CROSS OF IRON: A Review by Lorrin Bird

After wading through the infantry-oriented scenarios of *Squad Leader*, where the occasional rare appearance of one of the really bland and nondescript tank types was widely cherished, the first *Squad Leader* gamette, *Cross of Iron* (a particularly catchy title in view of the book/movie's great popularity, but don't look for Sgt. Steiner 'cause he ain't there), has changed the value of the game system immensely. Now, instead of being a good infantry game, particularly with regard to support weapons and leadership effects, the system represents one of the best combined arms representations available from either a boardgame or miniatures approach.

Since the armor rules of *COI* have undergone the most extensive revamping - and for us armor buffs they're what we've been waiting for with sweaty palms for months - they'll be reviewed first.

In comparison with the *SL* system, the new game mechanics for tanks are both terribly involved and interesting, since the degree of tank trivia has both exceeded the infantry and approached a level that only *Tractics*, has previously attempted in the field of miniature armor rules.

The different size tank guns are all included in the game, with major differentiations between short and long barrel versions of the same weapon, and the To Hit and Kill charts now have modifiers to account for the accuracy and penetration versus range considerations that are dependent on gun type and that were glossed over in the *SL* primer. What it amounts to for the *SL* fan, is that now a few more modifiers will have to be thrown in from time to time, but the "highly accurate" Panther gun will now be able to increase its kill prospects at close range to almost a sure kill, while lesser guns don't get as large a bonus (funny that the 50mm short gun is just as accurate as the Panther's 75/70 at any range, but some things don't come out in the wash).

Whereas in *SL* the probability of killing anything frontally was a rather uncertain thing, ranging from a very low probability to a moderately low chance (and leading to exceptionally high levels of player blood pressure and tension), in *COI* all that has changed. From the absurdly useless (against any tank with speakable armor) derringer of the PzKw 38t (and one wonders how the French with Char tanks could have succumbed to that gnat) to the tanker's nightmare, the Soviet 100mm battering ram carried by the SU 100, the kill abilities are now closely tied in with the tank that's firing, as well as the target and the myriad of little things that the modifiers take care of.

The armor ratings are also changed considerably, with some tanks getting negative armor modifiers (BT7s, Marders and Mark Is), and the big boys really adding on to the dice roll (+3 for Panthers, +2 for Tigers and the other heavies). The end result of the armor/gun revisions is to really sock it to the Soviets when a Panther hits the hexes, since just about anything the Russkies can field is useless against the hulldown Panther (only German tanks can go hulldown on hill hexes, a la *Arab-Israeli Wars*, which

throws the armor battles towards the panzer guys if they can control the high terrain).

Rounding out the new rules, movable turrets (which unfortunately are either Mark IV or JSI-KV 85) are provided so that the covered arc can be shifted without having to pick up the tank and cart it around (too bad none are available for *Tobruk*), tanks can use intensive fire to up their rate of fire with increased breakdown chances, and tankers may now use overdrive to exceed the maximum/normal allowable speeds, risking a track throw in the bargain.

The intensive fire rule is an interesting innovation of sorts, since it bridges a current gap in miniature thinking where either one shot or a plethora of rounds is permitted during a turn. It would seem that due to environmental restraints (the tight confines of a turret), realistic aiming problems due to dust and target motion and possible ammo conservation where 20 shots couldn't be made every minute turn after turn, that gunners would normally try for the one good shot. On occasion, however, gun crews might have to really put out the lead to stop someone and gain a higher than normal ROF.

In *COI*, everybody except the really slow-firing Soviet and German heavies (JS II and JgPz VI) can try to force the gun to outdo its usual performance, but once again, the breakdown probabilities go up as the prospects for ammo depletion or a jammed breech or whatever are increased. It's also interesting to note that due to ROF, where it takes a few seconds to reload and 5 shots can't be made at a target in one hex (think about that, *Tobruk* and *Tractics* fans), targets have to move a certain number of hexes/percent of movement rate before you can bingo them with your extra shots (intensive fire or normal bonus). It looks like *COI* has equaled Einstein in its study of time and space and (wargame) relativity, and has prepared one of the most comprehensive and reasonable studies of armored warfare for us thankful wargamers.

To further overload the poor wargamer's memory with rules to be remembered, a few other niceties have been thrown in. After hitting and penetrating a vehicle, one gets to roll for a "brew up" (internal explosion that tears things apart, like when your spouse prepares an unusually bad pot of coffee or chili), which automatically prevents the crew from surviving and fires the imagination with visions of Mark IVs lying in the desert with an appearance much like what's left of your son's twenty dollar birthday present one month later. As someone noted to me recently, with all the auxiliary dice rolls the name of the game could have been "Dice of Iron" (in the tradition of that other classic wrist wringer, Dice At Sea/WAS).

Finally, not to forget the classic story of Michael Wittmann; whose Tiger single-handedly destroyed 36-or-so British vehicles on one outing, there are panzer leaders whose great ability at working their crew earns them an improved gun accuracy (how come the Russian leaders don't detract from the accuracy?). In the "Paw of the Tiger" scenario, Hans Bolter, through outstanding leadership, allows his Tiger to cut up the Slavs at unbelievable range, thereby putting a final touch to the classic confrontation of quality versus quantity. From what I've seen of other wargame rules and players, the normal grass roots armor battle usually consists of Panthers and "easy eight" Shermans running wild in almost flat and clear terrain, trading shots at 5000 to 9000 feet with rather optimistic systems allowing all kinds of gun accuracy and penetrating ability at those distances. Just like a miniature Napoleonic battle, the combat degenerates into massed lines of tanks trading shots until the last AFV goes up in smoke.

In *COI*, despite the glut of tanks one is given in one scenario after another, one is almost forced to use the vehicles in a realistic fashion despite any desires for those favored 10,000' shots by Elefants against T34s (sound familiar?).

With terrain that is broken up with trees, buildings and hills, it is just unfeasible to get in a shot of more than 20 or so hexes (800 meters) without hopping on a hilltop, and how does one put 10 tanks on 7 hilltop hexes, anyway? Despite the armor fans' yearnings for that *Panzer Blitz* board where a two-mile clear LOS can be attained, *COI* forces one to conduct those battles within 500 or so meters (about 12 hexes), which is where most tank combat usually occurred, since T34s weren't (usually, anyway, under normal circumstances) so silly as to approach a Panther in open terrain from far away. Instead they would hide and let the panzers approach them at close range.

Infantry also changes the nature of things quite a bit. With panzerfausts, panzerschrecks, antitank mines and other goodies (including the 88mm ATG from our *Panzer Leader* days), tanks in congested countryside (which is every board in *COI*) just can't run roughshod over everybody and everything. When fighting in the kind of landscape that the *COI* boards represent (the new board is almost all forest, with a one hex wide road through the woods that would make Rommel curl his brow), a combined arms approach with plenty of infantry and support gadgetry is an absolute necessity, since a shortage of infantry can counteract superiority in tanks, even with Stukas.

Before proceeding to the infantry rules, which while being new and improved take second place to the chariots of war, a few other notes on *COI* are worth making.

When the typical armor miniatures system is prepared, and especially when the mechanics use comparisons of dice rolls for combat resolution, there are bound to be a few areas where the system just doesn't work due to the shortage of possible dice roll results and values that can be given to the unit capabilities and various modifiers. The end result is that the capabilities of one unit can be greatly exaggerated or underestimated, while the majority of the combat is perfectly reasonable.

During the struggle on the Eastern Front, the T34/76 tank had shocked the daylights out of the panzers since the best gun they had at the time was the 50mm short with APBC ammo, which was unable to effectively deal with the sloped armor of the Soviet tank. The German reaction to the T34 was to design and manufacture the Tiger I, which had 100mm of frontal armor and a gun far superior to anything the Russians could muster up for another 2 years. With its thick armor and powerful gun, the plan was to engage the T34s at long range, where their guns were useless against the 4-inch-thick plates, and thereby turn the tide (the Tigers, incidentally, had to rely on long range gun duels since they were poor "rough country" vehicles and could be outmaneuvered by even the raw recruit Soviet crews).

From historical accounts of the Tiger/T34 run-ins, a definite view of the Tiger's supremacy comes to light. Against the Tiger, whose crews were taught to approach the enemy at an angle in order to increase the effective thickness of their armor, the 76.2mm gun was woefully inadequate, and even the longer barreled version couldn't pierce the 100mm plating (which was welded in a superior fashion) at point blank range. The only record of common defeats of Tigers by T34s was at Kursk, where the Soviets successfully got to within point blank range and penetrated the flank armor (which was only 80mm). Other than a rare ring or vision slot hit, the 76.2mm gun was virtually useless.

In *COI* however, a slightly different picture appears, since the short-barreled 76.2mm weapon can kill a Tiger at 960 meters 17% of the hits; with the longer barreled gun doing it 28% of the time. While the percentages might look low, with intensive fire taken into account and the fairly good accuracy of even Russian gunners up to 24 hexes (57% hit probability against stationary target), it seems that the Russians have been given a big chance in the game to improve upon their historical abilities.

In addition to the above, the 75mm "regular" gun (which I'd assume is what the Sherman M4/75 will carry in later gamettes) also has a 17% kill probability against Tigers out to 960 meters, which is really interesting since during the Normandy battles the Shermans rarely ever even got a flank kill against the PzKw Vla, and it required the upgunned "easy eights" and Fireflies to deal effectively with the Tigers.

A rather common error in miniatures design, which may have crept into *COI*, is to confuse the T34/76 tank gun with the ATG version of the same 76.2mm gun, which was so good the Germans used the captured models on the Marder II and as an ATG. Due to its longer barrel and baffle plates, as well as other items that couldn't be added to a gun hemmed up in a turret, the 76.2mmL/54 packed considerably more wallop and could kill Tigers with a good probability of success.

While it may appear to be a technical point, or nitpicking at its worst, the ability of the T34/76 in *COI* is a major variation from all other major miniatures rules, where the 76.2mm tank gun hardly ever got any kill on the front (and occasionally the sides) of a Tiger, and those kills were few and far between. To compound matters, even with the "shot trap" characteristics of the early Panthers, the long barrel T34/76 gun can affect a kill 17% of the hits, which boggles the mind since the Panther armor even at the "thinnest" parts was considerably thicker than the Tiger, and over 110mm thick.

While the use of the 75 "regular" gun column for the Sherman tank can only be surmised at this point, it does bring up a number of points regarding the balance of military power during the North African campaign.

At the end of the El Alamein battle, the best German tank was the Mark IVf2, which carried the 75mmL/43 gun. On the Commonwealth side the Shermans and Grants had the U.S. 75mmL/40s, along with a growing number of 6-pounders as the Germans were backed up into Tunisia.

Based on the data in *COI*, it would appear that the Sherman and Mark IV guns were roughly equivalent, and with about the same armor (the Sherman's tendency to explode canceled any thickness advantages it might have had) the numerical advantage of the English would eventually prevail in any face-to-face confrontation with the panzers. Taken in that light, the ability of the Germans (and whatever Italians were still unsurrendered) to escape encirclement and annihilation must be due solely to their skill and superiority, along with Montgomery's timidity.

The WRG rules for WWII combat, however, grant the German gun a major advantage in penetration capability at over 1000 meters that can turn the tide in miniatures games. Given a wide-open battlefield, which the desert often presented, the panzers could (in the absence of Lancasters and Hurricanes, at any rate) hit the Shermans before they closed to within their effective range and then either withdraw or sortie out against the weakened foe (*Brew Up* also puts a high velocity gun on the Mark IVf2, with devastating results).

While the ability to hit a moving target in the desert around mid-day or so is a vital question that may have made the preceding discussion an exercise in academic make-believe, it's still a peculiar curiosity to see how differently tank guns can be simulated in two different gaming systems. It also points out how one might expect things such as the 76.2mm Russian tank gun to fare from one game to the next, depending on the designer's appreciation of the ballistic shape of the shell, whether it was capped and was high quality metal (this goes for armor, too), what the muzzle velocity equaled and a host of other little bits of trivia that can significantly affect what the shell can do at a given range.

It would appear, based on the preceding, that John Hill and friends have a rather exaggerated view of the T34 gun effectiveness (in Hill's armor rules that were recently published in another wargaming magazine, the T34/76 (either version) could kill a Tiger over 30% of the hits, which is going a bit far), and that for at least the interest of us armor buffs perhaps some clarification is necessary (despite the seeming similarity of 75mmL/48 and 76.2mmL/41.5 guns, the 76.2mm weapon was markedly inferior against good armor).

It's also interesting to note that the rules do not differentiate between APBC and APCR ammo for the Mark III tanks in the game. After the rather harsh treatment that the panzers took at the hands of the T34s they encountered in 1941, efforts to upgun the AFVs armed with 50mm shorts were taken, and the long 50mm weapon and APCR ammo were the results (in addition to the design of the Tiger).

Due to the higher speed of APCR shot over the regular APBC (a 50mm long with APCR could throw out shells at a higher velocity than even the 88mm ATG), the shells could penetrate more armor although the accuracy of the shell and its penetration/range relationship suffered. While the material needed to put together AP40 was in short supply and the shells weren't in readily available quantities, they were used rather successfully in North Africa and Russia to enable the 50mm gun to improve its performance against thicker armored targets, and

they filled the gap until the longer barreled 75mm guns could be distributed.

Since the *COI* tables only give one set of data for the kill characteristics of the 50mm guns, it might be very interesting to see some values for the effects of AP40 with regard to the impact it had on Mark III/T34 engagements (the Mark III, odd as it may seem, was the main German battle tank until well into 1942, and in 1943 it formed an integral part of Tiger units).

After picking on the rules for their treatment of T34s (I shouldn't complain since I normally play the Russians), we pass along to the infantry system which has been expanded to incorporate a world of things you always dreamed of but thought beyond the capabilities of the usual wargame designer.

The infantry treatment in *COI* now includes partisans, SS troopers, cavalry, snipers (so you can really get into those Stalingrad street slaughters from upstairs windows, and in preparation for the Japanese gamette, where they'll presumably have palm trees to hide in), German allies (Rumanians, Italians, and Hungarians - except that the Hun in them seems to have become sublimated over the past 1000 years or so), and the typically inferior conscript types (Volks Grenadiers, Russian peons, and American "bottom of the draft lottery barrel" scrubinos) with which to populate the ranks of your soon-to-bedecimated force.

The SS men, contrary to what might be thought, don't get morale checks with 10 as the base number (the Canadians outfought them many times, and German propaganda seems to have played on our minds). Although they are given a morale value of 8, like the Americans they bounce back rather quickly, which is explained in the rulebook as a combination of superior elan and the knowledge of how the Russians usually treat SS types they take prisoner (it was not uncommon for the Russians to herd SS soldiers into a hut, and then set the thing on fire). As is fitting, therefore, SS men can't be taken prisoner (in opposition to the "Allies," whose major activity in *COI* seems to be surrendering to the Russians).

In keeping with the general "evolutionary" design improvements in the SL series, the introduction of the sniper brings a further bit of suspense and drama to the game board. Although their attack factor is a not too impressive "one," which is reasonable for one guy with a scoped rifle, they have a range of eight and an automatic DRM of -3 or -4, which is how they do their dirty work. A factor of one applied to a moving unit with the DRM of -4 gives a KIA probability of 57%, which is really remarkable for the work of one guy.

In reading through Enemy At The Gates, one can really appreciate the impact of the hidden sniper (they are initially placed off board, and even when they fire they're not automatically spotted) since the Russian snipers at Stalingrad were so proficient that in the later stages of the cityfight German soldiers were afraid to took out of their trenches for fear of catching a bullet in the head (the Russians usually aimed for and hit the head). The book, in fact, is filled with descriptions of new line troops filling in at relatively quiet sectors being decimated when they peered over the emplacements to see what was going on blocks away, and were bingoed (the presence of snipers could be discerned by lifting up one's helmet and then waiting for the omnipresent shot - that's why so many Germans wore air conditioned hats).

Even when the "trick shot" artists do their stuff and are put on board, they're still under a concealment marker and benefit from area fire modifiers.

Cavalry, as one might imagine, are the scourge of the steppes and can do a royal job on their slower moving enemies as they ride by and do an "Errol Flynn" routine with their scabbards. It's really amazing to see in one of the *COI* scenarios where a group of Cossacks go after a large group of Germans who are given kubelwagons and other mechanized support to run away with.

In fact, the victory conditions for the cavalry scenario depend on surviving Germans, which conjures up visions of the Cossacks with swords drawn on high chasing down a Kettenkrad filled with panic-stricken troops and slaughtering the whole group in short time (does one form a circle with the wagons under these circumstances, and wait for the SS cavalry to came and save the day?).

While we're on the topic of ambushes (since the American Indian is supposed to have crossed the Bering Straits from Russia, perhaps the Cossacks are a distant relative), the partisans as everybody knows are the aces at it, and can hop out of the woods and overwhelm the Rumanian rear area units in no time flat. Having little to work with in terms of weapons (being given Russian rejects and whatever they could pick up from the surrendering Italian hordes), and a relatively low morale, they have to hit and run since they are one of the specialties of the SS.

During my previous article on *Squad Leader* in Campaign, there was an allusion to the lack of an overall morale system for the game that considered the impact of widespread losses on troop morale. *COI* has neatly solved the issue (at least partly) by having losses reduce unit morale values by one point for losses of certain percentages of the total strength, with tank support and fresh reinforcements raising morale. The abilities of troops to function normally not only extends to what they do after they're fired on, but also during a general slaughter prior to they're being shot at. The system is not perfect but for an introductory gamette is satisfactory (any more detail would probably blow more minds than LSD, and *COI* would become available by prescription only).

The effect of the rules changes on the game is very interesting, and the relationships of one side to the other (Russians versus Germans and their camp followers) swings a bit towards the Wehrmacht as a result.

With a few Panthers and some friendly hilltops, a group of T34s and other tanks can be obliterated before they get a chance to flank the opposition. With panzerschrecks (German bazookas), panzerfausts and SS soldiers (6-5-8) unsupported Russian tanks can be pocketed and destroyed unless they use their speed and mobility very carefully (anti-tank mines are the ultimate in armor "zingers," and demo charges can be thrown at passing vehicles). Also, the Russian tanks now don't have the smoke capability that they could use every so often in SL to reduce the German panzerfaust accuracy (add results of one die roll to firing unit when "smoke gets in their eyes"), and it's

sorely missed (try to sneak in an assault gun in armor "scratch" games just so you can "cloud the issue" on occasion and reduce a sure kill by a Panther to something more to your liking). One of the fascinating aspects of *COI* from a historical perspective is the realization that comes from analyzing the armor with regard to the real abilities of the panzer crews and strategists. The invasion of France had proceeded with tanks that were inferior to the Matildas, Chars and some of the lighter enemy vehicles with regard to armor and firepower (very few 50mm shorts were available in 1940, and Rommel's main battle tank was the Czech PzKw 38!). The panzers' saving grace was their speed and leadership, and the fact that they slaughtered the opposition at Sedan was an event of great skill and technical ability.

In Russia, the panzers came across tanks armed with 45mm guns which were comparable to their 50mm short (and superior to the 20 and 37mm squirt guns that made up a sizable part of their force), vehicles with amazing speed and comparable armor (the BT 7s, and something that came as an absolute surprise (where was German intelligence on this one?), the KV and T34 tanks. Add to that picture the excellent Russian 76.2mm ATG and anti-tank rifles that could wipe out a light tank (Matchbox says the Mark II was "the spearhead of the great German offensives," and they're somewhat correct).

Fortunately for the invasion, the Russian armor appeared in piecemeal packets (shades of France and the Low Countries), and with the aid of Stukas, which can give a light tank a good "ride" and superior mobility, the large Soviet tank park was reduced to rubble (Squadrons' book on Soviet Panzers shows a road lined with groups of upside down tanks, where they ended up after aircraft hit them, and the resulting internal explosions tossed them through the air). The rule in one of the scenarios that limits the movement of the Soviet tanks according to the roll of a die goes a long way towards simulating the rather uncoordinated manner in which the radio-poor tanks operated, and this is something that adds that special flavor to armor miniatures that had previously been lacking (will Polish tanks go backwards on occasion with certain dice rolls?).

Aside from being one of the most playable and comprehensive miniatures games now available, *COI* is also the best source compilation on the tanks of the Eastern Front conflict anywhere, and its publication now enables the trivia-happy gamer to satisfy his hunger for statistics and vehicle comparisons from one neat booklet. For one such as myself who has struggled through the often conflicting and seemingly unreasonable info contained in other rule systems and so called "source documents," the *SL* series of Gamettes looks like the final resolution of the search for decent data (provided they eventually address such important ammo types as APCR and APDS, which helped to increase the effectiveness of normally unspectacular weaponry).

In view of the excellent game system, the generous allotment of data and numbers for trivia freaks (don't forget the chronological info on each tank, now you Germans can't blitz a Nashorn into 1942 scenarios) and the real feel for Eastern Front combat that the game attains (remember to wear gloves during winter scenarios because some gainers have complained of frostbite), *Cross of Iron* has more than lived up to the advanced billing that it received. Given the additional refinements that are sure to follow with *Rising Crescendo* and the other gamettes in the series, we will eventually have the ultimate system for our board and miniatures gaming that will retain a flexibility to be exactly what we want it to be, as long as we're willing to study the system (and put up with its occasional peculiarities).