Introduction

Welcome to Panzer Campaigns latest title – Tunisia ’43 – the 20th title in a series which began in 1999 with Smolensk 41. While the series has grown, it has been enhanced along the way, to become arguably the most versatile and complete operational series of games covering World War II in Europe. And, while we feel there are still plenty of new titles to explore, the easiest of the well-known battles have been covered now and new titles provide the designers more challenges.

The Beginning of Tunisia ’43

Over time, Tunisia ’43 has become the most newly requested title on various forums or by email from supporters of the series. People often request new titles, but when they do they often don’t consider the size of the battle in terms of both time and distance. Typically, in previous Panzer Campaigns, we would pick a period that we were going to focus on. Then we would mark off on the map just how much area we needed and go from there. In any game, it isn’t uncommon to have a few scenarios from a period different for the main campaign focus if it falls in the map area. But at this early design phase, Tunisia was tricky for us to get our heads around.

I would frequently ask people who requested this title to consider the battle for a minute and tell me, given the average of ten turns per day, what the start and end dates of the campaign should be? Then I would send them this image file of Tunisia (note the bar scale circled in this image is 50mi or 80km) and then asked that they draw a square around the area of the battle that we should focus the campaign around. I would also remind them that the largest map we had ever produced for a new title was Kursk, which was 380 km by 300 km.
It is not surprising that not many people got back to me. Of those that had taken the time to consider this scale question, no two were alike in their opinion of this focus area although all agreed that Kasserine needed to be covered. Panzer Campaign Tunisia was a puzzle right from the get go.

As an actual game in test, the project began shortly after the twelfth title in the series, France ’40 was complete. David Guégan, who worked with us on France ’40 was discussing with us these very issues of campaign scale when he happened upon a website containing period topographical maps at 1:250,000 scale which could be downloaded. These we were able to convert into BMP format we required and rescaled to the size needed for the game map editor. Using these maps we were able to start building a small map area covering the Kasserine Pass. We knew we could not have a game in Tunisia without Kasserine, so it seemed like a good place to start. It is worthy of note that even though we started at Kasserine, this Campaign was one of the last to be completed.

As is often the case, it turns out the area of interest for Kasserine fell almost perfectly at the place where four sheets joined. So we used Photoshop to splice these together and we built outward from there in pieces. Keep in mind all this was done several years ago when a good PC still didn’t have a dual core processor, and 128 MB of memory on a video card was pretty good equipment. So it was not so easy working with maps and files back then on our older, slower PCs. But eventually we stitched together close to 30 map sheets, not in one massive BMP as we normally would do. We built this giant map in several pieces which were fitted together and adjusted at the edges so everything matched up.

My partner Dave “Blackie” Blackburn, as always, did the heavy lifting on the map creation. After a lengthy period of time, we had the entire battle area in a game map, from the Mareth Line in the southeast and as far west as Tebessa on the west side of the West Dorsal mountain range. The gross area of the map totalled 144,000 sq km, when you remove the unmapped area approximately 100x100 hexes in the southwest corner where no action took place.
With such a large area, we felt we would not try to cover the Torch Landings themselves, as they were really a sideshow to the Tunisia Campaign. Not only would they have added a lot more map area, even as separate smaller maps. For example the seizure of Casablanca on the Atlantic coast, from Safi on the south to Rabat in the north, where the force landed, was comparatively large as compared to the invading force. Certainly nothing when compared to the forces assembled for later invasions such as Sicily, Salerno, Anzio, and Normandy. US casualties for all the actions in the Torch phase of the invasion against Vichy French were set at around 500 men in three days fighting. The biggest single loss was when a burst of MG fire caught a boat making for the wharf at Algiers.

Even Atkinson in his book “Army at Dawn” calls this early period of fighting in Northwest Africa “a matter of pot-shots” and, although there were moments of pitched firefights over the three days, these just do not amount to much in terms of the operational battles we depict in the Panzer Campaign scenarios. Who knows, some of these firefights could be included in a Squad Battles title at some future date!

**The Campaign Structure and OOB Basic**

At this point we had a game map, all the map area we thought we could use for a game called Tunisia ’43, but we still did not have a concrete idea of which period of the fighting to focus the game on.

The Order of Battle was the next hurdle. Generally by this point of World War II, the Allied OOB is not that difficult, at least not for the major formations. The Table of Organization and Equipment (TO&E) was fairly standard. There was a pretty good overall OOB for both the Allies and the Axis in an appendix of the book “Bloody Road to Tunis” by David Rolf. This book was another very handy reference used by Blackie and I, later in the scenario building and testing phase. But an OOB in a book appendix doesn’t tell you anything about the strength or the make-up of many of the units, particularly the Germans and Italians given their depleted situation by this time in the war in North Africa. Keep in mind the Africa Korps had retreated from Alamein in the previous couple months taking losses as it went. And the 5th Panzer Army was a scratch force that was flown in to Tunis in response to the Allied Torch invasion in Algeria and Morocco.

At this point we enlisted the assistance of Mike Avanzini. Mike had done a number of OOBs previously for us, mainly on the East Front. Tunisia was something he had some information on but with the help of
Wig Graves, who had recently worked on this theatre of operations in another game. This allowed us to really dig into the Order of Battle. Mike has written up a very detailed section in these notes which are covered later so I will keep my comments here at a higher level.

As we began to assemble the detailed info for the OOB, Mike kept asking me, the same thing I was asking people who we requesting the game. That is “when does the campaign start and end?” This was critical because the organization changed radically during the fighting in Tunisia. Some units, as you would expect, upgraded their equipment. Some US armored units actually downgraded equipment, as losses in Sherman tanks suffered in the battles in February could not be replaced with Sherman’s, and these units were issued the older Lee tank, a vehicle similar to and perhaps better known as the British Grant tank which served with the 8th Army at Alamein in 1942.

Players familiar with the Panzer Campaigns series will be aware that the way the game works for victory. Side 1 is the attacker and is charged with capturing objectives while the second player, side two defends the objectives. In Tunisia ’43 the Allies start out as the attacker. This was followed by a period where the Germans were on the attack, not only around the well-known battles at the Kasserine Pass, but all over northern Tunisia. There were also long pauses in the action, which doesn’t lend itself well to a turned based game where both sides do nothing for several days with typically 10 turns per day.

The net result of all these factors was we knew we could not design this game with only one OOB to cover the action from the initial advance to Tunis by the Allied forces in November and December of 1942; then still in the same campaign scenario, cover the German offense in February 1943 and, finally, play on until the end of hostilities in May 1943. More importantly, using our game engine, which is based on 2 hour day turns, we simply could not make a playable campaign scenario which spans 6 or more months of fighting as we would end up with in excess of 1800 turns.

In an effort to see how it was done in board games, I purchased a copy of The Gamers Operational Combat Series title “TUNISIA”. This game covered the whole campaign in one scenario – something I thought people might be looking for in this Panzer Campaign. But this game used a ground scale of 5 miles per hex and half a week turns where tanks can go roughly 2km per Panzer Campaign turn which is much slower than the speed we assign tank and panzer units.

The closer I looked, the more I saw this board game, did not appear to match the information we had researched. There were many places on the map that I was unable to find on the period 1:250,000 topographic sheets we used to make our map. Nor was the OOB, depicted by the unit counters, a match for the organizations in the research done by Mike Avanzini. As an experiment, I set up one of the scenarios in the board game. I found that the start line did not match the placement with situation maps in our reference books.

In fairness, this board game was produced in 1995. Perhaps the designers may not have had the advantage of today’s Internet and newer information such as the previously mention books by Rolf, or Atkinson’s “An Army at Dawn”.

Eventually we decided the best way for us to proceed was to develop the OOB to cover the TO&E of the formations involved into three distinct periods – Early, Middle and Late. We also began this OOB from scratch using the widely accepted and popular standardized combat values, the McNamara database, which was provided to us by Ed “Volcano” Williams. At the Tillercon in Nashville in May 2010, we all met face to face and hashed out some concerns and differences we had surrounding values and ranges for some guns. We set up many test fire scenarios to ensure the results we were seeing in the game matched those reported in accounts of the battles.

Through discussion on short test scenarios we agreed to reduce the hard attack range of the Allied Sherman tanks to one hex, because even though the firing tables clearly showed this common Allied tank could engage targets at a range beyond 1 hex or 1 km, there was certainly no published accounts, supporting long ranged fire by Sherman’s against German armor. So this range change was more one of doctrine vs. gun capability.

My colleague Mike’s section on the OOB Detailer Notes follows but I thought I should mention some information about how the game engine handles Nations and unit counter colors. In this game there are French units on both the Allied side and the Axis side. For simplicity these Allied French are called “French” and the Axis French are referred to as “Vichy French”.

This works for game purposes but technically it is not really correct. The Vichy French units that fought the US for three days in November largely surrendered and came over to the Allied side. Some of the units in the game which we call “Vichy” are previously true Vichy units stationed in Tunisia. They embraced the Axis when they landed at the Tunis airfields in response to the Torch invasions. Others are Axis French are Foreign Legions units that served at Alamein and retreated with Rommel’s army. There are the Deutsch-Arab Volunteers and the Phalange Africaine unit, the latter of these units won a number of Iron Crosses so it is no mistake should you see some higher unit quality Axis French units.

On the Allied side they are all called French even though France had surrendered to the Germans in 1940, but there were a number of Free French units formed that served with the British even before the US had entered the War. The only true Free French units in the game are those that served with the British 8th Army which had marched, or driven, across North Africa in pursuit of the remains of the Deutsche Afrika Korps (DAK).
They are the Vichy units that came over to the US in Northwest Africa and share the same nation color with the Free French but they are very different in their politics. These Allied French were referred to as “Darlan French” after their leader Admiral François Darlan, as opposed to the Free French who looked to Charles de Gaulle as their leader. Darlan French were Pro American and didn’t care for the British. Finally, there is the French unit known as the Corps Franc d’Africa that was organized by the British in Northwest Africa, and it was neither Free French nor not Darlan. These units equipped by the British and were very different from the US re-equipped Vichy units. So in game terms we made these units as “Commonwealth”, so they would stand out on the map as different from the ex-Vichy Darlan French units. This too is not technically correct, but the Corps Franc does not serve near any Australian and New Zealand units so we felt this was a better way to distinguish them among all the Allied units on the map.

Many of the French units which joined the Allies after the Torch Landings were of dubious quality and value as fighting units. Some units did see action at various places during the campaign and none really gave a good account for themselves. In fairness to the soldiers, they were ill equipped and poorly trained. Clearly from my reading, the Allied Command did not consider these troops to be very reliable. Therefore in many of the scenarios there may have been more French units in the area, but like any of formation of little combat value, such as rear echelon units, these units are not placed in the game as players tend to find additional purposes anything at their disposal. Below follows Mike Avanzini’s detailed Order of Battles Notes.

**Order-of-Battle Detailed Notes**

As with the start of any OOB creation a good primary source was needed. For this we turned to fellow designer Wig Graves and asked him for any information as he had previously worked on the “Total War in Europe’s, War on the Southern Front” game. I received a package in the mail containing some outstanding primary source material in German and Italian, which was used in the creation of the order of battle included in the game.

**The Early OOB – Axis Units:**

In reaction to the Allied “Operation Torch” landings in North Africa, the Axis command starting shipping ground troops to Tunisia. Among the first German troops shipped were the 10th Panzer Division, 2 battalions of the FI-Regt.5, the Barenthin FI-Regt, FJ Pioneer-Btl.11, 2 companies of the sPz-Abt.501 (Tiger battalion) and 4 Marsch Battalions (Feld-Ersatz or replacement battalions), designated T2 (Tunis) to T5. The Italians sent the 1 Superga Division and the 50 Special Brigade Imperiali (L Brigata Speciale Imperiali), along with the 2 battalions of the San Marco Regiment of marines. These units started arriving in Tunisia in mid-November under LXXXX.AK commanded by General Walther Nehring. On the 8 December 1942, this command was re-designated PzAOK.5 (5th Panzer Army) and the command was taken over by Generaloberst (Colonel General) Hans-Jurgen von Arnim.

Two main sources were used to create the Axis OOB. First source was the German captured records at the National Archives. I used data from Series T-313, Roll 417, featuring kriegsgliederungen (OOB Charts) for both LXXXX.AK and PzAOK.5 with dates from Nov 1942 to March 1943. The second source was two volumes of the Italian Official WWII history, “Le Operazioni Italo-Tedesche in Tunisia”. Volume 1 deals
with the 1st Italian Army, Formally the “Deutsch-Italian Panzer Armee”, while Volume 2 covers the Italian XXX Corpo (Corp) attached to PzAOK.5. These volumes contain OOB charts for 1st Italian Army for the battles at the Mareth line and a great listing of all units attached to the XXX Corps. See the attached bibliography for full information on these sources.

PzAOK.5 was divided into divisions and abschnitts (or Districts). I used two Kriegsgliederung dated 17.11.42 and 16.12.42 for the Early Axis OOB.

German units in the early OOB include

- 10th Panzer-Division commanded by Gen Lt Wolfgang Fischer. This division had been rebuilding in France since April of 1942 after spending almost a year on the Russian front. Most of the unit arrived in mid-November with a few companies of the support units and most of the artillery regiment missing. During the battles in northern Tunisia in late November to the end of December, the division had several units attached to it including the Fallschirmjaeger Regiment 5, and the Schwere (Heavy) Panzer Abt.501 featuring the first Tiger tanks in North Africa.

- Division v. Broich, named after its command Oberst (Colonel) Friedrich Freiherr von Broich. This division was just a Stab (HQ) unit in which various ad hoc battalions were attached. On February 17, 1943 when General Fischer was killed during 10th Panzer’s attack on Faid, Oberst Broich took over command of the 10th Panzer and Oberst Hasso von Manteuffel was given command of this unit and it was renamed Division v Manteuffel.

- Fallschirmjaeger Regiment Barenthin consisting of 2 battalions of FJs and 1 PAK (Antitank) battalion. The regiment was made up of staff and pupils of the Luftwaffe parachute schools.

- Fallschirmjaeger-Regiment 5 consisting of the I./ and III./ battalions, (II./FJ-Regt. 5 was part of the Ramcke Bde) under Lt Col Koch. This unit fought under 10th Panzer-Division during the November and December battles, and then became the I./ and II./ battalions of Jäger-Regiment.HG under Kampfgruppe Schmid. This unit was given a “B” quality rating.

- Marsch or Feldersatz Battalions (these were replacement battalions) were created from penal units and replacements. There were two type of battalions designated “T” for Tunis and “A” for Afrika. These units were about average in morale and we applied a “C” quality rating. The units were designated T1, T3, T4, and T5 were the Tunis battalions, and M(A)22, M(A)24, M(A)25, M(A)26, M(A)27, M(A)28, M(A)30, M(A)33, and M(A)34 were the Afrika battalions.

- Schwere Panzer-Abt.501, The first company arrived on 23 Nov 1942 with 3 Tigers and 4 PzIIINs. For the first two weeks fought as Kampfgruppe Lueder, named after the battalion commander. By December 9th, the 2nd company arrived but the unit did not have more the 12 Tigers and 16 PzIIINs until January 1943.
Division Supegra, commanded by Generale di Divisione Lorenzelli, consisting of the 1\(^{st}\) and 3\(^{rd}\) battalions of the 92\(^{a}\) Reggimento Fanteria (infantry regt.) and the 3\(^{rd}\) battalion of the 91\(^{a}\) Reggimento Fanteria, along with the 5\(^{a}\) Regg Artiglieria (artillery regt.) in support.

- Various small support truppen including a battalion of z.b.V. Brandenburgers

Quality ratings for the various Axis units go from “A” to “C” for the German units, and from “B” to “D” for the Italian units. You will not find many “A” units as most Axis units where sent to Tunisia in reaction to the Allied landings and where taken from refitting and replacement units.

The Early OOB – Allied Units:
The Allied army that was pushing toward Tunisia was under the command of the British 1\(^{st}\) Army, commanded by Lt. General K. Anderson. The British 78\(^{th}\) Infantry Division along with the US 1\(^{st}\) Armored division made up most of this initial thrust.

Most of these units are rated “C” and “D” for their lack of combat experience. The US forces where practically of poor initial quality. The British had some experienced commando and parachute units that participated and these where of a much better quality.

In addition the former French Vichy units now attached to the Allies where the CSST, or Command Troop Tunisie, commanded by Gen Barrie. These units where poorly armed and very low in moral and are rated “E” quality in most cases.

The US 1\(^{st}\) Armored Division, in spite of protest from the division commander Major General O. Ward, was broken up into small groups and fought dispersed. It was the start of some very hard lessons the division learned while fighting. In fact, elements of US 1\(^{st}\) Armored Division served under British command in “Blade Force”, a task force created largely from the British 78\(^{th}\) Infantry Division.

The Middle OOB – Axis Units:
For the middle Axis OOB, I used a KGL dated March 4\(^{th}\) 1943. Although this is after the Kasserine battles, I was able to use this and interpolate using accounts of the battle to more or less accurately depict the Axis force. Axis Units have varying quality from “A” to “D” depict the wide range of units sent to Tunisia. You can see looking through the OOB that this was truly an ad hoc arrangement of units, with only a few divisions mostly intact. A summary of the Axis units during this middle period are...
Abschnitt Nord located near Bizerta, and commanded by Gen Maj von Ballerstedt. This district consisted of parts of the Reggimento Marinai “San Marco” (Regiment of marines) with two battalions detached to other areas. It also contained parts of the Marsch Btl T4. Also under its command were the Marine batteries captured by the Germans and controlled by Abschnitt Nord. These old French batteries meant to protect the ports of Tunis and Bizerte from attack by sea. We included the units in the End in Africa scenarios for color only as we had information on the number and size of the guns. Obviously with the guns facing toward to sea, and stationary, they are of no use for defense in the game.

- Kampfgruppe Schmid, The Herman Goring Division, commanded by Gen Maj Schmid. This unit consisted of the Jäger-Regt-HG, which was formally FJ-Regt.5, and the Grenadier-Regt-HG, along with a Marsch Btl A24, Aufk-Abt, Flak-Regt-HG, Pioneer Btl-HG and some artillery support. This unit was stationed south of the 334th Infanterie-Div.

- Division v. Manteuffel, formally Div v. Broich, now contained The Bareth FJ Regt (mot), FJ Pioneer Btl.11, Marsch Btls T3 and A30, 10" Bersaglieri Reggio, and various artillery and flak support units. This division was covering the extreme north of the German/Italian front.

Figure 1 Sample of Pz.A.A.K.5 – Div. v. Manteuffel
• 334th InfanterieDiv, commanded by Gen. Lt Weber. This division consisted of two grenadier-regiments and one gebrigs-jäger, along with the standard artillery regiment, schnelle and pioneer btl's. The unit was placed south of Division v. Manteuffel and in front of the City of Tunis.

• The Italian XXX Corp D'Armata (30 Corps) commanded by Gen d’Corpo Sogno consisted of various German and Italian units listed below.
  
  o Abschnitt Tunis (German), station in Tunis, consisted of the German Grenadier-Regiment 160, and various batteries.
  
  o Abschnitt Benigni (Italian) with the 1st battalion, 91st Reggimento Fanteria, and the Gardo Marine battalion from the Reggimento Marini “San Marco”, Marsch Btl A28, XXIV Bersaglieri Btg, A Bersaglieri MG Btg, and various Italian artillery and flak units.
  
  o Abschnitt Buhse (German), with the Grenadier-Regiment 47 (mot), Marsch Btl A27, and the 2nd Battalion of the 91st Reggimento Fanteria, and also various artillery support.
  
  o 50ª Brigata Speciale (Imperial), with the reggimento “Leguio” which consisted of various Italian units including, Lodi Btg, V/CNN Btg, 2nd Battalion 92nd Reggimento Fanteria, and some Bersaglieri companies. The XV-XVII Armored Btg, Nizza Cavalleria Armored Car Btg, DLVII Semoventi Groppo, and various artillery and flak support.

• 1ª Divisione Superga, commanded by Gen d'Divizionne Gelich, consisting of the 1st and 2nd Btgs of the 92nd Reggimento Fanteria, 3rd Btg of the 91st Reggimento Fanteria, Marsch Btl's T5, A22, A25, and A26. Various artillery and Italian armored units were also attached.

• Deutsch-Arabischen Truppen (KODAT), were a volunteer unit formed in 1941 from Arabs in Iraq, Syria and other Arab countries. They were sent to the Russian front in the late summer of 1942 and where briefly fought in the Caucasus’s under 1.PzAOK. With the Allied landings in North Africa it was decided to send the unit to Tunisia and collect more volunteer to fight the Allies. This unit consisted of two Tunisian Btl's, one Algerian Btl, and one Moroccan Btl. For further information on this unit see http://allworldwars.com/German-Exploitation-of-Arab-Nationalist-Movements-in-World-War-II.html

• Phalange Africaine was a unit of made up of French Volunteer meant to defend Vichy France and its colonial territories.

• 10th Panzer Division commanded by Gen Lt von Broich, was now a complete unit with all of its sub units attached along with a full complement of tanks. This unit along with the quickly rebuilt 21st Panzer Division was to provide the offensive punch to 5.Pz.A.O.K.
• 21\textsuperscript{st} Panzer Division commanded by Gen Lt Hildebrandt, from the Deutsch-Italian Armeegruppe was made up of a rebuilt PzGr-Regt.104 made up of Marsch Battalions, and a Panzer-Regt.5 made up of 2 replacement panzer battalions. This unit was sent by Rommel from the Deutsch-Italianische Panzer-Armee to help with the defence in case of an Allied drive on Sfax.

• 20\textsuperscript{th} Flak-Division consisting of heavy 8.8cm batteries and light 2cm batteries, providing plenty of defensive punch to the 5.Pz.A.O.K.

The Deutsch-Italianische Panzer-Armee (formally Panzerarmee Afrika) which was renamed on February 19/20 to the 1st Italian Armata (Army). Rommel was to turn over command of the army to the Italian General di Armata Messe on January 23rd but decided to stay in command during the “Kesserine” offensive, Operations “Fruhingswind” and “Morgenluft”.

The army consisted of the Deutsches Afrikakorps and the Italian units that retreated from El Alamein. This force was well depleted from that battle and also from the long retreat from Egypt to Tunisia. The army took up positions in the former French fortified positions called the Mareth Line.
The Middle OOB – Allied Units:
The Allied army in Tunisia was under the command of the British 1st Army, commanded by Lt. General K. Anderson. This army consisted of the British V Corps, which also included the Corps Franc d’Afrique, the Free French units attached to the Allied armies. Also included are the US II Corps, along with the ex-Vichy French units under XIXe Corps, and the Cmd Trp Tunisie.

The quality of this army was below average with the British units at mostly “C” quality, while the US II Corps are mostly “D” quality due to the complete lack of experience of men and officers.

The US 1st Armored Division was mostly split up in four (4) combat units and served all along the front against the wishes of its commander. As a result this division does not have an HQ in the game. Units of the division answer directly to US II Corps HQ as the parent HQ.
The ex-Vichy French forces are mostly of “E” quality as there morale was extremely low having just switch sides and also due to their lack of weapons. The Free French force was given mostly “D” quality as like the US forces they lacked experience.

The British Parachute and Commando units are rated “B” and “A” as being more elite units then the rest of the army.

**The Late OOB – Axis and Allied Units:**

By the late stages of the Tunisian campaign the Allied army, especially the US II Corps, had gained some experience in the German “Kesserine” offensives. By this time the US II Corps units are bumped up to a “C” quality rating. The British 8th Army arrived to take up positions opposite the 1st Italian Armata. At this point from the middle of March through May the Allies take the offensive to drive the Axis units back to Tunis and surrender.

**Campaign Considerations**

Before the first units were ever placed on the map and the first test scenario played we, and a number of our testers, had a series of discussions on the campaign to determine what factors we had to consider as we built the game. Early in this discussion, one of these testers said:

“Mud was a factor immediately. It played an important role throughout the six-month campaign.”

….and our weather table reflects this. In discussions with Ed Williams we established standardized movement cost for terrains for any new series titles and what sorts of penalty would be applied for SOFT ground or MUD. We also used a higher penalty for uphill movement on account of the higher vertical scale represented in the map. That and we didn’t want tank formations climbing mountains like alpine troops to avoid the mountain passes, as this was not possible in the region.

We understand the restricted movement cost slows the play down considerably and we thought this might be a larger issue for previous series fans who zipped around the plains of Russia, or the more low lying areas of Western Europe. However, it turned out when we moved up Kharkov ’43 to the December 2010 release, we had already exposed players to slower movement as the new Kharkov battle was fought in deep snow conditions with severe movement penalties.

We then set about to gather all the references we could as to storms, mud, and heavy rains, so that where possible we followed historical events. Where we had no concrete information we programmed in typical weather for that time of year in Northwest Africa. Weather, in reality, doesn’t affect all areas on a map this size as it does in the game so the model doesn’t work perfectly. However, in test play it
seemed to work fine. Just expect the movement to be a little reduced when compared to earlier titles in the series.

Another play tester comment was:

“At times the action was hot and heavy day after day; at others both sides were resting and building up forces and supplies. This will be difficult to simulate with our game turn system without having an awful lot of turns.”

.....indeed he was right!

Most Panzer Campaigns titles have ten turns per day, usually with 8 turns of day at two hours per turn, followed by two 4 hour night turns.

To compress the number of turns of a longer scenario lasting several days, while still honouring the scale the series was designed around, we adopted a longer 6 hour night turn with the normal 2 hour day turns thus reducing the number of turns from normal Panzer Campaigns titles by 20%.

We consulted this website for time:
Sunrise and sunset in Tunis

…and while historical values were not available for 1943, we could certainly see that in the middle period of the Tunisia fighting, sunrise was a little after 7am and sunset closer to 6pm. But it is not pitch dark at sunset, nor is there instant light at sunrise.

So we felt the time parameters we had selected that gave us six 2 hour day turns, at 8am, 10am, 12 noon, 2pm, 4pm, and 6pm (allowing for twilight) followed by two night turns 6 hours long, at 8pm and 2am was a perfect compromise. This longer night turn also helped a point that we had discussed; that players we able to press their units too hard and far, accomplishing too much, during night turns in previous titles. Less night turns gave them less time to do this. Thus the changed worked all around.

Handling the Air War

One of the issues that I learned while working on Panzer Campaigns #8 – Sicily ’43, was that if you included every air unit in the game OOB to be available, and gave them to the theatre ground commander for close air support, as the game does, it would give you far greater control over the air than any general in World War II ever had. So you will find that every air unit which served in the theatre is not included in the OOB.

In reading the official US ARMY Histories (people call these “The Green Books”) I discovered this reference which summed things up nicely.
"Finally, air-ground co-ordination was still far below expectation. The Axis dominance in the air was so great that it was fruitless to train (front line units) in aircraft identification because up front men learned to never fire at an aircraft from the ground for fear of drawing fire unless of course they we fired on first. Air Reconnaissance had given too little help to forward elements. Air bombing missions were executed too slowly to influence most current battle situations. Tactical air support was still in short supply."

Further research led me to some interesting reference on US Army Air Force website.

This led to the idea that the best way to represent much of the air component in the game, at least for the Allies, was to include values in the parameter table which leads to air effects as mainly Interdiction and suppression of Axis air missions vs. direct ground support missions.

The point is, as the OOB has been set up, you are the ground commander and you don’t have control of all the aircraft in theatre. And even if you did, the air to ground co-ordination just didn’t exist to use it properly.

Another factor which impacted the air values and presence or absence of available air missions to each side in the scenarios is the geography and the impact on weather. The German and Italian air bases were in the coastal plains of the central Mediterranean where much better conditions existed for putting the aircraft in the air in the first place. Secondly, the Axis air units were much closer to their targets allowing for fewer planes to fly more sorties. The Allied air bases were in the mountains where the bases were more easily socked in by weather, and they had to fly longer distances to reach the battle field. Finally, even though the Germans supply was impacted by sea interdiction, the Allied supply lines were long and based on very poor roads, and rails, over hard country. These are the factors considered when the vastly superior Allied air forces were minimized in numbers of direct game ground support units in favour of effect by game air values in the game parameters.

Finally, the last note regarding the air war in Panzer Campaigns in general is a rule change affecting air Interdiction. During the early stages of game development, especially when we take an engine to a different theatre, we set up test shots, test movements, and such, to get the feel right before any playable scenarios are created. During this stage we noticed that more often than we liked, a weak interdiction strike would cause the unit’s movement to stop, but after the attack the unit would carry on again as if nothing happened. But in reality, when a column is attacked, vehicles take evasions action and the column has to reform before it is ready to move again.

We discussed this effect with John Tiller and asked that we at least see a greater chance of disruption. The programming change that resulted from this was a doubling of the chance of disruption. Also, any units affected by an air interdiction attack will suffer a loss of up to half the movement allowance. This is a much more realistic air interdiction affect; one which has now begun to makes its way into older titles of the series. It is also an example of John Tiller’s “elegantly simply” programming – something the game engine takes care of, automatically and realistically, without complicating the games interface and burdening the player in detail.
Additional New Rules Change

As previously mentioned, in late in 2010, the release order for new Panzer Campaigns titles was changed. Tunisia was put on the backburner while Kharkov ‘43 was polished up for completion. With this, Kharkov actually had several new rules changes, created for Tunis ‘43 which were actually released earlier. These changes have already been incorporated into some previous Panzer Campaigns titles that have been upgraded since December 2010. I felt it might be interesting to explain how these rules came about.

First of all, through monitoring various discussion forums, I have been made aware that players have long wanted the ability to create “Hard Forts” during the game. That is, they felt that improved positions and trenches were not enough; they wanted to build their own bunkers. At a time when this was a hot topic of discussion on the public forums, we, on the design side of Panzer Campaigns series, were looking into this longer Tunisia campaign period. Having not yet determined that the period would be divided into three parts, we had to provide a way for the Axis to slow down the Allied advance in rough mountain passes. The idea was to allow engineers to lay mines more readily, and to create bunkers to fortify the passes. This would satisfy player demand as well as potentially help us with this longer campaign period.

We had previously added the ability for engineer units to lay mines but it was dependent upon the standard “digging in value” parameter. That is, engineers could lay mines at half the percentage value of the default digging value. So if you wanted more mines, you were also making it a lot easier for units to dig improved positions and trenches. For Tunisia we had created a separate value for laying mines and a new parameter for bunker building. Bunkers can only be built by engineer units in a hex location that contains a trench in the hex before there is a chance that a bunker will be built. For this to occur the Engineer in the trench hex just continues to “Dig-In”.

Don’t expect a lot of bunkers to suddenly start popping up in games. After a great deal of testing various values, and with an additional programing change to allow decimal values, the default bunker building value was set at 1.5%. With this bunker building value, there is roughly a 50% chance of a hard fort “Bunker” being created in 3-4 days of game turns (at 8 turns per day). Tests with the value set much higher just resulted in too many bunkers showing up all over the map.

Another long outstanding item in the series has been player concerns with the survivability of AT guns. The issue, as explained by players, was that the guns near the front line could not survive going into travel mode because they were vulnerable to the A/I controlled opportunity fire. The request was for a special movement rule for AT Guns to be able to move one hex without being put into travel mode. John Tiller’s approach to correcting the issue was to program the A/I to not fire at the AT Gun when it changes in travel mode, as long as the unit has not expended any movement points prior to that change.
Public discussion forums are not the only place where good ideas are born. Three times over the last 7 years we have held weekend gaming events, we call them “Tillercon”. The last one was held in Nashville, Tennessee. At that event we discussed various challenges we face in making new titles. One of these is making a game that offers challenge for veterans while not making the game more difficult than necessary for new players. My partner, Blackie raised the point that these veterans were experts at knowing exactly how much fire to direct at a key defensive hex, waiting to get a disruption result before launching the assault.

To offer more challenge, and to make the task of the attacker harder, an optional rule was proposed. It is called “Delayed Reporting of Enemy Disruption”. What this does in game terms is suppress the disruption result during the phasing players turn. With this rule in effect, the player whose turn it is, will not know when, or even if, the defender has disrupted, thus forcing him to decide when to assault a unit that he has been targeting. Of course an alternate approach might be to wait until the next turn to see if the enemy units in the target hex have disrupted. If they do this, it will take longer to press home the perfect attack and it gives the defender a chance to recover from disruption, especially if the troops involved are higher quality. It also gives the defender a chance to move up reserves. The effect was exactly what we wanted.

Another neat improvement we made to the game engine for Tunisia was night fatigue. The original idea for this came from Brian Bedford – aka Dog Soldier at the Blitzkrieg Wargaming Club.

Brian suggested that players pushed their troop’s too hard, right through the night, 24/7, and that even with additional fatigue being applied for movement; the penalty wasn’t enough of a deterrent. The original idea was that any movement at night would be subjected to a chance of disruption, unless such movement was done by units in travel mode. John Tiller felt if this was coded as requested, it would just lead to all units moving in travel mode, stumbling around at night. The more I thought about it, the more I agreed with John. The idea, as proposed, needed to be revised. What we settled on was a chance of disruption for any night movement which was not in travel mode and using road movement.

No sooner did we agree with this, and put it in place, that we ran into a problem. We were re-testing a scenario where the Germans used night movement to take advantage of the Allies. Here the panzers and grenadiers moved up at night to strike in the early dawn hours. But our carefully crafted idea for a new rule broke down. The scenario was Sidi Bou Zid and as soon as the Germans began to move up in the night, the disruption was throwing the attack into disarray. It was pretty discouraging really as there were a lot of good minds discussing this night fatigue idea and we were very happy with the design concept.

We discussed the findings some more and settled on a modification to corrected the situation. We had John Tiller apply a quality modifier to the chance of disruption. This was an elegant solution not only for the higher quality German panzers at Sidi Bou Zid, but also for US Ranger troops who also were very well trained and also could performed night marches without disruption. The net effect is there will still be a chance for any unit moving in deployed mode (not travel mode on roads), to disrupt. But for the better quality units, there is less chance for disruptions to occur.
Finally, and again as a result of the testing done using the Sidi Bou Zid scenario, we added a parameter value for “Quality Fire Modifier” for A and B quality units. Simply put, in this test battle we had well documented combat results, generally for tank vs. tank action. We had game hard attack values that Panzer Campaigns players were very comfortable with and that we didn’t want to adjust. Yet without a modifier included, the game would not match the historical results we knew to true, without this modifier.

Summary

Well there you have it, our version of the battles and events in Tunisia, as accurately portrayed as possible. Here you have a huge map covering all of Tunisia and we feel the OOB is the most accurate ever done, giving the resources for the scenario designers among you to make, or revise, any battle from this period. We have presented the three periods of battle, with different OOBs reflecting changes in TO&E. These are set around logical changes in the campaign initiative, and removes turn after turn of inactivity in the longer period where little happened and both sides regrouped and built up their supplies over long, and often, arduous routes.

The game was a very long time coming, for a title often requested by fans of the series. We hope these notes, with their insight on playtester feedback in very early development stages, explains how this game was developed and perhaps a little of why it took so long to be completed.

We really hope people will experiment with the new rules, particularly the “Delayed Disruption Rule” which while taking away control for the phasing side, adds a great deal to the realism. This can be seen as a huge playing field leveller for a series where the attacker is often perceived as having the advantage. It will certainly make play more difficult for the attacker and therefore make play against the AI more challenging.

We do hope you all enjoy this title which we at John Tiller Software have created. THANK YOU to all those who helped us bring it to you!

Suggested Historical Reading

Books:

Over the course of making this game there was a lot of references used. Below follows a reading list this Historical reading list s that purchased and used throughout the creation of Tunisia ‘43:

An Army at Dawn: The War in North Africa, 1942-1943, Volume One of the Liberation Trilogy

http://www.amazon.com/Army-Dawn-1942-1943-Liberation-Trilogy/dp/0805087249/ref=sr_1_1?ie=UTF8&qid=1297910909&sr=8-1
Bloody Road To Tunis: Destruction of the Axis Forces in North Africa, November 1942-May 1943

http://www.amazon.com/Bloody-Road-Tunis-Destruction-
November/dp/1853674451/ref=sr_1_1?ie=UTF8&s=books&qid=1297910983&sr=1-1

Kasserine Pass

http://www.amazon.com/Kasserine-Pass-Martin-
Blumenson/dp/0815410999/ref=sr_1_1?s=books&ie=UTF8&qid=1297911241&sr=1-1

Meeting the Fox: The Allied Invasion of Africa, from Operation Torch to Kasserine Pass to Victory in Tunisia

http://www.amazon.com/Meeting-Fox-Invasion-Operation-
Kasserine/dp/0471414298/ref=pd_rhf_shvl_1

Primary Web Sources

Here are a few Websites that we found useful if you care to read about the campaign on line:

United States Army in World War II - Mediterranean Theater of Operations

http://www.ibiblio.org/hyperwar/USA/USA-MTO-NWA/

Kasserine Pass Battles - Staff Ride Background Materials

http://www.history.army.mil/books/Staff-Rides/kasserine/kasserine.htm

Tunisia – The US Army Campaign in World War II

http://www.history.army.mil/brochures/tunisia/tunisia.htm
Other References Used


