The Design of Combat Patrol[™] One Man's Wargame Development Journey Part 2 © 2015 by John R. "Buck" Surdu

In part one of this series, I described some of the influences on my game design and how and why I embarked on a journey to design a new set of WWII skirmish rules. In this part of the series, I will describe some of my initial thoughts and experiments along the way to the final design. As I discussed previously, when I set out to design a new set of WWII rules, I had the following goals in mind:

- I wanted rate and distribution of fire to be realistic.
- As described earlier, I wanted cover to be represented explicitly.
- I wanted near misses to cause figures to be suppressed or stunned.
- I wanted the game to *flow*.
- The game needed to *scale*. I did not want most of the players watching one player do stuff.
- I did not want the rules to be clearly biased toward one nation or another.
- This may seem trivial, but I wanted the difference between automatic and semiautomatic rifles to be represented properly.

Ground Scales...

I know there are different schools of thought on this, but I like weapon ranges to be close to the figure scale. I don't like rules in which long range with 28mm figures is twelve inches. That leads to WWII games that look more like Agincourt than modern warfare. (I leave it to the reader to determine when they think "modern warfare" begins.) On the other hand many gamers recoil at the idea that infantrymen can fire across the table with small arms. Also, gamers playing *Beer and Pretzels Skirmish* often did not like the idea that with figure-scale small arms ranges almost all vehicle fire was a close range. Remember I began writing these rules for *me*, not for publication, but I did want the guys in the club to be willing to play them with me. So, I set the ground scale at one inch equals five yards. As I usually do, I cut nominal maximum effective ranges by 75%. So while you can imagine firing an M-1 Garand to 1000 yards, for instance, the maximum range for the M-1 Garand in G.A.M.E.R.[™] is 48 inches = 240 yards, which is about 25% of the nominal range of the weapon. So why cut it by 75% (or half and half again)? First, soldiers in combat situations rarely shoot as well as they do on a rifle range. Second, rarely can soldiers see and acquire targets more than a couple hundred yards, even in the desert. So while a 48-inch range is not really in scale with the figures, the ground scale was a nice compromise between competing design goals.

What's in a name?...

Quite early, my friend Mark encouraged me to make a decision between a game with a cinematic feel and one with a more realistic feel. I was looking for something that could span both styles of game play. In the simulation system that I had a small role in developing for the US Army (OneSAF), we incorporated the idea of entities in multiple levels of resolution depending on the users' needs. I thought I could do the same thing for these new WWII rules. I thought about what attributes would be needed to describe the individual soldiers for this game. The first list of attributes was this:

- Shoot or Marksmanship
- Hand-to-hand or melee
- Guts or personal courage
- Dexterity or reaction
- Endurance, hits, or hit points

My notion was that at the lowest level of game resolution, all the figures controlled by a player would have the same values for all these attributes – these would be "team attributes," rather than "individual attributes." Figures might be armed with different weapons, but everyone in the team (or half squad) would have the same marksmanship score. At the highest level of resolution, each figure could have different attributes, different weapons, etc. There was a middle level of resolution in which all figures in a team had the same attributes, but the location of wounds was tracked. Wounds to the upper body would have a different effect than wounds to the lower body.

Since at the highest level of resolution, figures within a team have different attribute values, players could customize their attributes for cinematic style games. For instance, most normal soldiers have an Endurance of 3. Players can create an extra tough figure who has an Endurance of 4, 5, or even 6.

After a career in the Army, I couldn't resist trying to arrange these attribute initials into an acronym. I came up with really lame ideas like GERMS (guts, endurance, reaction, melee, shoot) and SHREG (shoot, hand-to-hand, reaction, endurance, guts). A challenge was that there was only one vowel. My long time friend, gaming buddy, and sometimes running partner, Dave Wood, came up with the name of the rules by changing the attribute names. The attributes became:

- Guts
- Accuracy
- Melee
- Endurance
- Reaction

"G.A.M.E.R.," while a little bit silly, it was less silly than "Look, Sarge, No Charts" and didn't require identifying some obscure German military term.

Whose turn is it?...

I felt that the two most important aspects to get right were firing and activation. I believed that if I could get these to things to work together smoothly, everything else would follow. I will describe the evolution of the firing mechanisms in part 3, but in this article, I will describe my thinking and early experiments regarding activation.

To be clear, I define the activation mechanism for a game to be the means of controlling who is acting. Some games are referred to as IGO-UGO ("I go; you go") like Chess. In some cases IG-UGO refers to the whole side; in other cases one side moves one unit, then the other side moves a unit, and so on. Other games use initiative based mechanisms, like

Crossfire. Some modify IGO-UGO by rolling each turn to determine who goes first in a given turn. Many skirmish games use a card-based activation mechanism. In some card-based systems, each side is designated a color and when that color is drawn, one unit from the appropriate side can act. In other card-based systems *G.A.S.L.I.G.H.T.®*, each unit has a card in the deck, and when the card with the unit's name is drawn, that unit acts. Each of these activation mechanisms has a variety of variants.

I decided quite early in development of G.A.M.E.R.TM to use the *Look, Sarge, No Charts* (LSNC) Double RandomTM activation mechanism until I could come up with something better. Card-based activation mechanisms have many advantages in terms of building drama, unpredictability, and friction. We all owe Larry Brom and his daughter a debt of gratitude in this regard. Card-based activation mechanisms also have a number of drawbacks, most notably the fact that often all the players are watching one player perform actions. This approach does not scale well to multi-player games.

Also, if you put in a joker that potentially ends the turn early, there is occasionally that one person who does nothing for several turns. The development of the Double RandomTM activation mechanism for *Battles by GASLIGHT* and refined in *Look, Sarge, No Chart,* was designed to address these shortcomings. (See http://www.bucksurdu.com/Buck_Surdu/G.A.S.L.I.G.H.T..html for more information on *G.A.S.L.I.G.H.T.*®.)

At the beginning of *each turn*, players roll a six-sided die for each leader. In the case of G.A.M.E.R.[™], leaders control half squads or teams, squads, platoons, etc. After the six-sided dice are rolled the game master draws a card from the activation deck. The activation deck has red cards numbered one through six, black cards numbered one through six, and a reshuffle card that potentially ends the turn before everyone gets to activate. When a card is drawn, *all* leaders whose sixsided die matches the card that was drawn activate their units. There are nuances associated with black versus red cards, leaders being able swap dice, and handicapping one side or



Figure 1: GASLIGHT uses a cardbased activation system in which each unit has its own card in the deck.

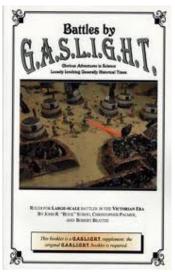


Figure 2: Battles by G.A.S.L.I.G.H.T. pioneered the Double Random[™] activation mechanism that has been evolved in Look, Sarge, No Charts rules and in G.A.M.E.R.™.

another, but basically a unit may activate twice, once, or not at all during a turn.

Both sources of randomness are important. Each turn the six-sided dice are re-rolled. Without rerolling these dice each turn, players could predict which units will move

simultaneously each turn, possibly making the coordination of multi-group attacks easier. Without the activation deck, one could look at the six-sided dice around the table and predict the order in which units will act in the upcoming turn. This system makes it hard to coordinate the activities of a brigade, but we think that's okay.

Because *all* units whose command die matches the card drawn get to activate, many people may activate at the same time instead of one person activating and nine other players watching. Over several years and many gaming conventions, this mechanism has proven effective at keeping games flowing despite the number of players. It scales.

This still has the drawback of a person potentially not activating for many turns because of the draw of the joker. While this may be a realistic reflection of battlefield friction, it can be frustrating for players. (In my first game of *Piquet*, I never voluntarily execute an action the entire game!) You could, of course, just pull the joker out of the deck, but I really liked the unpredictability of the turn ending suddenly. Howard Whitehouse handles this by putting two reshuffle cards in the deck, with the turn ending when the second card is drawn. This has the provable effect of generally having fewer cards undrawn when the turn ends.

In the development of G.A.M.E.R.[™], I came up with a different solution to this issue. Each side gets a set of tokens that can be spent during the game. Tokens can be spent to move a card "forward" of the joker if that number had never been drawn during the turn. For instance, if no fives have been drawn before the joker ends the turn, the overall commander on one side can spend a token to pull the first five in the activation deck forward and let all units with fives activate. There are nuances to this mechanism that I won't elaborate in this article. This method provides all the drama and unpredictability of card-based activation and greatly reduces the chance that a player may spend several turns idle, but the joker is retained for suddenly ending a turn.

While this works well, I cannot resist trying to develop new concepts. So I considered a number of alternative activation mechanism. One of the things I was trying to do better with G.A.M.E.R.TM than I had managed with *Beer and Pretzels Skirmish* was getting rid of all the order chips cluttering the gaming surface. (That mechanism provides good fidelity, but I have been unhappy with the aesthetics.) I considered an order writing system like Swashbuckler or Canvas Eagles in which turns are divided into impulses, and special codes are used with "delays" to reflect duration of more difficult events. I considered using a system like that in X-Wing in which units activated for movement in order of "goodness" or "elite-ness" and then activated for firing in a similar, but perhaps different, order. In thinking through this, I determined this would create more issues than it might solve. I also didn't like the lack of randomness in this approach. Finally I considered a card-based mechanism in which the activation deck was composed of the following cards:

- 3 black cards and two red cards of each number (e.g., 1, 2, ... 6) for elite units
- 2 black cards and two red cards of each number for regular units
- 1 black card and two red cards of each number for green units
- 1 optional random event card
- 1 "indirect fire lands" card for each side
- 1 end-of-turn or reshuffle card

(Again, I will spare the reader a discussion of the difference between black and red cards, but black ones are better.) This technique would give elite units, on average, more activations than regular units and regular units more activations than green ones. I didn't

like the size of the activation deck this method created or the way it actually played on the table. Turns became too long with too many players watching others play the game. Elite units were too agile, and green units were too slothful. In the end, I settled on a hybrid in which I used the Double Random[™] activation mechanism described earlier but added the random event and indirect fire cards to the deck.

But how would I reflect better initiative – and more activations – for better units? This vexed me for several weeks. I finally decided to add two more cards to the activation deck. One says "green," and the other says "elite." When the "green" card is drawn, the next card is drawn. All units with that number – except Green units – activate. When the "elite" card is drawn, look at the previous activation card. Elite units with that number get to activate again. This achieved my desired balance between the different troop qualities while maintaining all the randomness and unpredictability I sought.

While I am still thinking about an alternative, in over a year of play testing, this activation mechanism has worked quite well. Again there are nuances to this system that are not elaborated here, but in general I am pleased with the results.

In the next part in this series, I will address the development of the firing mechanisms for G.A.M.E.R.TM.