

The Design of Combat Patrol™

One Man's Wargame Development Journey

Part 1

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I have been developing a new skirmish gaming system for three years, posting occasional notes and musings on my blog (www.bucksurdu.com/blog). The rules were recently released under the title **Combat Patrol™**, using the **G.A.M.E.R.™** system. I make the distinction between **Combat Patrol™** the rules and **G.A.M.E.R.™** the engine, because in the future I plan to use the engine for other sets of rules. While **Combat Patrol™** is the skirmish instance of the **G.A.M.E.R.™** system, and **Combat Patrol™: WWII** is specifically the World War II skirmish system, there may be instances of the **G.A.M.E.R.™** system for other scales of wargaming and other historical periods.

Several people have noted that it has been interesting to follow the development of a set of rules from concept to finished product. In this series of postings, I will walk through *my* development process, because it may be of interest to a wider audience. I will not try to recap all the blog postings, but I will provide what I hope are interesting anecdotes about wargame design – and perhaps interest you in a forthcoming game.

Combat Patrol™ is unique...

Combat Patrol™ is a unique design concept for skirmish gaming. No dice are used to resolve combat. Specially printed cards are used to manage the activation sequence as well as all combat results, movement, and morale. (This will be fully explained in a subsequent article.) When a figure fires, the player draws a card and looks at a specific portion of the card to determine whether the shot was a hit. If so, he draws another card to determine which figure was hit, where he was hit, and the severity of the wound. In two card flips you determine whether the shot hit, which soldier was hit, where the soldier was hit, and whether any cover protects him. It is very, very fast, and it involves no chart cards or table lookups and



Figure 1: Dungeons and Dragons represented two different schools of thought regarding the treatment of armor. The approach to armor in D&D is like the approach to cover in 99% of wargames. T&T and G.A.M.E.R.™ represent different approaches to armor and cover, respectively.

very few modifiers.

Cover is treated in a unique way. In the “golden age” when we were kids and had all the time in the world for gaming, after years of playing *Dungeons and Dragons* my club switched to *Tunnels and Trolls*. One reason was the way magic was handled. The other was the way armor was treated. In *D&D*, armor made it harder for you to hit an adversary. In *T&T* when you hit an adversary, his armor absorbs some of the hits, reducing the damage scored on the opponent. Mathematically these two approaches can be made equivalent, but there was something appealing about knowing that you received eight points of damage but your leather jerkin absorbed three of them.

In the **G.A.M.E.R.**TM system, when a figure is hit, the card may include icons that indicate some types of cover, such as woods, a foxhole, or a building. When hit, if a figure is behind cover that matches one of the icons on the card, the figure merely ducks back without being wounded. Cover matters, but you don’t have to remember or look up a bunch of pluses and minuses to your to-hit die roll. For a skirmish game, I find it appealing that you know you were hit, but that tree or wall protected you.

The cards also manage movement, hand-to-hand combat, opportunity fire, and morale. These mechanics have the benefit of eliminating charts and tables while greatly speeding play. Because the mechanics are unique, new players sometimes have some difficulty wrapping their heads around it at first, but they are usually self sufficient after just a couple of turns – as long as they don’t try to fight it. To help players with the mechanics, I created a short video that can be found on the rules’ Web page: http://www.bucksurdu.com/Buck_Surdu/Combat_Patrol.html

In the beginning...

I began miniatures wargaming with the American Civil War using *Rally 'Round the Flag* by S. Craig Taylor. Few rules systems since then have achieved the same balance of fidelity (a.k.a., realism) and simplicity. Many years later I began gaming WWII skirmish as a low-intimidation way of introducing miniatures wargaming to new prospects. At the time (early 1980’s) the common school of thought was that “realism” required lots of detail, intricate mechanics, and reams of charts. After six years of development (and discarding two complete systems along the way) I developed *Beer and Pretzels Skirmish*. While those rules are



Figure 2: *Rally 'round the Flag* was an early influence on me. *The Sword and the Flame* pioneered the use of cards to resolve activation and combat results. *Beer and Pretzels Skirmish* was my first published set of rules for World War II.

not new and shiny, there are many unique mechanics and interesting aspects of those rules that really stand the test of time.

So why would I design another set of WWII skirmish rules? Partly I was never happy with the clutter of order chips on the table in *Beer and Pretzels Skirmish*. But that mechanism was at the heart of those rules, and subsequent attempts to bolt another activation system to those rules proved dissatisfying to me. Partly, I had other ideas for game design that I wanted to try. Most people in my family live into their 90's but don't remember the last five or six years. I use game design as a way to try to keep the juices flowing and stave off dementia – perhaps it's too late. Finally, I wanted something that was even faster than *Beer and Pretzels Skirmish* for multi-player gamers. While *Beer and Pretzels Skirmish* was designed for players to control one or two squads, our gaming group frequently ran extravaganza games with twenty or more players. Whether it was running out of ideas for scenarios or the fact that we were pushing those rules outside their design envelope, I became increasingly dissatisfied with games using *Beer and Pretzels Skirmish*. So, **G.A.M.E.R.**TM was born.

G.A.M.E.R.TM was designed to be a reasonable simulation of small unit combat with enough sophistication to keep it interesting after many games. Yes, I know we've all heard claims of "simple but realistic" many times. **G.A.M.E.R.**TM uses a card-driven mechanic to resolve most combat and morale situations. Once players get their heads around this unique system, games flow very quickly. Figures have customizable attributes, which allow players to dial up the level of complexity to their tastes while allowing others to keep the game simple and nimble.

Since Larry Brom's groundbreaking *The Sword and the Flame*, many designers have used card-based activation mechanisms to control the flow of wargames. In the *Look, Sarge, No Charts* series of rules, we took that mechanism to the next level, mitigating many of the down sides of card-driven activation while retaining the goodness. Inspired by a naval game from the early 80s, called *Sea Strike*, I wanted to use cards to do more than just control the flow; I wanted to use the cards to resolve most of the actions as well.

Sea Strike used an IGO-UGO activation mechanism, but rather than dice and charts, combat was resolved with a deck of cards that were divided into five areas, the four corners and a center circle. Depending on what kind of combat action you were trying to resolve, you looked in a different part of the card for the results. You might be looking for a torpedo symbol, red X, or something else. The concept was quite good; however, when you started adding optional rules, different symbols on the cards took on multiple meanings, so it was difficult to remember where to look and how to interpret the



Figure 3: *Sea Strike* featured a number of innovative mechanics, including the use of cards, rather than dice and charts, to resolve combat effects.

results unless you played frequently. The idea of using cards for more than just activation stuck with me.

Years later, I began to develop a set of rules for skirmish actions in the American Civil War. I built custom cards that were divided into several segments. Rather than looking for face cards, black cards, and red cards to determine the effect of a hit like in *The Sword and the Flame*, instead you flipped one of these cards and looked in the shooting section, melee section, morale section, etc. to determine the effects. The rules didn't really pan out, and I eventually discarded them. (As a game designer don't be afraid to admit that something isn't working and decided to start over!) Though these rules didn't work, for many years and through many other design processes (see www.bucksurdu.com for information about the many games I've designed), I kept thinking about using cards for more than activation.

The *Look, Sarge, No Charts* Legacy...

Several years ago, with some buddies, I embarked on a journey to develop a set of WWII battalion-level rules that was not simplistic but would flow. I was tired of games that were supposed to be about maneuver warfare, but I could walk by the table after three hours of play and nothing seemed to have moved. Still, I didn't want it to be a kind of bubblegum rules. After six years of development – and discarding two previous designs, we released *Look, Sarge, No Charts: World War Two*. There is more information about this on my Web page, so I won't elaborate. While they never achieved widespread use or acceptance, I believe these rules are really elegant and smooth. LSNC features a card-based Double-Random™ activation mechanism, really elegant spotting rules, and some other interesting mechanics. Small labels on the back of each base eliminate the need for large letter- or A4-sized chart cards littering the table. (The biggest – and certainly valid – criticism of these rules has been the aesthetics-spoiling labels, but I think they have less impact on the look of a table than large chart cards.) While I didn't originally set out to design a set of rules that had no chart cards, part way through the development process, when most mechanics worked without a chart card, it became a challenge to eliminate them.

A pet peeve of mine is when the level of abstraction in a game is inconsistent. If the player is supposed to be a battalion commander, he should make battalion commander decisions, not deciding which type of round a loader is shoving in the breach of a tank gun or which direction the turret is pointing. Battalion commanders fight with platoons; squad leaders and tank commanders make those kinds of



Figure 4: The current family of rules using the *Look, Sarge, No Charts* mechanics. While largely overlooked within the community, they feature a number of innovative mechanics to speed play and eliminate the need for chart cards on the table.

decisions. In developing rules without chart cards, I had to think very carefully about what really mattered in the game. Without chart cards, there is little room on a label for a lot of information, so there was no room for dozens of modifiers to die rolls.

In play testing, players tried to drag us to add modifiers and special cases. Usually this is because in the heat of a game, they are looking for a modifier that provides them some small advantage on the tabletop. In the next play test they will often argue exactly the opposite point. My personal opinion is that if you see modifiers that have less than a 5% impact on the outcome of an event, the game designer is deluding himself. We do NOT have that kind of resolution and knowledge about combat phenomenology. The random die roll accounts for most of those special cases. Good game design means thinking really hard about those few things specific to a particular historical period that are important to driving players to appropriate, period-specific tactics. My job during development was to resist the temptation to gunk up the game by providing the *illusion* of fidelity.

An aside...

Let me wander off the reservation a bit to discuss fidelity versus resolution. The false dilemma often posed on-line is simulation vs. game. I say "false dilemma," because *all* wargames *are* simulations. They vary with respect to their fidelity and resolution. In the simulation profession, resolution deals with the level of detail. For instance, I can simulate a battalion as a single (battalion) entity, company entities, platoon entities, individual soldiers and vehicles, or even simulate the individual vehicles as a series of subsystems, like propulsion, fire control, armor, etc. None of these approaches will necessarily achieve a different average simulation result after many iterations; however, they vary greatly with respect to resolution or detail. Fidelity refers to the accuracy of the result *for a specific purpose*. In gaming fidelity deals with how well the simulation reflects those aspects of a simulation the designer is trying to emphasize. A good metric of fidelity is whether period-specific tactics are rewarded by the rules. Fidelity and resolution are independent and orthogonal variables. It is possible to have a high resolution, high fidelity simulation as well as a high resolution, low fidelity simulation. Similarly, low-resolution simulations can have either high or low fidelity, depending on which aspects of a historical period you are trying represent. By really thinking about my game design, I have tried to develop low- to medium resolution and high fidelity.

Now, back on the ranch...

Like many elegant things, they seem self-evident once someone creates them. Many have not appreciated the time and effort that went into the development of the *Look, Sarge* family of rules and the debates over whether a particular modifier or special case mattered and if so the best way to represent that in a way that is consistent with the rest of the game design. Similarly many will not appreciate the time and effort that has gone into the development of the card-based system in **G.A.M.E.R.**TM. First, I developed charts and tables that had the probabilities of different results that I wanted. Then each table had to be deconstructed and distributed across 50 cards so that players need not remember a bunch of modifiers or consult a bunch of tables. The result of most actions is clearly printed on the card – once players understand how to read the cards. There are no dice, because

flipping a card is essentially rolling a die, looking up the result on a table, and showing the result on the card.

As with all my designs, I started out with a set of goals – concepts that I wanted to ensure the game represented. Since the world certainly isn't short of high-quality WWII skirmish rules, what was I trying to achieve with **G.A.M.E.R.**TM? These were my original goals:

- I wanted rate and distribution of fire to be realistic. It is very difficult for a team leader to ensure that four men aren't all firing at the same target, yet in many skirmish games, the player can snipe at the figures he would like to hit. In all of my designs, I try to eliminate this sniping – except for real snipers of course.
- As described earlier, I wanted cover to be represented explicitly. If a wall protected the figure, I wanted the player to know that, not merely that the aggregate of modifiers resulted in a miss.
- I wanted near misses to cause figures to be suppressed or stunned. Coming within an inch or two of death has that effect on most people.
- I wanted the game to *flow*. I was okay with unique mechanics if the game progressed quickly.
- The game needed to *scale*. I generally run games with six or more players. I did not want most of the players watching one player performing actions. I want the game to work with many players without bogging down.
- I did not want the rules to be clearly biased toward one nation or another. The bias of many game designers is often quite evident in game designs.
- This may seem trivial, but I wanted the difference between bolt-action and semi-automatic rifles to be represented properly. Back when I was a cadet, then Major Alphin recorded a series of short films (see <https://www.youtube.com/watch?v=irG1Q2hW2LI>) about different weapons. I cannot find the one that really stuck with me on-line, but there was a video that compared the firepower of a Wehrmacht and US squad in WWII. What stuck with me was how much more firepower the Garand gave the US squad than any nation's bolt-action rifle – even taking into account the difference in machineguns and other equipment.

Note that having no charts was not a goal. Similarly, a card-based mechanic for resolving combat and other game effects was not a goal. (On my blog you will see that I am tinkering with a dice-progression mechanic that is looking for a game, but in general, I start with the game goals and seek or develop what I think are the most appropriate mechanics.)

During development I worked diligently to be true to those initial goals, and I think I've more or less achieved them. Other aspects of the rules sometimes had to bend to make sure that the main design goals were met. So there are aspects of the rules that I really like, and there other aspects with which I am less pleased. I hope that you enjoy the game for what it is meant to be: a fun way to represent small unit actions in WWII that is reasonably accurate and reasonably easy to play.

And a final word for today...

Finally, I have to say that these rules were designed for *ME*. When setting out on this multi-year journey, I had no intention of publishing the game. We had just finished a three-year rules development process for *Bear Yourselves Valiantly*, and we were talking about another major undertaking: the development of the next set in the series for near-future science fiction. I have become increasingly disheartened by the on-line crowd of critics and sock puppets who decide what are the “cool rules,” how quickly thrown together rules with thrilling eye candy often get all the attention, rules that are obviously designed to be disposable after a year or two, and reviewers who have not played the game they are reviewing – even once. In the gap between these development efforts I wanted a small project that wouldn’t require a lot of additional research and would be fun for my buddies and me to play from time to time. In the end this “small project” took three years. I was surprised at the positive response to the rules when I finally took them public.

I call it **Combat Patrol™: WWII** because throughout the development process, I had it in the back of my mind to apply this system to other historical periods, such as science fiction skirmishes. Indeed, before I had even finished development, members of my gaming group were already applying it to periods like the War of 1812 and the Napoleonic Wars. The basic system has proven to be pretty adaptable.

In the next installment of this serialized article I will talk about the early stages of the design of **G.A.M.E.R.™**.
