DESIGN NOTES FOR TED RAICER'S ROYAL TANK CORPS

THE BATTLE

The Battle of Cambrai (20 November-7 December 1917) was the brainchild of Major (later Colonel) J.F.C. Fuller, who had joined Britain's newly formed Royal Tank Corps as a staff officer in late 1916. Tanks had made their combat debut in the waning days of the Somme Offensive, but their numbers had been too few and the terrain unsuitable to have a major impact on the battle. Fuller determined that the next time tanks were used in an attack, they would be deployed in great numbers, and at a carefully selected point.

Cambrai was not intended by Fuller to be a decisive battle. His plans envisioned no more than a massive raid on German lines, in which the Royal Tank Corps, with over 400 machines, would shatter a section of the enemy front, inflict heavy losses, and then halt and dig in. It was to be an experiment that would point the way to a future decisive campaign involving thousands of tanks.

Unfortunately for Fuller, the bloody failure of the British 1917 offensives in Flanders had led the British commander, Douglas Haig, to seek an alternative plan to win the war. Fuller's intended raid was thus converted to yet another attempt to break the trench stalemate and force a passage "to the green fields beyond." But the forces available, under General Julian Byng's Third Army, were insufficient for this ambitious goal.

The initial assault on 20 November achieved considerable success. Dispensing with a prolonged bombardment, the Third Army took the Germans by surprise. Using 324 tanks in the first wave, the Royal Tank Corps flattened the enemy wire and overran major sections of the defender's works. Byng ordered his cavalry divisions to prepare to exploit the breakthrough.

Confused objectives, lack of reserves, and heavy losses among the tanks (mostly due to mechanical breakdown) soon slowed the British advance. By 23 November the high water mark was reached with the capture of Bourlon Ridge. The British had advanced a maximum of five miles on a seven mile front, an impressive result by the standards of 1917, but the Germans were pouring in troops to close the hole torn in their line. On 27 November a local German counterattack recaptured Bourlon Wood. Three days later the Germans launched a major counteroffensive.

Cambrai demonstrated not only the potential of the tank, but the effectiveness of the newly developed German infiltration tactics. Using specially trained Stosstruppen (Shock Troops), these new tactics sought to find or create gaps in the enemy line through which heavily armed infantry squads could infiltrate. These units would then attack and destroy vital points in the defender's rear, over-running artillery, headquarters, and supply depots.

At Cambrai, German Stosstruppen penetrated the British right flank to a depth of three miles. By 2 December the British center and left were in danger of being pinched off by the German counteroffensive, and over the next few days Byng was forced to pull his army back. all the gains of November were abandoned.

The Cambrai offensive was a British defeat. It was also a warning to both sides that the stalemate of the last three years was unlikely to continue in 1918. The British only partly heeded this warning. To counter the Stosstruppen they adapted a policy of "defense in depth" not deep enough to prevent major breakthroughs in the German offensives of the following spring.

The German failure to learn the lessons of Cambrai was to be even greater. Their ultimate success at Cambrai led them to dismiss the value of tanks. Not only did the German army fail to develop its own tank arm, it failed to develop a defensive doctrine capable of dealing with the massed Allied tank attacks of July and August 1918. It would be left to a future generation of German officers to embrace the tank as a decisive new weapon of war.

THE DESIGN

ROYAL TANK CORPS was a happy accident. I had been asked to consider designing a game on the battle of Verdun. The challenge was to provide the vital "illusion of movement" to games dealing with the 1915-17 trench warfare period of the Western Front. I quickly decided that some variation of the area/impulse system would probably work best.

As an experiment to test this hypothesis, I pulled out a copy of the classic old SPI design on the battle of Cambrai, Dave Isby's "To The Green Fields Beyond." Tools of analysis at hand, I set about reviewing Isby's design decisions with their application to area/impulse game in mind. When I was done I had proved

to my satisfaction that I had a good system for simulating WWI battles in mind. More than concluding just an experiment, I also found I had designed an area movement game that worked well in its own right.

Royal Tank Corps is thus built on taking Isby's foundation to another step. His research was sound, which I confirmed with additional research to confirm the accuracy of his work. Players of both games will quickly note the major differences in game systems and overall feel. Though both designs, I believe, do a good job of simulating Cambrai, they do so in nearly opposite ways. To a large extent TTGFB plays like a staff exercise. There is a great deal of pre-planning of barrages and many logistical considerations. RTC dispenses with most of this, factoring it directly into the game mechanics. The result is a view more from the fighting front than GHQ.

The first challenge in designing RTC was the map. The division of the RTC map into areas was not done arbitrarily. Some choices were obvious; the use of trench lines and canals/rivers to determine area borders for example. Others were more subtle; drawing boundaries so that different commands starting on the map set up in different areas. The result is an area map that presents a different picture of the battlefield than a hex version, but is equally realistic in its effects.

In formulating Orders of Battle, I combined Isby's research on unit organization with my own research on the combat ratings of divisional units for my earlier "The Great War in Europe". The decision to (mostly) combine tank companies into tank battalions was dictated by the use of areas instead of hexes, and my desire to eliminate any "fussi-ness" in my design.

Perhaps the single biggest change in RTC from previous area/impulse games is that play no longer automatically alternates one impulse at a time between players. In RTC you don't activate a single area and then pass to your opponent. You can continue activating as long as you have fresh units—or until you lose a combat. This creates a fundamentally different dynamic than previous games.

The reason for this change is the linear nature of WWI battles on the Western Front. Units did not "go over the top" in dribs and drabs. Instead, entire corps would advance together over a broad front. RTC's continuous impulse system allows players to launch proper WWI style attacks. At the same time being forced to pass to the opposing player allows the defender to seize the initiative when the attacker's plans break down. Whether the change in the initiative will prove to be merely local or not depends on both the number of fresh units available, and whether the newly moving player's own plans break down in combat.

Thus the continuous impulse system also rewards the use of reserves. Without fresh units, you cannot react to take advantage of unexpected setbacks to the enemy's plans. RTC is in fact that rare game where many turns will end with both players holding back forces from the battle, rather than be the first player without fresh reserves.

Artillery ammunition is handled in great detail in TTGFB, and indeed much of the "fun" of that design is managing your logistical resources. This is certainly a valid approach, and for some gamers very interesting, but I wanted to brew a different "cuppa tea."

In broad strokes, the shell situation at Cambrai was fairly simple; neither side had enough. The British were short of shells because of the huge expenditures in Flanders that summer and fall. The Germans were short of shells because this was a "quiet" sector of the front and they were taken by surprise. Inevitably, as the battle continued the British munitions shortages worsened, while the that of the Germans somewhat improved. The die roll based system for ammo shortages and resupply represents these historical factors simply but effectively, while at the same time adding an extra element of fog of war.

Fatigue also played a part at Cambrai that needed to be accounted for. Here again the historical dynamic was asymmetrical. Fatigue was a greater problem for the British, as most of their divisions were committed to the battle earlier. Once again the system used in RTC captures this without record keeping, and in a manner that prevents the exact effects of fatigue from being predictable.

The victory conditions in RTC reflect the divided nature of the British plan. The automatic win represents Haig and Byng's hopes for a decisive thrust, allowing the cavalry to break into the German rear, restoring a war of movement. It is unlikely to occur, but the possibility will haunt the German player for the first two or three turns. The geographic victory conditions correspond to Fuller's original conception of the battle as a gigantic raid.