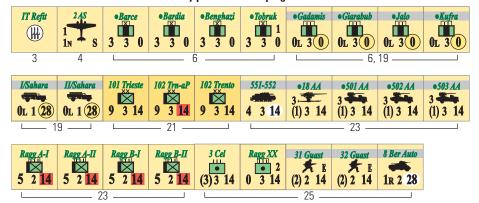
Additional German counters for the early part of the campaign



ORIGINAL DESERT FOX COUNTERS, LEFT SIDE, ROWS 6 THROUGH 10



Additional Italian counters for the early part of the campaign



- 21: ODF presented the Italian motorized divisions in their component regiments. I thought that treatment improper given their similarity of equipment and training to the regular infantry divisions (p.14), particularly for the grounded Trento regiments. No explanation is given for the ODF strength of 102/Trn. The breakdown is still allowed (when motorized for Trento). The *Bersaglieri* regiments remain separate, per doctrine.
- 22: ODF presented 136 Giovani Fascisti (GGFF)
 Regiment as a full division. Intended to be the core of a new armored division, it was strengthened in the fall of 1942 with a few stray battalions of infantry, recon, and artillery, and called a division. The Axis player may form the "division" in DFD by stacking the regiment with other units.
- 23: The Italian army suffered most from the ODF counter shortage, with only this counter to show the gradual improvement in weaponry. It is misnamed: Artclre is a contraction of *Artillery Celere*, indicating a fully-motorized but still truck-drawn unit. It is supposed to represent self-propelled guns (*Semovente*), a substantial increase in direct fire support. These two battalions (554th and 556th) were attached to Ariete, the new unit (551st and 552nd) to Littorio.

The other new counters represent some of the weapons reaching the front in 1942, particularly powerful anti-tank guns, German 88s in 18 AA, truck-mounted 90mm in the others. The Ragg counters allow infantry divisions to upgrade to the TAS42 standard.

- **24:** Some marker arrangements have been altered slightly from ODF. Most fronts are shown here, with one of each reverse side.
- Out of General Supply (OGS) is still backprinted with D (disruption).
- Captured supply is back-printed with emergency supply. In ODF, captured was backprinted with forced march (no longer used), emergency supply with construction (see below).
- Construction markers are now paired with the new untrained status.
- **25:** Some ODF Italian organizations were incomplete due to counter shortages.
- 3 Cel brings Littorio into line with the other armored divisions.
- Ragg XX represents the CAM artillery assets.
- The Guastatori were excellent assault engineers assigned to corps headquarters. They were often used to spearhead attacks on fortified positions.
- 8 Ber Auto was a one-off armored car battalion (attached to Trieste in some sources). Like all Bersaglieri units, it got preference for men and equipment.

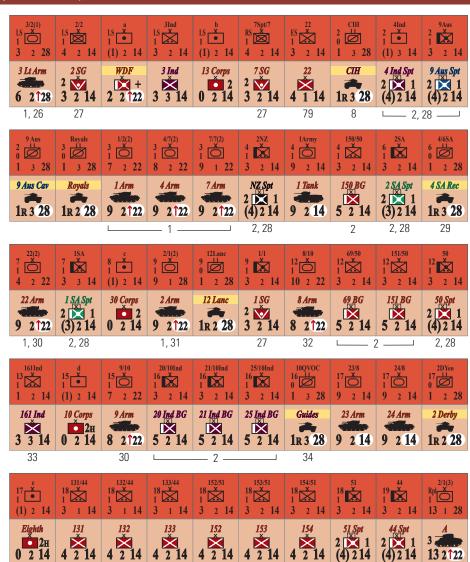
COUNTER COMPARISON: DFD VS. ORIGINALS

ORIGINAL DESERT FOX COUNTERS, RIGHT SIDE, ROWS 1 THROUGH 5.

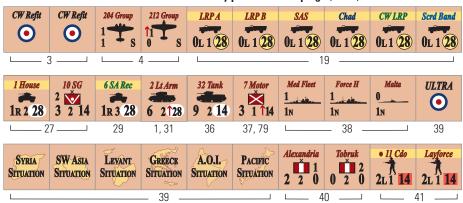
- **26**: 3 Armoured Brigade was understrength in March 1941, rather than poor quality as the ODF counter indicates. It is presented in DFD as a normal British armoured brigade, but deploys depleted.
- 27: ODF support groups were presented as infantry or mechanized infantry, but really were artillery with infantry protection. One new unit was added for 10th Armoured Division (along with the division's recon unit); 8th Armoured does not get one as it never served intact.
- **28:** Disassembling brigade groups gave each division a powerful artillery group. It is given ground combat value in DFD to account for the divisional machinegun battalion and anti-tank regiment, plus the dual-pupose utility of the 25-pdr field guns.
- **29:** ODF 4/6 SA is the 4th and 6th South African Recce Regiments amalgamated after heavy losses. Both units are present in DFD.
- **30:** This brigade arrived understrength and should be treated as a normal brigade deploying depleted.
- **31:** ODF had 2nd Armoured Brigade arrive after being equipped with medium tanks; it actually arrived with mostly light vehicles but was held back until upgraded.
- **32:** 8 Arm and 9 Arm are presented as slightly weaker owing to their inexperience.
- **33**: 18 and 161 Ind were weak in ODF. They were actually standard brigades but were thrown into action before desert acclimation. They arrive untrained in DFD.
- **34:** 10th Queen Victoria's Own Cavalry had been renamed the Guides before the war.
- **35**: The CW armor upgrade counters (n.1) show brigades strong in certain US tanks. The large drop in depleted strength indicates the likely loss of these tanks first.
- A & B = M4 Shermans
- C & D = M3 Grants or Lees
- E = M3 Stuarts.

ODF 2/1(3) is either overly strong for Stuarts or overly fast for Shermans; it was actually equipped with the latter.

- **36:** This was an ad hoc formation formed to control tanks in Tobruk, later becoming an official brigade.
- **37:** Motor brigades were motorized rather than trucked (p.17, n.79), 7 Motor being the first into the desert.
- **38:** The fleet counters support the expansion of the naval rules.
- **39:** These counters are used to support some of the game's new events, notably the Middle East Tracks (r. 22.2).
- **40:** The Alexandria garrison represents a rotating array of artillery and infantry units. The Tobruk garrison represents Italian assets captured in the fortress (a.k.a. the "Bush Artillery").
- **41:** These are some of the special units added to carry out the missions allowed by r. 15.0 & 16.0.

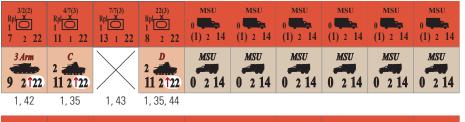


Additional Commonwealth counters for the early part of the campaign (1 of 2)

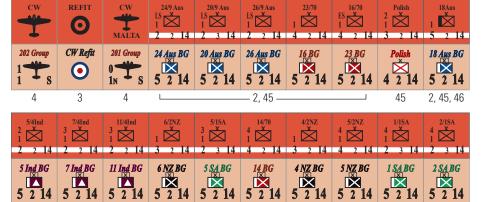


1, 35

ORIGINAL DESERT FOX COUNTERS, RIGHT SIDE, ROWS 6 THROUGH 10.

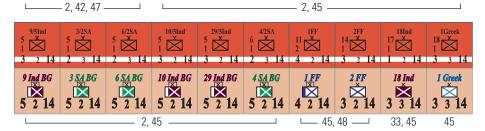






X

5 2 14



×

5 2 14

Additional Commonwealth counters for early part of the campaign (2 of 2)

1R 3 28

×

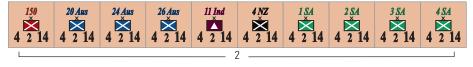
5 2 14

5 2 14

1R 3 28

1R 3 28

5 2 14



3 2 14

50

3 2 14

Remy 6 SA 7 Aus Cav 21 Aus BG 25 Aus BG 44 Recce 50 Recce 51 Recce \mathbf{x} 1R 3 28 $4 \overline{2} 14$ 5 2 14 5 2 14 4 2 22 1R 3 28 1R 3 28 1R 3 28 46 48 1 DOY 2 NZ Cav 3 SA Rec 7 SA Rec 2£ 1 14

- 42: This brigade was disbanded after destruction at Mersa Brega—as 3/2(1) in game terms (n.24)—so never actually appeared as Gen (2). Both ODF and DFD allow for it, but ODF 3/2(2) is oddly weak; it is presented as an ordinary brigade in DFD.
- **43:** Based on the strength of the ODF counter, 7/7(3) would be replaced by either upgrade substitute A or B (n.35), but by the time this would have happened in game terms the brigade had departed for India.
- 44: 22 Arm became the main armored component of 7th Armored Division and was equipped accordingly. There is no good explanation for its odd strength in ODF, nor its improvement in OTF (n.78).
- 45: ODF presented most CW infantry as dismounted (foot), but in game terms they should be trucked.
- 46: ODF included 18 Aus, part of 7th Australian Division, because it served at Tobruk. It clearly is intended to be a brigade group. The rest of the "Silent Seventh" was left in the Levant, but could have been brought to the desert.
- 47: Mountain-trained units are identified as such in DFD because of some special capabilities. 4th Indian Division, a high-quality pre-war formation, was frequently used in rough terrain.
- 48: The Free French units with Eighth Army were later combined into a division (p.30), but have been left as separate units in DFD. Remy was a mechanized column, formed, like the FF infantry, from a wide mix of units and unit fragments.
- 49: The recon units assigned to most Commonwealth infantry divisions were left out of ODF, probably because of countermix limits. Their greater importance in DFD made their inclusion necessary as well as desirable.
- 50: RE reflects Eighth Army's wealth of engineers. Upgrades F & G represent Matildas and other infantry tanks fitted with flails for minesweeping, one of the early experiments leading to the development of Hobart's 79th Armoured Division "funnies."

The 25 Aus BG counter on counter sheet 2, is incorrect, it has a combat factor of 5 as shown here.

×

5 2 14

X

5 2 14

X

5 2 14

1R 3 28

49

COUNTER COMPARISON: DFD VS. ORIGINALS

ORIGINAL TRAIL OF THE FOX COUNTERS, LEFT SIDE, ROWS 1 THROUGH 5.

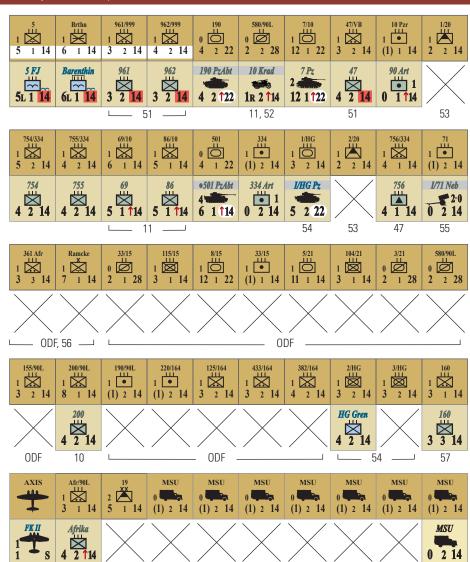
- **51:** The 47th Infantry Division (on Crete) and 999th Infantry Division (in France) were slated for duty in Tunisia but did not arrive in their entirety. DFD allows for the possibility.
- **52:** OTF duplicated the 580 recon unit (see row 3, counter 10); this was probably intended as the recon unit for 10th Panzer Division. It actually had none at the time, so this OTF counter's place is taken in DFD by the division's motorcycle infantry battalion. The division has also been fleshed out with additional supporting units.
- **53:** The 19th and 20th Flak Divisions were not combat units, but administrative HQ overseeing FLAK units in Africa. They probably were used in OTF to save counters and have been deleted in favor of the actual battalions.
- **54:** OTF presented the HG Division in its formal organization less support units. The armor was still being organized so operates in DFD as battalions. HG Gren is actually a combination of both infantry regiments, only parts of which arrived.

The relatively low morale in OTF probably arises from the division's poor performance in Sicily, but that occurred after the loss of many experienced personnel in Tunisia. Accounts of the campaign have the individual units fighting well, but senior leadership being inadequate.

- **55:** The 71st Artillery Regiment in OTF should be the 71st *Nebelwerfer* Regiment, presented here as two separate battalions.
- **56:** These units are properly portrayed as dismounted in ODF and trucked in OTF.
- Ramcke's men captured British trucks during the retreat from Alamein and remained mounted for the rest of the campaign.
- The attenuated 361 must have scrounged enough trucks for at least a road march as they made it back to Tunisia while the marching Italian infantry did not.

They have been left on foot in DFD, and will have to be mounted using MSU (captured or otherwise).

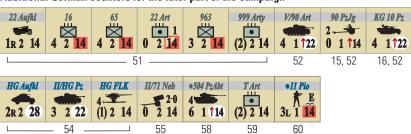
- **57:** The 160th Panzergrenadier Regiment is overly strong in OTF. The headquarters was brought over to control a mix of Marsch (replacement) battalions—organized originally as "T" Regiment—and local volunteers.
- **58:** The Tigers of 504 PzAbt trickled in late in the campaign, but could have been brought over earlier.
- **59:** This artillery unit was an ad hoc formation built around some spare and scratch batteries.
- **60:** This was Witzig's parachute assault battalion of Eben Emael and Crete fame.



Additional German counters for the later part of the campaign

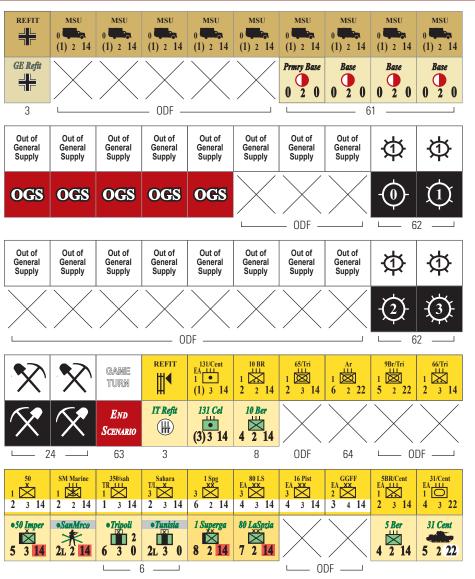
53

13



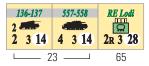
ODF

ORIGINAL TRAIL OF THE FOX COUNTERS, LEFT SIDE, ROWS 6 THROUGH 10.

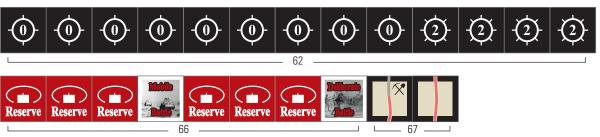


- **61:** Bases are a new supply unit replacing the permanent supply sources printed on the maps in the original games.
- **62:** The number of fort markers has been increased, and there are two new levels: Level 0 on the front of Level 1, and Level 3 on the back of Level 2. One of each of the backs is shown here.
- **63:** The End Scenario marker is provided as a mnemonic device to mark the last turn of a given scenario, an especially important consideration as that turn changes depending on events.
- **64:** The Ariete battlegroup in OTF is supposed to represent the amalgamated remains of the division (probably due to counter limits), but in the longer game it was preferable to let the division's regiments speak for themselves.
- **65:** Like the RE CAM, this was a *raggruppamento* of recon, tanks, infantry, and artillery intended to provide a corps or army headquarters with a unit capable of fighting for information.
- **66:** The Reserve markers are used by new rules for unit status. The reverse side has mnemonic counters for two new forms of battle, one of each being shown.
- **67:** These markers, one front and one back, are used to record the construction of primary roads on the map.

Additional Italian counters for the later part of the campaign



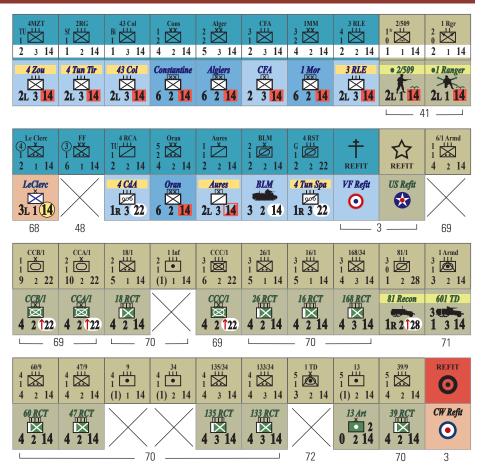
Additional Markers



COUNTER COMPARISON: DFD VS. ORIGINALS

ORIGINAL TRAIL OF THE FOX COUNTERS, RIGHT SIDE, ROWS 1 THROUGH 4.

- **68:** For the time covered by the game, the Free and Vichy French were mortal enemies. This unit is Free French and has been so presented.
- **69:** US armored divisions were badly underrepresented in OTF (p.21). The armored infantry regiment has been deleted because it never fought whole; its battalions formed part of each combat command. The armored regiments have their light tank battalions included separately, both for historical accuracy and to increase divisional flexibility.
- **70:** The wealth of US supporting units enabled the retention of the RCTs with additional units taking the place of divisional assets. The new Task Forces (TF) represent that additional combat power.
- **71:** This OTF unit is probably supposed to be an amalgam of 1.AD support units, including 601 TD. The individual units have been included in DFD for historicity and flexibility.
- **72:** The 1st Tank Destroyer Brigade existed only as an administrative (pool) headquarters. Most of the TD battalions served in fragments and are incorporated into the infantry division Task Forces.
- **73:** These French divisions were formed during the campaign; not committed, they might have seen action.
- **74:** These units were part of the Vichy order of battle in North Africa. The artillery regiment was part of the Tunis district; FES patrolled the deep desert.
- **75:** The US 2nd Armored and 3rd Infantry Divisions remained in Morocco after Torch, forwarding replacements to units in Tunisia and preparing for the landing in Sicily in mid-1943. If needed, they could have been brought to the front.
- **76:** Most US non-divisional support units were broken up to reinforce divisions and RCT and are included in the TF. The three included here fought as complete units.
- 77: This mnemonic counter supports the process of gaining experience for US forces. II Corps represents the improvement in command-control as well as Patton taking command of the corps.



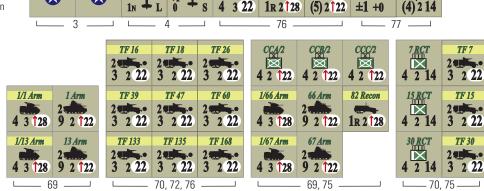
Additional DFD Vichy French counters



Additional US counters

US Refit

US Refit

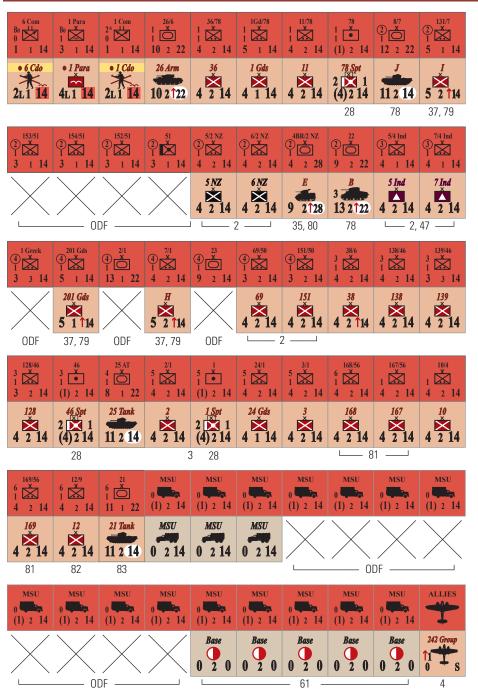


91 Recon

US Inexp

©

ORIGINAL TRAIL OF THE FOX COUNTERS, RIGHT SIDE, ROWS 5 THROUGH 10.

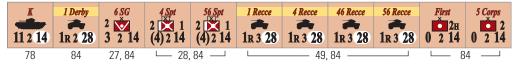


78: This is errata from OTF. The main armor component of 7th Armoured Division at this time was 22 Arm (n.1, n.30, n.35, n.44). 8 Arm, reequipped by then with a mix of medium and infantry tanks, was a corps-level asset for infantry support assignments. As the tanks included the improved Churchill infantry tank, it is represented here by an upgrade counter. Substitute unit K has been provided an additional upgrade if desired.

79: Two substitute infantry upgrade units allow the Allied player to create Commonwealth motor brigades. There were four present in Tunisia, two being upgrades of regular infantry units:

- The upgraded 7 Motor Brigade with 1st Armoured Division.
- 38 Brigade with 6th Armoured Division.
- The upgraded 131 Brigade (from the disbanded 44th Infantry Division) with 7th Armoured Division.
- 201 Guards Brigade, which had started life as 22
 Brigade (the 1940 Mersa Matruh garrison), serially
 renamed 22 Guards, 200 Guards, and finally 201
 Guards. The last was captured at Tobruk, then rebuilt.
- **80:** 4 Arm was equipped primarily with Stuarts at the time of Alamein, intended for use as a pursuit force for 7th Armoured Division. It was later assigned to the New Zealand Division as a stand-in for the destroyed 4 NZ, which was being retrained as an armoured brigade to create a mixed division (p.19).
- **81:** The British 56th Division arrived in Egypt, not as part of Torch as presented in OTF. It reached Tunisia after an epic march across the desert.
- **82:** This is minor errata for OTF. The brigade should be 12/4, not 12/9.
- **83:** This is minor errata for OTF. The brigade should be 21/4, not a separate brigade as indicated here.
- **84:** The Commonwealth order of battle in OTF was constricted due to counter limits. These counters have been added to complete units as follows:
- 1 Derby and 6 SG to complete 6.AD.
- The support units for 4.ID and 56.ID.
- The Recce units to flesh out First Army's infantry divisions (56 Recce had been transferred to 78.ID prior to the campaign).
- First Army's army- and corps-level artillery.

Additional Commonwealth counters for the later part of the campaign



PLAYER NOTES

This is a brief set of notes garnered from some specific points learned during playtesting. It is worth mentioning that three of the four notes below concern supply.

Hint #1: Keep an eye on the clock. The campaign game is all about time. That includes judicious use of appeals, particularly holding off when your opponent is declaring them. Don't overdo though, or you'll find yourself facing a wall of dumps and RP with too little time to recover.

Hint #2: The way to stockpile dumps is to not expend any, even to keep your army in general supply. You have to be careful your opponent is not in a position to do much about it

This is actually a viable strategy for the Axis player in the Fox Killed scenario. Delaying the Parallel War (AXC-5) is in your best interest because it also delays Allied events, chiefly Taranto (ALC-12).

Hint #3: Every hex on the coast road can be a chokepoint for a supply line run out to its maximum. Desert Raiders, commandos, and aerial interdiction are ideal candidates for taking advantage of the fact.

Hint #4: Think of the combat units as the husk of your army, and the logistic network as its core. You can afford to have units eliminated (though it can be costly if they are out of communications), but as long as the logistical base is present the army can be rebuilt. The reverse is not always true.

