VOLIV, Nr. 4 \$8.00 Late Summer 2018

Vargame esign

How Much Tinkering? Proposed Changes to Combat Tables



Napoleon's Resurgence, 1813

Marshal Soult • Roadblocks to the Rescue

Wargame Design, Late Summer 2018

Editor-Publisher: Kevin Zucker

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NAPOLEON RETREATS, 1814

Publication Date: 14 February 2019

HOTHOUSE EARTH

A "Hothouse Earth" threatens the very habitability of the planet for human beings. Earth climate would see global average temperatures some 6° to 8° F higher than they are now, with sea levels 30 to 200 feet higher than today, the paper said. Even if Paris carbon emission reductions are met – no more than 3.6° above preindustrial levels – that still may not be enough. Scientists at the Stockholm Resilience Centre, the Australian National University and other institutions made the forecast.

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EDITORIAL

How Much Tinkering? Dave Demko

In this issue we present the results of our reevaluation of two Combat Tables of TLNB: Shock Combat and Bombardment. Taking the time to explore possible changes to the *TLNB* System does not mean committing to implementing those changes. Exploring ways to improve the system is clearly time well spent, even if you don't ultimately adopt those ideas. That's work done to validate parts of the system as they stand.

With a game system like *TLNB*, with 38 battles already in print, the question is not only whether a proposed change is an improvement but whether the improvement is worth disturbing the stability of the rules and the players' familiarity with them. Consistency across the Library is a selling point because it benefits players. We value that confidence that games from across the Library will work with the rules as written.

Regarding other wargame series with revised core rules, I've seen remarks to the effect of "Why did you release the game before it was done?" or "Why didn't you get it right the first time?" The assumptions underlying questions like that suggest a misunderstanding of the iterative quality of creative work. *TLNB* is seeing incremental improvements while maintaining its stability. Part of our job is to regularly re-examine and make improvements. The only difference between a good game and a bad one is the capacity for doing things over.

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For me, the ultimate is people playing and enjoying the game. Tell me how you want to quantify that. — KZ

Kevin has envisioned people playing a game through fifty times and wearing the ink off the counters. The success of *NLB*-based games may have rendered the goal of fifty playings unrealistic. The original *NLB* expanded on the basic *Napoleon at Waterloo/Napoleon at War* system with the additions of time, space, and command. Also, *Napoleon's Last Battles* was one of a kind, with no real competition until we got *Napoleon at Leipzig*. So in the late '70s people in the mood for Napoleonic grand tactics might well play these games dozens of times.

Nowadays we already have several boxes full of battles and campaign games to explore. For example, 5th edition *Napoleon at Leipzig* has crowded out *Napoleon's Last Gamble* for my attention, at least as of this writing. It would be hard to stick with just one of these games for 50 playings with all the others whispering from the shelf, "My turn, my turn."

There are many ways people enjoy these games. Success might show in repeated playings. Guys who like to go deep on a game or a system might "use up" every battle in the box or play each multiple times, as I did with Four Lost Battles. Maybe a successful game gets played solitaire if your opponent is a no-show, and you just want to be pushing those particular counters. Or there's the weekend test: You and some opponents/teammates arrange to spend a whole weekend wargaming. On which game would you like to spend that valuable block of time?

Another good measure of success across the population of wargamers: Which games caught on so well that they led to long-running series? Some series are designed as such from the get-go. Consider Napoleon at Bay and Bonaparte in Italy, purpose-made as the first installments of the Campaigns of Napoleon. In contrast, Six Days of Glory or Napoleon's Last Battles did not initially seem intended as the first volumes of series. Or Four Lost Battles, either. However a series starts, thriving over the years is a sign of success. The same is likely true for people asking for reprints of old favorites: They want replacements/upgrades for themselves and they want the games to reach a wider audience. Another good sign is do-it-yourself player's aids and

cheat-sheets. Wargamers don't make those except for games they have played and mean to keep playing.

These all look like signs of sustained interest, which makes them reliable indicators of success. When designers reciprocate sustained player interest with new games in a series and updated series rules, the result can be—should be—continuous refinement, reflected in both the changes that are adopted and the ones that are evaluated and discarded.

THE ROAD TO HALLE

NEW EXPANSION KIT FOR *NAPOLEON'S* LAST GAMBLE ... PRE-ORDER NOW~

This expansion kit adds one 22x34 map (WX) to the battlefield area and will extend from Brussels to west of Hal, overlapping the (N) and (NX) maps and a 4-page study folder with three scenarios:

- Expanded Waterloo Scenario: June 18th. Allows Napoleon the option of flanking the Mont St Jean position at the risk of freeing up the 17,000-man Hal force.
- The Fields of Hal Scenario: June 17th— 18th. Hypothetical battle in the Hal environs (below). Can Blucher affect the outcome? Wellington believed that this area was the most likely location for the culminating battle, rather than Mont St Jean.
- Extended Campaign Scenario: June 15th–19th. Provides Napoleon and Wellington with more operational options, more area to defend, more room for maneuver (and more room for error).

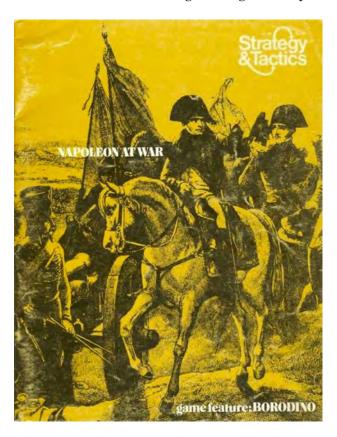
In addition, several Turn Record Charts and Anglo-Allied Setup Cards account for the added map and associated arrival times on the WX map. No additional counters are needed.

Smoke 'em if you Got 'em' Kevin Melahn

Fall 1972: New York City was a gritty place, with hustlers ruling Times Square, rent controlled apartments still to be had, while fed-up inhabitants fled to the suburbs. The departure left a void to be filled by non-conformist innovators. Old warehouses in SoHo sprouted a new wave of artistic innovation. I was starting my second year as a graphic design student at Parsons School of Design. Parsons had been acquired by The New School, and moved across the street from the New School campus on Fifth Avenue in the Village. Having survived a rigorous first year there, with long hours and commuting in from Fort Greene in Brooklyn juggling a portfolio and canvasses, I was ready to enjoy a more relaxed schedule focusing on my core interest, graphic design. I had some funds on hand after working all summer and wanted to enjoy living in my shared apartment in the West Village. That included an occasional bottle of inexpensive wine, book browsing at The Strand and ales at McSorley's. I was also a wargamer, an odd interest for an art student. Needing to supplement my summer earnings, I had scheduled my class schedule to have Fridays off, which allowed me to look for part-time employment. I've been a wargamer since the days of AH Guadalcanal, 1914, and Battle of the Bulge and a reader of S&T, and so a plan began to take shape.

I walked up to the SPI offices on 23rd Street after class on a Thursday in late September 1972. Being young, and unwise to office protocol, I showed up at the front desk without making an appointment and asked to speak with Redmond Simonsen about a part-time job. Amazingly enough, Redmond, along with his associate Manny Milkuhn, agreed to meet me. I was savvy enough to have brought my portfolio of design work. They were not dismissive of my work, and pointed out some areas for improvement. I pitched my case for a part-time job, and Redmond hired me on the spot. He suggested a pretty aggressive schedule, 20 hours a week. That would entail a four-hour day on Thursday, and all day Friday and Saturday. I'd be on my own Saturday, catching up on the work flow of

the past week. I started the very next week, and began right away on the grunt work of the SPI art department; counter sheets, maps, charts and tables. Soon I was working on magazine layout.



The SPI Look

Compared to the colorful and almost painterly look of many games today, SPI had a cleaner aesthetic, born out of Simonsen's design philosophy, as well as the requirements of a tight budget. Both Redmond and Manny were graduates of Cooper Union's design program, a school heavily influenced by the Bauhaus and Swiss design. That influence was apparent in the choice of classic fonts, such as Helvetica, Frankin Gothic and Times Roman, the dramatic use of color and the grid in magazine layout. The role of the budget played into design choices, but the emphasis on clarity and simplicity in design worked well within that framework. Some today decry what they call the "bland" look of early SPI games. The games and magazines were constrained to only two colors: black,² and a second color, both used as a solid, or a screen tint. But the clean design

¹ Simonsen tagline, Air Force slang for "take a break."

 $^{^{2}}$ In the mid-70's "Deep Photo Brown" replaced black.

still looks good 45 years later. Why only two colors? Simply put, it was affordable. Given the limited quantities of the print runs, Redmond's choice of two colors allowed him to use the most cost-effective presses and inks, as well as press time.

As a working graphic designer for over 45 years, most "business people" think of designers as artists: irresponsible beret-wearing flakes. In fact, graphic design work requires multi-disciplined thinking, with designers seeking the most effective way to solve a communications

problem. Since the ascendency of designers in companies such as Apple, "suits" today grudgingly give designers more respect. In the case of SPI, I believe Redmond was the most responsible senior person in the company. He seemed to be the only person who worried about, and stuck to, budgets.

Paste Up and Mechanical

The speed at which design work has changed with the advent of Adobe Creative Suite cannot be overstated. For example, the time it would take me today to produce a counter sheet is a very small fraction of the labor intensive process in the pre-computer days of "paste up and mechanical." To create a counter sheet back in 1973 at SPI was a multi-step process.

I would receive either a hand drawn counter sheet 'layout', or a typewritten outline of the counters needed. The details would include whatever numbering scheme was being used, NATO symbols or other icons such as AFV silhouettes, any superscript numbers and their respective positions on the counters, and so on. Many times we would have these symbols already typeset in galley form, that is, just placed in some order on a long sheet of paper. These individual elements, sets of numbers, icons, and such would be cut out with an X-Acto #11 and positioned using a grid



printed in "non-repro blue" on a board. SPI used hot wax as their preferred method of adhering paper to board, with the occasional use of rubber cement. Any graphic element to be added to the counters would involve making small photostatic copies of things like tank silhouettes, or using rub down Letraset. The number of hours it would take to complete a sheet depended upon the complexity of the counter design, and the galley type. A typical SPI counter sheet would take a minimum of three hours. To replicate that counter sheet today using Adobe Creative Suite would probably take 20 minutes.

Maturing at SPI

After overcoming the initial excitement and terror of my first job in graphic design, I settled into the routine. When I'd arrive on Thursday afternoon, I'd usually have a stack of projects to dig into. If I had questions, I'd hesitantly go to Redmond for clarity. I didn't want to look like an idiot, and Redmond did not suffer fools. I learned early on, and this has stayed with me, that I should try to puzzle out a solution to a problem before going to the boss. I learned it was best to start in on the project and then check in with Redmond once the look had been established to

make sure I was on the right path. I'd incorporate any corrections he made and proceed. Redmond's approach to design was to make incremental revisions. We'd look at making changes in one color, then another, then maybe another, before we'd land on a solution. Of course, we'd view everything we did at actual size, unlike designers today viewing maps and counters at 300% of actual size and then wondering why the type look so small at the proofing stage.

I did get an occasional acknowledgment from The Man when I could distinguish the silhouette of a PzKwIII from a PzKwIV while pasting up a counter sheet. But as I said, he did not suffer fools, and if I made an error, I'd know about it.

One of my mundane Art Department tasks was cleaning the Rapidograph pens using an ultrasonic cleaner. Nowadays we simply point and click; in those days it required a straight edge, a steady hand and a perfectly-functioning Rapidograph. On Saturdays, I would collect all the pens, break them down, clean and fill them so that Redmond and Manny would be ready to go Monday morning.

I encountered Redmond's lighter side, late on Fridays as the day wound down and the playtest hordes were still outside the gates. There would usually be a gathering in Redmond's office with some of the office ladies, an occasional guest like John Prados, as well as Terry Hardy and other SPI folks. Sometimes I'd hang out a bit, but since these folks all outranked me, I felt a bit intimidated. I do recall one scotch-soaked evening in which Terry Hardy enthusiastically reviewed Behind the Green Door, and urged us all to see it right away. Dunnigan appeared occasionally, though rarely turning up in the art department as he shambled around the office. He reminded me of a Hunter Thompson-like character, cynical and quite a know-it-all. He did know enough not to interfere in his partner's art department, though.

My tenure at SPI lasted until early 1974. I was preparing to graduate Parsons, and my focus was building up my portfolio that spring. I managed to land a job in the Parsons photo lab, which gave me the opportunity to use the school



facilities to upgrade my portfolio, my key to getting a job after school. Redmond initially did not take my departure well, suggesting that I should stay on and work full time when I graduated. My heart was set on working at an ad agency, where I managed to get a job in the teeth of a recession that summer. I'm sure my professional experience at SPI helped me get my position at Ogilvy & Mather.

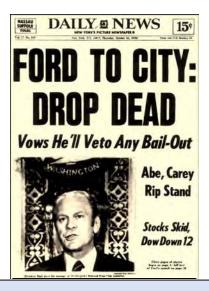
My short time at SPI gave me a great education in design as well as the professional work ethic. I've had many bosses over the years, and supervised graphic design teams myself. Redmond was a great role model as a supervisor; fair, tough and very committed to his craft. We all miss him.

What Might Have Been

In wargames today there are many self-taught graphic artists and designers. Frequently I find maps and counters to be overly florid, sacrificing clarity to a need for the graphic artists to demonstrate their ability to use every effect available in Photoshop. If Redmond had been able to take advantage of the ease and speed of Adobe Creative Suite, the SPI design aesthetic wouldn't have changed very much. The maps, counters and magazines would have retained much of the same look, but with tasteful, and useful graphic additions and embellishments.

On a side note, the P-500, Kickstarter pre-order-style of financing for today's game companies might have made it possible to forestall SPI's demise. The debt-ridden tailspin and collapse might not have taken place if Redmond had been able to test market the crazier game release decisions made in those final years.

I got married in 1975, and my wife and I left NYC in late 1977. I remember the *Daily Post* front page (below). The combination of all that the city was going through was why we decided to leave. We'd had enough.



By 1970, the city gained notoriety for high rates of crime and other social disorders. A popular song by Cashman & West in the autumn of 1972, "American City Suite", chronicled, in allegorical fashion, the decline in the city's quality of life. The city's subway system was regarded as unsafe due to crime and suffered frequent mechanical breakdowns. Prostitutes and pimps frequented Times Square, while Central Park became feared as the site of muggings and rapes. Homeless persons and drug dealers occupied boarded-up and abandoned buildings. The New York City Police Department was subject to investigation for widespread corruption, most famously in the 1971 testimony of whistle-blowing police officer Frank Serpico. [9]

US economic stagnation in the 1970s hit New York City particularly hard, amplified by a large movement of middle-class residents to the suburbs, which drained the city of tax revenue. In spring 1975, New York City faced a serious fiscal crisis. Under mayor Abraham Beame, the city had run out of money to pay for normal operating expenses, was unable to borrow more, and faced the prospect of defaulting on its obligations and declaring bankruptcy.

-https://en.wikipedia.org/wiki/History of New York City (1946-77)

A LOOK BACK FROM WDM 2007 FOUR LOST BATTLES SPECIAL ISSUE

Topic: Bombardment

Historically speaking, when a unit during Napoleonic battles suffered under bombardment, what was the most likely outcome? Did they hold positions and suffer losses, or were they more inclined to retreat?

During the wars, the calibre and destructiveness of artillery increased several-fold. In the beginning, among the professional armies, retreating in the face of artillery fire was regarded as a sign of disgrace for that unit. But in the course of time, that attitude changed, and eventually the British allowed their units to lie down.

Were bombardments typically long enough in duration for a unit to get hit, and then decide to pull back, or was it a case of a short, violent bombardment followed up by an infantry advance?

Large battles always began with a bombardment, and after the initial assault, as the initiative changed hands, another period of bombardment would typically ensue. These interludes could last upwards of half an hour. Guns were not used as close support because of the possibility of hitting friendly forces. Either scenario you mentioned could occur. The first would be under the rubric of "bombardment," the second would involve adding the artillery strength into a regular combat. French batteries had two ammunition wagons backing up each gun, one in each tier, plus what it carried with it. The guns brought with them about 50 rounds each. In big battles it was not uncommon for guns to fire over 100 shots each.

Each battery had two train sections to feed ammo forward to the guns. As one was depleted, it exchanged its place, then drew from the artillery supply train. Elting explains, "An artillery company operated in two sections: one consisting of its guns and one caisson apiece, moved with the combat troops; the rest of the vehicles accompanied the artillery park." "When hostilities resumed in August (1813), Napoleon had 1,300 cannon with 365,000 rounds of ammunition in its trains."

Bowden agrees, showing 1,262 guns with over 280 rounds per gun. Two hundred rounds per gun was considered enough for a major battle.

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EXTRA! NAPOLEON'S RESURGENCE UPDATE

Roadblocks to the Rescue, Marshal Ney, General Retreat

Roadblocks (recommended House Rule): Add 12 Roadblocks (not 6)—use markers from Quagmire. 28.34 Marshal Ney (special rule): Imagine a straight line through the Windmuhlenberg (3510), from 5301 to 0127. When Marshal Ney reaches this line he must stop advancing for two full turns. He may move, but not South (or SE) of the line. He can still perform all command functions per usual. After two full turns, Ney can move freely across the line.

28.35 Marshal Soult: Soult is removed from play. (see page 26, #4).

24.84 General Retreat card (No. 9): (clarification-addition): It is not necessary to have a General Retreat Card to declare a General Retreat. The GR Card may be played as "Inapplicable" for its MA alone, like a Tactics Card (18.83).

Roadblocks

Add 6 (six) more Roadblocks to the Coalition Setup, to the 6 already added since publication (see article below), for a total of 12.

Background: F.L. Petre (p. 118) says the Allies had 78 redoubts, batteries, and epaulments (see illustration below) at Bautzen. "The centre, from the hills to Kreckwitz, was covered with redoubts or batteries armed with a powerful artillery sweeping open slopes. [The positions listed by Petre were rated Improved Positions in the existing set up (28.17).]

"Besides these there were numerous smaller works along this line (which count as roadblocks), and on the Kreckwitz heights, villages were fortified (I.P.), and abattis (road block) set up in the woods."

Marshal Ney

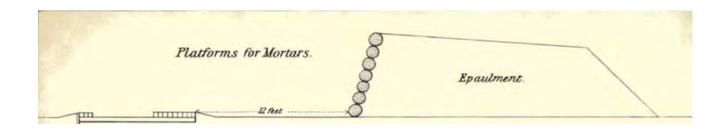
Background: In the actual battle of Bautzen, Nev delayed for two hours because his orders said to move at 12 when it was only 10. Ney's instructions were to "be at the village of Preititz around noon and attack the enemy's right. The officer who delivered the order had had to make the long detour through Klix; he arrived at 10:00 on the heights of Gleina, which Ney had just taken much sooner than expected. Preititz was located only two miles from the heights of Gleina, and the marshal feared committing to the affair too soon, as he did at Jena, and instead of continuing his victorious march, he formed his divisions between Gleina and the windmill height." -Leggiere, p. 348

Card Rules

(clarification): 20.53 General Retreat Card No. 9: It is not necessary to play a General Retreat Card to declare a General Retreat. The GR Card gives you an extra GR over and above the one per game (20.51). If you play the GR Card, your MA increases to 5/7. The GR Card may be played as "Inapplicable," for its Movement Allowance alone, like a Tactics Card (18.83).

Background: Napoleon successfully cancelled a General Retreat at the battle of Castiglione in 1796. It was a "feint" designed to get Wurmser to advance out of the hills. He also did that twice at Arcole, 1796, retreating at the end of each day.

THIS UPDATE CONTINUES ON BACK PAGE.



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NAPOLEON'S RESURGENCE RECOMMENDED HOUSE RULE:

Adding Coalition Roadblocks at Bautzen Kevin Zucker

During the development of *Napoleon's Resurgence* we encountered the question of Coalition roadblocks. A roadblock represents a physical obstruction (such as an abattis) plus a battalion more or less. We knew they had some roadblocks at Bautzen, especially along the Spree. But we decided they weren't critical, and so they were omitted.

Now the Coalition player may wish to avail himself of the omitted roadblocks. (The markers and rules are included in *Napoleon's Quagmire*.) This House Rule applies to the May 20th Set-up.

Going back to search out the Coalition roadblocks, there are three mentioned in Leggiere, "Napoleon and the Struggle for Germany" (Vol. 1)

- 1. Pliesskowitz (2616)
- 2. Doberschütz (2519)

Dobschütz is meant and not the village of Doberschütz (S-1211).

3. Niedergurig bridge (2320).

Nafziger's "Lützen & Bautzen" mentions three more:

4. Roadblock near the Powder Mill (1506). Macdonald found an unguarded stone bridge "which his corps rapidly crossed" while part of his troops crossed at a ford "near the powder mill."

"As they crossed, they were struck by the Volhynie Infantry Regiment in a bayonet attack led by Colonel Kurnossov and momentarily slowed." (p. 218).



"Oudinot encountered only a few skirmishers as he crossed the Spree. These were quickly pushed back, as Pacthod's 13th Division crossed two fords and the small bridges near the village of Singwitz (1813). His forces had completed their passage of the Spree by 1:00 PM."

- 5. They encountered another roadblock...
 "Pacthod's right moved onto a high plateau crowned with pines (S-1914) and defended by a single Russian battalion in a strengthened position."
- 6. The Russians put a roadblock at Hochkirch (S-5200).

"The Russians had cut down many of the trees around Hochkirch, to give their artillery a clear field of fire as well as to build an abattis to increase the obstacles that the French would have to overcome." Nafziger (p. 221)

The total of SIX roadblocks can be placed historically or freely, anywhere east of the River Spree, according to the Study Folder of *Napoleon's Quagmire* (25.73). Since part of the function of the Roadblock is wrapped in its hidden nature, it is more interesting to use the "free" set-up.

[Ed. Note: The total has been increased to 12. See page 8.]

General Retreat, and Proposed Combat Table Revisions

Kevin Zucker

Back when we designed 4 Lost Battles, and the cards were first developing, cards were seen, first, as a way to vary the Reinforcement Schedule, but second, as a way to shorten the rules, by putting onto them things that rarely happened. We then realized that the option to take a GR should be uncoupled from the card, but we decided to leave the card in the deck. In retrospect, that was probably not the best answer.

What would a proper GR rule be? In all fairness, it should provide a tool for the disadvantaged side to salvage their fat from the fire. Not losing was sometimes enough.

Even though Wittgenstein did not win, Bautzen served the Allied cause well, as it cost the Emperor twice as many men, and in retreat the Allies were approaching their supplies while Napoleon has no LOC at all and attrition is about to go through the roof, so that by June 1st the Allies outnumbered him.

Given the overwhelming forces against them, the Coalition Player will need that General Retreat order. It's like "Honor" required fighting when what the army really needed was to just retreat. As if some unwritten code that you cannot JUST bug-out. That is what we tried to juggle with in the arcane VP formulae.

Some players have a house-rule that the GR card is not placed in the main pack *until* the owning player elects to have it included.

When it's not needed, the GR Card can be played for the Movement Allowance. We just ruled that way. Remember that you can GR without card. The card gives you an extra GR if you cancel the first one.

Players do not like it when they are winning and then are forced to GR. A player should not have total control either. There were times when off-site events might force a retreat.

- You can cancel a GR even if you are forced to play it. Spend that turn dressing your lines or something.
- There are no forced movements just because of the GR.

• A General retreat can (theoretically) be used as a temporary "pull back" order, such as Hohenlohe at Jena. "The Prussians and Saxons could not withstand the pressure, and began to give ground, whereupon Prince Hohenlohe ordered a general withdrawal to the ground between Gross and Klein Romstedt. The withdrawal began in good order, but then dissolved into chaos as Napoleon unleashed Murat's massed squadrons." (Chandler's *Jena*, p. 63)

PROPOSED COMBAT TABLE REVISIONS

We have been testing a revision of the Combat Results Table substituting Dr* results and taking out the Ar*.

My greatest concern with this change is that the game will become somewhat less attackerfriendly. This will change the game. There should be lots of combat. Dr* means the defender, instead of taking a Dr, gets an extra bite at the apple. This makes the defense stronger.

On our first proposed table (page 12 below) instead of 7 Dr* results there are only 5. The one at 1:1 is balanced-out by an Ar* at 1:1. More battles are probably resolved at 1:1 than any other odds, especially when attacking chateaux. This means either side can benefit from a Shock at the most-common odds.

I'd be in favor of adding more Ar*, so that the effect is neutral, favoring neither the attacker nor the defender. We should consider adding more Ar* to balance the effect.

What is an Ar*?

I think we have to visualize in as concrete terms as possible. The French Imperial Guard at Waterloo, having received the final Dr result, had started to turn around and fall back, but just then, trumpets blare and drums roll, and the general gallops up and rallies the men for another attempt.

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What does this look like for the Defender? Remember, there must be some kind of LOS obstruction—woods, town, or crest. So then, there is a sudden surprise encounter. The British Guards stand up facing the French at lethal range. That is the Shock Moment.

So it seems to me that either Ar* or Dr* ought be provided for.

A general of ordinary talent occupying a bad position, and surprised by a superior force, seeks his safety in retreat; but a great captain supplies all deficiencies by his courage, and marches boldly to meet the attack. By this means he disconcerts his adversary; and if the latter shows any irresolution in his movements, a skillful leader, profiting by his indecision, may even hope for victory, or at least employ the day in maneuvering — at night he entrenches himself, or falls back to a better position. By this determined conduct he maintains the honor of his arms, the first essential to all military superiority.—Napoleon, Maxims, XVIII

What is Shock?

Shock is any combat other than the flat and level line/column/square fight, where battalions are not lined up in rows and columns. The occurrence of Shock Combat is very random; worse troops may get the upper hand, if they are alert, intelligent and responsive. Sometimes, as in an ambush, Shock Combat *can* be planned, but such plans often go wrong.

Some troops excelled at this kind of helter-skelter warfare; others could not function well. Any troops might be involved in a Shock Combat, depending upon circumstances. Prussian and Russian jäger excelled at Shock, as did the French infantry generally, and Austrian Grenzer, marksmen raised from backwoods provinces. Inexperienced troops without *elán* and the Prussian line infantry pre-1807 would not be placed in a town.

Reconsidering the "Ar*" Result

The Ar* makes low-initiative troops easy to kick out of a town, for example. But we concur—a low initiative rating indicates that a unit is not very good at "cohering" and performing unsupervised tasks invisible to their officers. All writers agree that it was just in this ability that the French troops generally excelled.

A unit's Initiative Rating is a combination of leadership—plentiful officers, good CO—and troop quality: training and doctrine, morale, well-supplied, confident and intelligent troops. Initiative means more than "élan;" but you can see how troops with a lot of élan and little training could still fight well in a town or in woods, even if they were not very good in regular combat; whereas low élan/poorly trained troops might congregate in the wine cellars and get completely drunk.

Now that we have had some experience with the revised table, we need to evaluate whether the defender now has too much help. What if the old Ar* was actually a needed balancing effect to take away some of the defender's inherent advantages?

[That is, almost all terrain benefits the defender; the defender also gets the rounding advantage.]

Let's assume, for now, the ideal wargame should be balanced, nearly 50/50. In most battles, as we know, one side is usually defending mostly and the other attacking mostly. The original *Napoleon's Last Battles* was biased toward the defender, 60/40 let's say. In concert with the 5-high stacking in TLNB, the Ar* gives an advantage to the attacker, to somewhat compensate for the defender's inherent advantages. It may have even moved the balance to the other side, 40/60.

I really just pulled those percentages out of the air, but wargames being wargames, it *must* be fun for the attacker or there is no game. We are even seeing games such as Bautzen where the attacker is on a roll. Maybe the defender needs the help more?

Testing of the new table with the Dr* result is ongoing. So far, the test team has found, after 60 instances of all types of the Shock Combat result. The Dr* with its 6 changes meant 10 per cent of results were changed.

				COM	BAT I	RESUL	TS TA	ABLE (CRT)				
Die	Die Probability Ratio (Odds) Attacker:Defender										Die		
Roll	1:5+	1:4	1:3	1:2	1:1.5	1:1	1.5:1	2:1	3:1	4:1	5:1	6 ⁺ :1	Roll
1	Ar	Ar	$\mathrm{Dr}^{\mathrm{c})}$	Dr	Dr	Dr2	Dr2	Dr2	Dr3	De	De	De	1
2	Ar2	Ar	Ar	$\mathrm{Dr}^{f{\star}\;\mathrm{b)}}$	$\mathrm{Dr}^{f{\star}\;\mathrm{b)}}$	Dr	Dr	Dr2	Dr2	Dr4	De	De	2
3	Ae	Ar2	Ar	Sk	Sk	$\mathrm{Dr}^{m{\star}\;\mathrm{b)}}$	Dr	Dr	Dr2	Dr3	Dr3	De	3
4	Ae	Ar3	Ar2	Ar	Ar	Sk	$\mathrm{Dr}^{m{\star}\;\mathrm{b)}}$	$\mathrm{Dr}^{m{\star}\;\mathrm{b)}}$	Dr	Dr2	Dr2	Dr2	4
5	Ae	Ae	Ar3	Ar2	Ar	$Ar^{* d}$	Sk	Sk	${ m Dr}^{{ m c})}$	Dr	$\mathbf{E}\mathbf{x}$	$\mathbf{E}\mathbf{x}$	5
6	Ae	Ae	Ae	Ar3	Ar2	Ar2	Ar	$Ar^{\rm e)}$	Sk	$\mathbf{E}\mathbf{x}$	$\mathbf{E}\mathbf{x}$	$\mathbf{E}\mathbf{x}$	6

Attacks at greater than 6:1 are treated as 6:1; Attacks at worse than 1:5 are treated as 1:5. "Ar*" or "Dr*" may be Shock If you obtain a Shock Result, proceed to compare the Initiative Ratings of the best units on either side on the Shock Combat Table, and apply the Combat Result.

NOTES:

- a) The CRT above is the same as the Test Table with changes noted.
- b) In the Test Table Ar* results have been removed, and Dr* added in each column.
- c) From the Test Table remove the * at 1:3 and 3:1
- d) At 1:1, add Ar*

Regarding the test statistics above, the defender is only advantaged 10% of the time, but in the old table the Attacker was <u>helped</u> 10% of the time. That is a 20% spread. We are moving it from the attacker to the defender.

If we want a truly balanced Combat Resolution System, then I believe the "*" result should be, at least, equally distributed to both sides.

Right now I am not convinced, we could be making the game less lucky for the attacker. The inherent advantages of defending are terrain and "SP rounding." Rounding will give you the benefit of a few SPs in the course of each turn. Terrain will increase part of the army's combat strength by x1.5 or 2.0. Let's say half the army has no terrain benefit, the other troops have been helped greatly by the Terrain Effects on Combat.

The Combat system with the Ar* functions to undo a bit of that defender advantage. That and the 5-high stacking... Those two things were needed to break open the game.

I think, in most games played, the player attacking has an advantage, whereby a passive defense doesn't work. An active defense is more historical. Attack and counterattack, back and forth, that is how we have it now. I would have to be very cautious about giving the defender that

When you are occupying a position which the enemy threatens to surround, collect all your force immediately, and menace him with an offensive movement. By this maneuver you will prevent him from detaching and annoying your flanks, in case you should judge it necessary to retire.

—Napoleon, *Maxims*, XXIII

much of an advantage. A 20% shift means 1 game in 5 would change.

Attacking should be fun. I am afraid that any change will make defending a more advantageous tactic. Right now I think there is a tenuous balance overall for all the 38 battles. Bautzen appears to be an exception, but I hadn't noted any strong patterns of one-sidedness in playtesting.

The following Proposed CRT revision (next page) has five Ar* and only three Dr* results.

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COMBAT RESULTS TABLE (CRT)

Die	Probability Ratio (Odds) Attacker:Defender										Die		
Roll	1:5+	1:4	1:3	1:2	1:1.5	1:1	1.5:1	2:1	3:1	4:1	5:1	6+:1	Roll
1	Ar	Ar	Dr	Dr	Dr*	Dr2	Dr2	Dr2	Dr3	De	De	De	1
2	Ar2	Ar	Ar	\mathbf{Dr}	Dr	Dr*	Dr*	Dr2	Dr2	Dr4	De	De	2
3	Ae	Ar2	Ar	Sk	Sk	\mathbf{Dr}	Dr	Dr	Dr2	Dr3	Dr3	De	3
4	Ae	Ar3	Ar2	Ar*	Ar	Sk	Dr	Dr	Dr	Dr2	Dr2	Dr2	4
5	Ae	Ae	Ar3	Ar2	Ar*	Ar*	Sk	Sk	Dr	Dr	Ex	Ex	5
6	Ae	Ae	Ae	Ar3	Ar2	Ar2	Ar*	Ar*	Sk	$\mathbf{E}\mathbf{x}$	$\mathbf{E}\mathbf{x}$	$\mathbf{E}\mathbf{x}$	6

Attacks at greater than 6:1 are treated as 6:1; Attacks at worse than 1:5 are treated as 1:5. "Ar*" or "Dr*" may be Shock (Sk). If you obtain a Shock Result, proceed to compare the Initiative Ratings of the best units on either side on the Shock Combat Table, and apply the Combat Result.

NOTES:

- a) The CRT above shows changes from the official table in red or green.
- b) In the Test Table above Ar* results have been reintroduced, and Dr* limited to only three columns.
- c) The Ar* result was removed at 1:3 odds or worse.
- d) It was pointed out that the Ar* result alleviated the problem of Chateaux not helping low-initiative defenders
- e) Most attacks on Chateaux will be at those odds at or near 1:1.
- f) By taking away 3 Ar* and adding 3 Dr* results, the number of Shocks should not increase too much.

Bautzen (continued from page 9)

The Bautzen battle could have used more testing than it received. (More testing is never a bad thing.) We had Andy Gebhardt on it, our best playtester, who in addition has travelled to the battlefield many times and knows the history around it.

Inherently the battle of Bautzen is one-sided. The Coalition fooled themselves into thinking they could fight here. They had not done what most players will do, and that is look at the Reinforcement schedule. If they had, they'd have seen the French advantage in strength of 70,000 men. The ratio of forces is 7:4. That guarantees the Coalition will be doing a General Retreat.

It has been proposed to limit French Command, maybe take Soult out of the mix. That would balance the game some, but there isn't any justification for it—it's just arbitrary— the kind of rule I don't like. I would, however, favor a rule preventing Soult from commanding any of Ney's formations (28.34).

Watching the Bautzen battle unfold in Chris's video, I thought the Coalition did well, until 2 PM when it was time to retreat.

I was expecting them to play the GR, not realizing they had a House Rule preventing that. So that wasn't something we found or could have found in playtesting. What we could have found were two things:

A) The need for roadblocks. I originally had roadblocks in the mix, but I determined they were not needed. So that was my mistake.

B) Ney either needs to be reduced to an officer (4), or else a special rule to cover his lack of judgement.

These two things along with the proper understanding of the GR could have been included in the published edition.

Bombardment Numbers

Andy Gebhardt, Tim Carne, Kevin Zucker

How would the infantry cope with being under fire? What could they do to present a smaller target? Would they turn their flank? Or was it less costly to turn directly toward the arty? When troops took evasive and protective action, that might lead to "suppression," a temporary reduction in effectiveness.

Was it cost effective for men to stand directly behind the man in front? That way, either no one would be hit, or three men would be. I was thinking about how the bowling pins are arranged, to minimize a strike from straight on.



Brigade Lambert (Smith) would appear to be in 1812 at the start of the battle moving to 1813 at the point described in the letter, with the 27th foot at the crossroad 1814 exposed to enemy artillery.

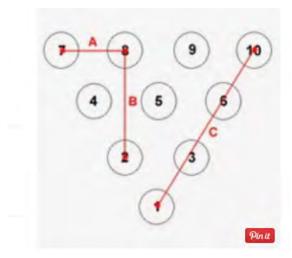
Tim-

Waterloo Letter #174 by Captain Drewe of the 27th foot at Waterloo.

"On reaching this station (the position close behind the crossroads) we (the brigade) formed column of companies at quarter distance, left flank to the enemy—the 4th regiment on the right, the 40th on the left and both considerably in rear of the 27th, which accounts for the few casualties in those Corps, comparatively speaking, with the 27th, as they were in great measure covered by the rising ground in front."

Letter #36 suggests something similar for the Union brigade earlier in the day, the regiment being formed first in line then wheeling to the left by Troop (so right flank of each troop towards the enemy), then each forming threes by the

right so each troop now facing forwards with a frontage of three horses. This is probably more to interpenetrate the infantry line and then



wheel up into line for the charge.

I think more can be said for moving tactically to take advantage of any crest or dip to keep the troops out of harm's way—examples include the retreat at Fuentes D'Oñoro and some of the French cavalry failing to do so at Lieberwolkwitz.

Kevin-

I have a feeling that it wasn't sheer machismo that caused officers to keep their men standing in nice rows and columns. If they were also facing directly toward the enemy cannon, their very straightness might save them. I still want to investigate further, whether the units would array themselves with a particular angle toward the guns (see bowling pins).

Remember too that these units have to move and fire as one. If you lost the formation, you lost all unit effectiveness with it. Machismo with a purpose.

Caveat: Numbers below pulled from thin air.

Each bty of 8 guns could fire around 30x8 or 240 rounds during the combat portion of a turn. Most of these rounds would either plough into the earth or skip or sail over their targets. Assuming the gunners have laid their guns properly and haven't been interfered with during their firing, a small portion, let's speculate 40%, or 100 rounds from those 8 guns, might find their targets. If the average round that struck the enemy

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took out 3 men, that would hit 1/2 or 3/4 SP per target unit.

On the bombardment table (see page 20), the best that 1 SP of arty can do is to gain a Dr (1/6th chance).

On the new bombardment table, there is a possibility of a De at 10+ SPs bombarding. Again, a 1/6th chance (with modifiers).

Letter #36 (above) does say, "left flank to the enemy." I am trying to visualise exactly what the artillerists were aiming at, what they saw, assuming they had a clear field of fire and were on a slight rise, as they ought to be. How large a target is a battalion at 1,050 yards?

At Bombardment range, all that the gunners would see would be a glimmer of movement in a body of troops. They could no longer discern individuals, only a shadowy patch of ground. Infantry and cavalry, however, could be distinguished up to the maximum bombardment range in the game, 1575 yards.

Tim-

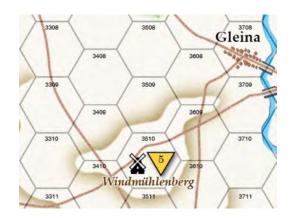
If we consider a British battalion of 600 men in two ranks then in line this will have a frontage of some 200 yards (300 files at 24 inches per file). When formed in open column of companies (and I am assuming 10 companies, not reduced to 6 companies as was the case for some weak battalions) and turned to a flank then this formation will be presenting 2 ranks per company so the equivalent of 20 files as opposed to 300. You could argue three "files" per company to allow for the supernumerary rank of sergeants etc. This means that the target presented over the same 200 yards frontage would be 10 clusters of 2 or 3 men each.

In this case the infantry were on the reverse slope so not visible to the artillery.

Kevin-

Sometimes the most important information isn't mentioned anywhere. So we are lucky to have this account. I still believe that forces in the open might have tried to present less of a target by adjusting their deployment.

Anyway, we can work with the numbers given.



Suppose we imagine a battery on the Windmühlenberg at Bautzen, facing north. At two-hex range, it has a field of fire of 2600 yards, including hexes 3309, 3408, 3508, 3608 and 3709. (Assuming it can see over the crest at 3609.) A single battalion straight ahead in the middle of this zone presents a target of 200 yards, which is a narrow slice of 7% of the entire field of fire. If in column it would be only about 24 yards wide, less than 1%.

Since I have no numbers I'll go out on a limb and guess that all of the battery's guns will hit the target <u>hex</u>, but only 33-40% will hit the battalion column. This is for the case in which there are no folds in the earth for the battalion to shelter behind. Tim, you may have actual data. I am sure it exists somewhere. Anyway that battalion could expect to lose 300-400 men in a half-hour of bombardment, or nearly half their strength.

Probably a single battalion would not stick around for that kind of punishment. In the game that bn. might be represented by an infantry unit with a strength of 1. More or less 1 bn = 1 SP. However, if this bn. was part of a larger brigade, such mayhem might be considered acceptable depending upon the brigade's mission. We are saying that there is a 1/6 chance of that brigade being forced to pull back because of the fire of that single battery of 8 guns. That means the brigade might stand there for 5 hours before taking a Dr.

There is an account in the battle of Jena (from *Special Study* Nr. 5, p. 48):

Lannes then gave us a remarkable example of the accuracy of his judgment. Pointing out to me the line of the enemy's infantry, of much greater strength than our own, which was facing him, he ordered me to go and fetch these two pieces of artillery, and to place them in position

(continued on page 25)

Apres Moi les Bagages!

Kevin Zucker

If you ever wondered how many wagons are associated with one "baggage train," the number includes one wagon for each gun in that Corps—carrying artillery ammunition, as well as wagons carrying food and ambulances.

At the start of the Autumn campaign in 1813, the III Corps, with nearly 40,000 men had:

- 475 wagons containing artillery ammunition (for 104 guns)
- 31 wagons containing tools and materials for the engineers (only 46 officers and men)
- 155 wagons containing ambulances, food and HQ (a part of this battalion served on detachment in the surrounding neighborhood)
 661 wagons TOTAL.

The III Corps was assigned the 5th battalion of *Equipages militaires*, with 155 wagons, 8 officers and 410 men. These 155 wagons carried the ambulance and victual service, as well as the headquarters effects. In single file they would stretch out for about a mile on the road.

Of 155 wagons, deduct 36 in ambulances and possibly 12 for the HQ. That leaves 107 wagons for biscuit, brandy and rice.

Sometimes additional bread was put into the artillery caissons. But we are more interested in the ammo load. Those 475 wagons should be able to hold enough ammo for two full-scale days of battle, including small-arms ammo. Chandler gives the amount of ammunition carried into battle for each type of gun (including the coffret):

12 lber. 77 rounds (77 min.) 8 lber. 97 rounds (48 min.) 4 lber. 168 rounds (67 min.) 6" How 64 rounds (64 min.) ¹

Ney's III Corps had a total of 104 guns, with more than 4 ammo wagons for each gun.

III Corps Artillery

12-12 lbers.

66-6 lbers with the divisions

26- Howitzers ²

"When the French emplaced, the coffret was placed on the gun limber and the bricole connected. Ammunition for firing was taken from the coffret and refilled from the caisson, of which there was one per piece in the battery position." ³ The remaining 3 wagons per gun were held back.

"The coffret for a 12-pounder held 9 rounds, the 8-pounder and 6-pounder 15 each, and the 4pounders 18 rounds."

Looking at the 77 rounds cited by Chandler, of that total 48 rounds of ball and 20 rounds of canister per 12 pounder gun makes one wagon load (816 lbs.). To reach the total of 77 rounds Chandler includes the 9 rounds in the "Trail Chest" ("coffret").

Coffret. Late 15th century, from old French, 'small chest', diminutive of coffre ("coffer").

Ney's corps started the campaign with 661 wagons. Only a portion would come all the way forward to approach the active battlefield.

Ney had four ammo wagons for each gun at the start of the Autumn Campaign. For the 12 lbers., for example, four wagons carried 272 rounds per gun, 3264 lbs. (816 lbs. per wagon). That is, enough for two days of battle. These are my calculations and are approximate.

It was asked whether the baggage train should not take up more road space than it apparently does in the game: That depends on the mission. If the corps in making a long march, the baggage should be following closely behind the corps. If a wagon and two-horse team took up 10 yards in a roadway, one 525-yard hex *could* hold 50 wagons nose to tail. The 100 wagons of the average baggage train could actually be compressed into two hexes. The infantry would march alongside the convoys at the side of the

¹ Chandler, Campaigns of Napoleon, pp. 358-59

² OSG, Special Study Nr. 1, p. 71

³ http://theminiaturespage.com/boards/msg.mv?id=244303

road. If the corps is in action, then the "trailhead" of the baggage train must be placed on the battlefield at a secure road intersection. Most of the wagons would be scattered around with the guns (one wagon per gun in battery), or running back to the trailhead to fill-up.

"Artillery officers have differed in opinion as to whether the 8 guns with their limbers should march past, the wagons following behind the 8th gun, or whether each wagon should follow its gun. In general, artillery officers prefer that the wagon should follow the gun. They fear the wagon may make a mistake and get lost amid the perplexities and circumstances of a battle. In their desire to obtain every possible security, the wagon shall not be far from its gun, and they can find no other means than by keeping the wagon always under the eye of the No. 1 of the gun."

-Napoleon

Just as the combat units do not always fit themselves into a space of 525 yards, so the baggage trains could spread out over several miles. The baggage train marker designates only the hub in that network, a trailhead with a few wagons sitting by, but we have to conceive most of those wagons coursing up and down the LOC, some of them carrying ammunition and some food, ambulances, or engineering gear.

"The bulk of ammunition was carried in caissons, designed by Gribeauval to hold the new 'fixed' ammunition, i.e. projectile and propellant made up into one. ⁴ The caisson was an 11-foot long, narrow-bodied wagon with a sloping lid hinged to open, the interior being divided into compartments for the assembled rounds. Powder and matches were also carried in the caisson, as were shovels and a pick (fastened to the sides), a detachable tool-box at the front and a spare wheel ... A light caisson was also produced (presumably for horse artillery use) only 7'6" long and without either spare wheel or tool box." ⁵

Cannon	Ammunition wagons	Weight of fully loaded caisson	Cannonball and caniste per caissor
8- pounder	2	1295 pdrs	92 projectiles (+15 in coffer
4- pounder	1	1079 pdrs	150 projectiles (+18 in coffer
6- pounder	1 or 2	1468 pdrs	140 projectile: (+21 in coffer

Ammunition was also kept in the small coffret attached to each gun's trail. The ammunition in the coffret (Gribeauval System) consisted of:

12pdr — 9 rounds 8pdr — 15 rounds 4pdr — 18 rounds 6.4" howitzer — 4 canisters

The French army used two kinds of wagons designed to carry the supply of ammunition: 'caisson à munition' (ammunition caissons) and 'charette-caisson' (ammunition wagons). The ammunition caissons and wagons were painted an olive-green, metal and wooden parts, including the wheels. The oil paint increased the resistance of the wood against the damp and bad weather.

Napoleon habitually wanted a double standard load of ammunition with each gun. That required 2 caissons for each 4-pounder, 3 caissons for a 6- or 8-pounder, and 5 caissons for a 12-pounder.

The 12pdr caisson loading (Gribeauval System) was designed to carry ammunition for the 12pdr and 8pdr cannons, howitzers, and infantry muskets:

12pdr — 48 rounds, 12 big and 8 small canister 8pdr — 62 rounds, 10 big and 20 small canister 14,000 infantry cartridges

This caisson also could carry ammunition for the new 6pdr cannon of Year XI. The 4pdr caisson was designed to carry ammunition only for the light 4pdr cannons and infantry muskets:

4pdr — 26 rounds, 26 big and 24 small cartridges, 12,000 infantry cartridges.

⁴ http://www.napolun.com/mirror/web2.airmail.net/napoleon/artillery_Napoleon.html

⁵ Wise and Hook, Artillery Equipment of the Napoleonic Wars p. 7

Marshal Soult at Bautzen

Napoleon had withdrawn Soult from Spain at the request of Joseph. He arrived at IHQ just in time for the battle on the 20th AM. At 7 AM Napoleon assigned him to the center, to command IV Corps (Bertrand). Soult assured the Emperor he would soon be on the plateau east of the Spree. Perhaps it isn't surprising that he didn't achieve the timetable expected of him.

From a play-balance perspective we need to keep Soult away from the Russian right.

Soult is only mentioned in F.L. Petre in three passages relevant to the Battle of Bautzen:

- a) Napoleon, anxious about his broken communications with Ney, had, about 7 AM on the 20th, ordered Soult, with Bertrand's corps and Latour-Maubourg's cavalry, to re-open them. Then, finding that they were again open, when he received Ney's letter of 9 PM on the 19th, he stopped his movement (p.121).
- b) Soult, on the French left, had advanced with Bertrand's Corps (on the 20th). He succeeded though with heavy loss, in reaching the Spree at Gottlobsberg and driving its defenders onto the Kiefernberg, but he only got a small force across the river there. At Nieder Gurig he also had a severe struggle to take the village and drive its garrison back on the main position at Doberschütz. Briesing was found unoccupied and Soult's left pushed through it part of the way to Plieskowitz. (p.123)
- c) Soult, with Bertrand's corps, But Ziethen's battalion was only withdrawn from the Kiefernberg at dawn, and there were difficulties in constructing a bridge below the Gottlobsberg, where the water was deep. At 11 AM Bertrand was still not across, and it was not till 2 PM that he had 20,000 infantry, 1000 cavalry and 30 guns on the right bank. He was therefore very far from having done what Napoleon expected when he sent orders to Soult to attack the enemy vigorously with three divisions advancing between Marmont and Ney. (pp. 127-28)

Soult is mentioned in passing by Nafziger...

d) When Napoleon learned that communications with Hoyerswerda were broken, he ordered Soult, with Morand's 12th Division, the 38th Division of General Bertrand, Bruyère's 1st LC Div, and Bordesoulle's 1st HC Div of I Cav Corps to re-established communications. Bertrand's attack stalled as he shifted his forces, with just the jittery Italian Division left to hold the line. To cover the gap, Marmont ordered his



22nd Div to occupy the positions that Bertrand abandoned. (Nafziger, pp. 219-20)

This excerpt explains the lack of success in getting across the Spree on the 20th. The order from Napoleon was to blame in diverting the attacking force. This excerpt also further identifies the troops withdrawn (see note a above).

Peter Hofschroer's *Lützen-Bautzen* book (Osprey) gives details on the false march:

- e) Marshal Soult took Bertrand's Corps and Latour-Maubourg's cavalry halfway to Gross-Welka and Klix to support Ney in case he met serious resistance. However, at 9 AM, before Soult had move off, a report came in from Ney... (p. 74)
- f) Soult's Corps was making little headway against Kleist, despite having a considerable numerical advantage of 17,800 men and 49 guns. Unable to cross the Spree, at 3 PM he ordered Franquemont and Morand to advance in three columns against Gottlobsberg, Nieder-Gurig and Briesing, which they did under fire from Kleist's artillery.

This detour by Soult is one of those things that will never be simulated, because of eye-in-the-sky. The player knows where Ney and the Coalition forces are. It would be better to represent such meanderings as an initiative failure (in reality, troops going in the wrong direction). That indicates to me that taking away Soult's command point, removing him from the game entirely, would help to get the right effect.

However, now that he is in the mix, removing him is no longer the easiest solution. Given his actual performance, marching the wrong way especially—though that was not his fault—the net effect is: things took longer than they would have with a solid Command Point.

So what do you do? I think we have to keep him, but limit him to his actual role of giving his CP to IV Corps. His featured role was to be more or less a distraction anyway. In that effect he achieved his goals and his delay might have been better, as this effect also delayed Blücher's departure to the last minute.

Keeping Soult in the game is okay, but he should only command IV Corps.

An extra command point anywhere else would be too powerful ...

Leader Ratings

A Rating that works in one battle doesn't work in another. The first version of the counter mix always starts out with the leader's former rating from a different year. That means very little. We have to look again to investigate how these Command Points are effectuating through this Army at this time and place. Marshal Ney must stay a [1] Commander. But his monster Corps—even after great losses—is several times his opponent Barclay's strength! His CP has a higher multiplier than Barclay's.

A cursory glance at the counter sheet can make sure both sides are equal in Command Points, but it doesn't tell the whole story. Both sides have 6 CP in play. But the final multiplier they represent is proportional. The French have a 1.75 multiplier (or less if their whole army is not in Command). A larger proportion of the French army would also be in command. Therefore, the correct proportion of CP should have been 7 Coalition vs 4 French. Such would be a more balanced game, and closer to the facts.



Bautzen is a big battle —4th largest in the Napoleonic Wars—and of the four*, it is the only one where the French have such an advantage. In the latest updates, we have hogtied Ney, and fellow Marshal Soult. The two hated each other from their time in Spain. With their

excess combat power, the French need to be

restrained. More playtesting would have revealed this.

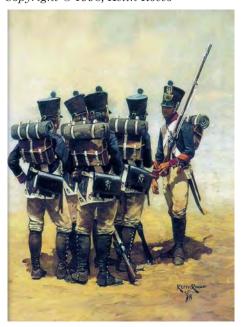
At this battle there were fraught command divisions at HQ (the direction of Preititz –vs.–the spire of Hochkirch) which I ascribed to



Hochkirch

Jomini's retrospective attempt to blame Ney for the disappointing outcome. I dismissed his arguments as personally biased, but now I am looking at the whole situation again. Maybe he's actually right. In light of how that decisionmaking body manifests in this game, Ney sits down from 10 AM to Noon. ... He probably felt, and rightly too, that his troops who have been forced marching can get a pancake and a snooze.

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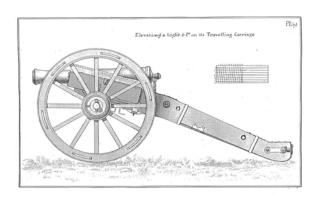


*Leipzig (475,000–41%), Dresden (355,000–43%), Borodino–(264,000–50%), Bautzen (264,000–63%). (Total men on the battlefield–French forces as percent of the total.)

New Bombardment Table

How it works, what it says about history, and the incentives it gives to players. by Christopher Moeller

		ВО	MBARDME	ENT TABLE			
			Bombardn	nent Stren	gth		
Die Roll	10+	8-9	6-7	4-5	2-3	1	<1
-1, 0	S	S	. 60		• 1	•	•
1	Dr	S	S	•			
2	Dr	Dr	S	S	•		
3	Dr	Dr	Dr	S			
4	1R	Dr	Dr	Dr	S	•	•
5	1R	1R	Dr	Dr	Dr	S	
6	1R	1R	1R	Dr	Dr	Dr	
7,8	1R	1R	1R	1R	Dr	Dr	Dr
9+	De	1R	1R	1R	1R	Dr	Dr
Key							
1R = Reduce	one Com	nbat unit (a	ttacker's ch	oice); may	retreat also.		
De = Defend	ler Elimin	ated	• = no	effect			
Dr = Defend	er retreat	t. On succes	sful initiati	ve check ma	ay convert res	ult to 1R	instead of Dr.
S = Suppress	sed. Modi	ifier of -1 fr	om target's	initiative in	the following	g combat	step.
MODIFIERS:	(see Note	es to Comb	at Tables)				



British light 6 pdr. Gun on a double bracket field carriage

The new Bombardment Table above has been developed by the entire OSG team through a series of long discussions and is very similar to the one in current use. Most of the results are actually unchanged. The table has two new columns and one new line. In addition to the added columns for "10+" and "<1" (less than 1), and the new line (9+) at the bottom, the new Bombardment Table also contains a new result, the "S" (Suppressed) result. Suppression fire forces the defenders to keep their heads down. Suppressed units have a -1 Initiative modifier in the coming combat phase (in case there should be a shock in that hex).

In addition, the new interpretation of the "Dr" result (for this table only) allows units to check their initiative, and if successful, they may stand in place and take a 1R instead of retreating from the hex. This is similar to the concept in the *Campaigns of Napoleon*, where the combat result may be taken as a retreat result or a Combat Strength loss. There are several factors at play here:

The Attacker can affect his attack by:

- 1. Increasing the number of guns (modified by terrain effects and weather)
- 2. Increasing the modifiers to the dice roll (mostly from cards: +1 for Grand Battery and Point Blank Fire, and from being in Square).

The Defender may be affected in three ways:

1. Miss: target is unaffected

- 2. Retreat: target is forced to retreat (unless initiative is rolled, in which case there is an option to lose a step instead)
- 3. Reduction: target loses a step of strength Let's look at how these factors interact with one another, and think about what they represent.

The number of guns firing.

The more guns the attacker brings to bear, the less likely he is to miss. That seems intuitive: the more guns firing, the more likely an effect on the target. Second, once 4 SP's are firing, half of the results will be retreats, the remainder will be a mix of Misses and Reductions. As the number of guns increases, the more Misses are converted into Reductions. At 10+, half the time you're causing Retreats, and half Reductions.

This is modified by terrain and weather effects, which neutralize a proportion of the attacker's strength (firing into a town, for instance, effectively neutralizes one third of his bombarding strength). Terrain and weather influences two things: the more "rough" the terrain or severe the weather, the more misses will occur and the fewer Reductions will occur. (Retreats remain the same until you drop below 4 Strength Points.)

At 4 Strength Points and above, you're retreating the target half the time. The rest of the

¹ Thanks to Aaron Tobul for the Suppression idea.

time, you're either reducing him or missing altogether. At 3 strength points or less, this flips, where there are no more Reductions, only Misses and a dwindling number of Retreats.

So, at low strength (3 SP's or less), artillery is mostly Missing. When it hits, it causes Retreats. At 4 SP's and up, Reductions are introduced. They begin to replace misses, until at the top of the chart, half of hits are causing Reductions and half are causing Retreats. Bigger bombardments replace more Misses with Reductions. Retreats remain constant.

It's as though the Bombardment Table is actually two different tables, with 4 SP's being the break point between them. On the low end, increasing the number of guns increases the likelihood of a Retreat result. On the high end, the odds of a Retreat level out at 50%, and you are now beginning to convert misses into Reductions. This seems to imply that, in terms of severity, reductions are somewhere in-between a miss and a retreat. As you fire more and more guns, your target will be reduced rather than emerging unscathed. Why then, does the lower half of the table contain only the Retreat result, and no Reductions? What is it saying? It seems to suggest that the Reduction result is something that only happens during high-intensity bombardments. At low intensity, formations may give way to panic, but are unlikely to be physically mauled by the artillery fire.

[Ed. Note: If that hex is key terrain critical to hold, a 1R result may be preferable to a retreat.]

Modifiers to the Roll

The second way a bombardment can be affected is through modifiers. These are actually rather rare. They're either the result of charges, or of card play. Play of a grand battery card or point blank fire card will cause die roll increases. At the low end of our table (3 SP's or less), each modifier eliminates a Miss and adds a Retreat. As more guns show up (4 SP's or more), this begin converts more misses into Reductions. At 10+ SP's, it switches to where *Retreats* begin to be converted into Reductions. If we see Reductions as a "weaker" result than Retreat, this is counter-intuitive. Possibly the 7,8 result on the 10+ column should be a De?

The Results

Miss, obviously, is the best outcome for the defender. Every column reduces the chances of a Miss by one. Defensive terrain and bad weather increase the likelihood of this outcome.

Retreat can be either a non-event or catastrophic (for a unit that's surrounded). That's another reason for the new rule allowing units to check initiative in order to avoid retreating. For units that make their roll, a Retreat is now either non-event, bad (a Reduction), or catastrophic.

Reduction is always bad for the defender. It can be worse than a Retreat, or better (if the unit isn't surrounded). This is something that begins to happen more and more frequently as the number of guns goes up. It's clearly a function of large numbers of guns pounding away.



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DESIGN NOTES:

Logistics is the Key to Landpower

Kevin Zucker

The title, above, was provided by Andreas E. Gebhardt, a great friend and military man. It says it all.

In the current TLNB rules, the game ends with the close of day after the big battle. We don't have the tools to properly replay the pursuit stage of a campaign (after the battle stage). Simplifications in the treatment of Logistics are hindering the TLNB Design Intent of stringing campaigns together in weekly periods.

We have been working on this problem so that our games can better reflect the full campaign. The After the Battle Stage are the days between battles—when troops are resting and reorganizing, and a lull has fallen in the fighting. For example, in March 1814 we have Napoleon fighting a small battle at Reims, just after a big setback at Laon.

Definition of LOGISTICS

1: the aspect of military science dealing with the procurement, maintenance, and transportation of military matériel, facilities, and personnel 2: the handling of the details of an operation; the logistics of a political campaign.

First known use circa 1861 in sense 1

Both logic and logistics ultimately derive from the Greek *logos*, meaning "reason." But while logic derives directly from Greek, logistics first passed into French as *logistique*, and then into English.

Origin and Etymology of LOGISTICS

French *Logis* lodging, maison. French *logistique* art of calculating, logistics, from Greek *logistikē* art of calculating, from feminine of *logistikos* of calculation, from *logizein* to calculate, from *logos* reason.

For game purposes Logistics encompasses everything that isn't combat: Marches, Attrition, Leaders, Replacements and Reinforcements, etc. We have under development a new rule covering the role of baggage trains in the reorganization of armies after a major battle (see below).



Logistics in the game are expressed in terms of VPs. The most expensive unit to lose is baggage and losing a supply source is the same in terms of VPs.

What are VPs all about?

The Victory Point process is an attempt to evaluate the status and condition of the two armies for continued operations. Winning the battle is only half the battle! You have to win the pursuit; you may even have to win another battle. The VP levels at the end of the battle are not just about who won the battle today, but are supposed to predict the future operations of the two armies.

Unlike in the *NAB*-series campaign games, where Supply and Administration have such an important impact, here the effects of supply and admin are reduced to a few rules regarding baggage; they are also indicated as an effect on VPs.

These armies were at a disadvantage if they had to fight two days in a row. This is the reason why major battles were interrupted by what we have called the "Truce" days: at Leipzig and Waterloo, the 17th, at Borodino the 6th. Here the troops are being reorganized, the armies are licking their wounds, supplies are being brought up,

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officers promoted from the ranks, battalions consolidated. These functions need to be taken care of on the day after a major battle. Troops can fight on an empty stomach for one day, but not two. Armies brought enough ammo for two days of battle, but not more. Troops need food and rest.

The "Undeclared Truce Days" rules, below, are an attempt to fill-in the missing details of what the armies have to do on their "day off" from battle.



30.6 Undeclared Truce Days

During the 11th-12th there was no combat as both sides were engaged in Recovery and Reorganization. Blücher was sick. Napoleon was allowed to slip away without pursuit.

30.61 Skip Truce Days: For a more historical and quicker campaign, skip the 11th and 12th entirely and move to the scenario start for the 13th. Use the historical set-up positions for the 13th, and implement the other scenario information as provided in 30.1–30.5.

30.62 Reduced Strength Units

Indications of ® or eliminated on the Initial Setup for the 13th should be ignored. Losses will depend on the outcome of the fight on prior days. Carry your losses forward from the 10th to the 13th. EXCEPTION: All units in the UAR, and all baggage trains, are automatically reorganized prior to the start of the 13th. **30.63 Play-out the Truce Days** (OPTIONAL): If you decide to play-out the 11th and 12th, draw two bonus cards each day. Leaving your forces in position from prior play, continue with 9 AM, March 11th using the Night Turn Sequence (2.2). Carry your losses forward from the 10th to the 11th performing recovery and reorganization as usual, until every eliminated unit is attempted, or the day sequence recommences. The following rules (30.64–30.67) apply when using this option.

30.64 Combat during Truce: If any unit enters an EZOC, Players switch to the Day Sequence immediately. Any formation which takes part in combat on a Truce Day has to roll for each of its units still UAR at that moment to see which ones will become PEU (30.67).

30.65 Baggage Reorganization: During each Reorganization Segment (22.2), of Weather check turns only, the Phasing Player may automatically reorganize one lost baggage train. The recovered Baggage Train enters as a reinforcement at any friendly Supply Source (not in an EZOC). VPs awarded to the enemy for the old baggage are not lost. Only a Commander or the appropriate Corps Officer may reorganize a baggage train. If the Corps baggage train is not on the map that Corps's reorganizing combat units are subject to a die roll (30.67).

30.66 Reinforcements during Truce:

Reinforcements arrive as specified on the TRC; each may be assigned a march order at the time of arrival.

30.67 Baggage Train Movement: All Formations must recover any units awaiting reorganization before their baggage trains move away from the current friendly supply source. If the Formation's Trunk Line (17.43) is increased, roll for each unit of the Formation still on the Reorganization Display: on a die roll of 5 or 6 move the unit to the PEU. All units that are out of supply (or lack a baggage train) upon reorganization must also roll as above.

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(continued from page 15)

on his left, on a mound which he indicated. "After their second discharge," he said, "you will see the whole of that line of infantry and artillery beat a retreat." It only took ten minutes, after our second discharge, just as he had said, for the Prussian line to waver and fall back.

Lannes could only have known this, in my opinion, because he had seen the line wavering.

But anyway, here you have *less than* one SP of guns pushing back a (demoralized) line of infantry. I would assume that would be an extreme outlier of a result. [<1, Dr]

Tim-

One thing to consider is the makeup of the battery. I think the French often kept the howitzers loaded with canister as a defence for the battery so the bombardment may well have taken place with only the six cannon of the battery.

I will have a look at the 1828 Kriegsspiel rules and charts to see what the professionals of the era considered as accurate rates of fire and of damage inflicted.

The original 1824 ruleset describes fire at good effect (when the target is clearly visible and the terrain is open) and at poor effect (target may be in broken ground or up and down a slope).

From Napoleon, His Armies and Enemies-1

- <1, no effect] In 1807 at Konigsberg, 13 men were hit by a single roundshot, and at Hanau in 1813, nine.
- [8+, no effect] At Wagram regiments bombarded all day by the full weight of the French artillery lost only 1/8 of their strength." (*Griffith, "French Artillery" pp 13-14*)
- [<1, no effect] In 1812 at Polotzk 3 French guns fired "upon a Russian battalion for several hours. The Russians suffered only 3 casualties because they conducted a series of small movements to the left and to the right."
- [6+, De] During the advance against Russian positions at Craonne (1814) Marshal Victor was wounded in the thigh and the command devolved on Boyer de Rebeval. His infantrymen found themselves in the open and under heavy artillery fire. The young conscripts were *shaken*. They did not dare either to advance or to retire. A retirement to the shelter of the wood would have involved a risk of panic. "The young soldiers behaved better than

might have been expected, but they lost terribly; the 14th Light Infantry Regiment lost 30 officers out of 33, and the regiment was mown down like a field of corn." (Houssaye - "Napoleon and the campaign of 1814" p 151)

- [1, 1R] In 1805 at Austerlitz, the Russian horse battery advanced against French infantry formed up across the road to Blaziowitz. The French stood motionless under the fire of 8 guns firing directly at them. Within moments 400 soldiers were either killed or wounded. "Our soldiers, motionless, endured this fire with the greatest intrepidity."
- [4-5, De] In 1807 at Friedland the 3rd Battalion of Russian Lifeguard Ismailovsk Regiment was bombarded by 30 French guns and was virtually wiped out. They lost 400 out of 520 men! (Mikhailovsky-Danilevsky, "Campaigns of 1806-1807").
- [8-9, Dr] In 1812 at Borodino, the Russian infantry advanced in "dense masses" and were hit by French cannonballs. The missiles made wide and long holes in the dense formations. The columns halted for a moment before their officers and NCOs put some order in the ranks. The French gunners redoubled their fire.

The columns kept coming in steady pace until canister shattered their front ranks. The leading officers and grenadiers fell down killed or wounded and the columns again halted. The French poured more canister and the attackers broke and fled.

- [2-3, no effect] At Borodino the French 30th Line took "numerous hits from artillery as it advanced against the Raievski Redoubt." Despite the destruction of several files the French continued their advance.
- [2-3, S] At Borodino a French horse chasseur regiment stood under Russian artillery fire for 8 hours and lost only 97 out of 280 men.
- [1, 1R] In 1812 at Smolensk, 12 Russian guns inflicted 120 casualties on four squares of French infantry. It took only 3 minutes for the gunners to inflict this kind of carnage.
- [1, Dr] In August 1813 at Katzbach, several cannon-balls hit the advancing Prussian battalion of land-wehr under Major von Hiller. It threw the battalion into disorder and the mob moved back and tried to push through other battalions. They were halted only when Hiller directed several guns at them. "I would have fired on them if the rout continued."

 Order was restored, they formed a square and even repulsed a cavalry attack. They held their ground even when another cannonball struck them and killed 14 men at once!
- [<1, no effect] At Sacile, an Austrian gun carried off a file of 3 men in each of three successive shots, but in its subsequent fire hit nothing.
- [2-3, 1R] In 1813 at Leipzig a Prussian bn lost approx. 200 men within 1 hour of artillery fire.

¹ http://napoleonistyka.atspace.com/artillery_tactics.htm#_accuracy_tests_for_artillery

Some of the above results are not possible in our current table. Eight of the given results cited occur already on version 9, but 5 do not. The next table, version-13, shows 4 new "De" results, 4 more "1R" results, and 3 new "no effects." Changes from Table-9 are shown in red...

		BOM	BARDMENT	TABLE K_13			
			Bombardn				
Die Roll	10+	8-9	6-7	4-5	2-3	1	<1
-1, 0	S		•		•		•
1	Dr	S					
2	Dr	Dr	S		•	•	•
3	Dr	Dr	Dr	S			
4	1R	Dr	Dr	Dr	5		
5	1R	1R	Dr	Dr	Dr	5	
6	De	1R	1R	1R	Dr	Dr	
7+	De	De	De	1R	1R	1R	Dr
Key							
				oice); may app			
or = Defend De = Defend			• = no	ve check may o	onvert r	esult to 1K	instead of Dr.
				initiative in th	e follow	ing combat	step.
MODIFIERS:							
Reduce stre	ngth by 1	/2 at 3 hex	range. Red	uce strength b	1/3 if t	arget is in a	town
f Weather i	s Mud, su	btract two	from the di	e. Grand Batte	ry (+1 D	RM) See ca	rd
nfilade fire	(+1 DRM) if bombar	ding units a	re at least two	hexes a	part.	
Grand Batte	ry and En	filade fire a	re not cum	ulative (choos	e one).		
No Enfilade	fire at 3 h	nexes range	or into tow	vn hexes.			

Note: The changes in red are concentrated at the bottom of the chart. We added an Enfilade modifier.

Density Modifier? Whether there is one battalion in a hex or 40, the battalion footprint (and density over the ground) is going to be around 24 yards deep by 200 wide (depending upon formation).

Napoleonic Artillery without LOS has no effect because it cannot see what it is firing at. This is not "area fire" such as you might have in the 20th century. This is observed fire. The gunners are taking aim at a particular battalion that they can see.

A battalion at 1,050 yards is something like a postage stamp relative to the gunner. I would be interested to know whether the adjusting screws and levers would allow of really minute adjustments.

Bombardment Tables presented in this issue are experimental; none have been officially adopted.

In 1814, the French had some divisions of conscripts of 20 days service (at Craonne, Victor's troops). They didn't dare take a Dr because they expected their unit to disorganize in any kind of retrograde movement. So they had to stay and take the pounding, a definite 1R or even De.

Even though I have flip-flopped on this density modifier idea, I have recently flopped, to the conclusion that a density modifier doesn't make sense when most of the hex is empty (c.f. checkerboard deployment). Density modifier is based on a misconception of what stacking means. "Stacking" doesn't mean that all the units are exactly inside a hexagon of 50 acres. They are spread out but "on call" at an instant's notice from either the Div Gen or other leader.

Range	Gun	Direct shot	Ricochet	
600 yard	s 6pdr	?? %	too short	0
	12pdr	?? %	too short	
950 yard	s 6pdr	9 %	25 %	
	12pdr	13 %	22.5 %	
1,350 yar	ds 6pdr	0 %	25 %	
	12pdr	9 %	22.5 %	
1,800 yar	ds 6pdr	0 %	?? %	
	12pdr	0 %	20 %	
	12pdr	55 %	too short	
1.200 var	ds 6pdr	16 %	21 %	
1,200 yar	ds 6pdr 12pdr	16 % 25 %	21 %	
Accurac	12pdr y of gur compan	25 % as in tes		
Accurac	12pdr y of gur compan	25 % as in tes by sized h Artill	21 % sts agains	
Accurac approx. Griffith	y of gun compan - "Frence Source of	25 % as in tes by sized th Artilla	21 % sts agains l screens. ery" p 14)	
Accurace approx. Griffith	y of gur compan - "Frence Source of informat	25 % as in tes by sized th Artilla	sts agains I screens. ery" p 14	% Hits
Accurace approx. Griffith Country	y of gur compan - "Frence Source of informat Lauerma	25 % as in tes y sized h Artill f	21 % sts agains I screens. ery" p 14; Range 1000 m 800 m	% Hits

Napoleon's Resurgence

SUPPLEMENTAL UPDATE (p. 2)

for ALL Study versions 12 Sept 18

ARTILLERY

2.1 Artillery Reaction Fire (new step in the Sequence of Play) Insert the following into the Turn Sequence:

D. Combat Phase

- **2A.** Artillery Reaction Fire Step. The non-phasing Player executes bombardment (13.0). Bombardment Strength may be reduced by Counter-Battery Fire (13.5).
- **2B. Attack Declaration Step:** The attacker must declare which friendly units are attacking which enemy units (10.3).
- **3. Bombardment Step:** The Phasing Player executes artillery bombardment (13.0). Artillery that suffers a "Suppressed" result in Step 2A may not bombard now.

The New Bombardment Table (under development, above right) has more 2R's and 1R's; new "Suppressed" result & Enfilade Modifier. Try it!

13.5 Counter-Battery Fire

The effective strength of Artillery Reaction Fire (ARF) is reduced by one-half the strength of any artillery in the target hex (rounding fractions down). If the target has no **LOS** on the bombarding unit, or is alone in an EZOC (13.42), there is no reduction. EXAMPLE: an ARF by 4 SPs would be reduced to 3 if the target includes 3 SPs of artillery with an LOS. ARF has no effect if the halved target strength is still *greater* than the ARF strength.

LEADERSHIP

28.34 Revised Leaders (cont'd):

Marshal **Soult** was ineffective at the battle of Bautzen (due to contradictory orders) and should be removed from play. Soult is no longer used in any scenario. (Use his former counter to paste-up the revised Ney officer counter, below.)



Ney is an <u>officer</u> at BAU. He re-mains a commander at LÜT & KÖN.

Print out and paste onto existing counters.

Eugen is now a <u>commander</u> at Lützen and Bautzen.

IMPERIAL GUARD [OPTIONAL]

25.73 (replace existing rule): **Release of French Imperial Guard:** Units of the OG, YG*, GC and Gde Res may not voluntarily engage prior to *Coalition General Retreat* declaration, or 4PM on the day of battle, whichever occurs first. EXCEPTION: * one whole YG Div (either 1YG or 2YG) may engage freely at any time. Applies to LÜT and BAU.

		BOMBAR	DMENT TA	ABLE K_20			
		Во	mbardmen	t Strength			
Die Roll	10+	8-9	6-7	4-5	2-3	1	<1
-1, 0	•	•	•	•	•	•	•
1	•	•	•	•	•	•	•
2	S	S	S	•	•	•	•
3	Dr	Dr	Dr	S	•	•	•
4	1R	Dr	Dr	Dr	S	•	•
5	1R	1R	Dr	Dr	Dr	S	•
6	2R	1R	1R	1R	Dr	Dr	•
7+	2R	2R	2R	1R	1R	1R	Dr
Key	• = no effe	ect					

S = Suppressed. Modifier of -1 from target's initiative in the following combat step (Step 5).

Dr = Defender retreat. On successful initiative check may convert result to 1R instead of Dr.

1R = Reduce one Combat unit (attacker's choice): option to apply Dr to whole stack.

2R = Reduce 2 units (attacker's choice); may then Dr. If only one unit in the hex, it is elim.

NOTE: Always take	e the step loss f	irst. Your choice	whether to stay	or retreat 1 hex.	
MODIFIERS:					
Reduce strength b	y 1/2 at 3 hex r	ange. Reduce st	rength by 1/3 if t	arget is in a town	

ARF only: Reduce Bombardment Strength by 1/2 the strength of artillery in target hex (13.5) If Weather is Mud, subtract two from the die. Grand Battery (+1 DRM) See card Enfilade fire (+1 DRM) if bombarding units are at least two hexes apart.

Grand Battery and Enfilade fire are not cumulative (choose one).

No Enfilade fire at 3 hexes range or into town hexes.

NOTE: All friendly units stacked with the Suppressed unit suffer the suppression Mod

PLAYER'S NOTE: Artillery Reaction Fire

Artillery Reaction Fire (see 2A. upper left) gives the defender some opportunities to break up the impending enemy attacks. You will need to adjust tactics, as you begin to pay more attention to artillery placement. Interesting problems and opportunities are presented to the attacker—more than just rounding up the most guys you can in a hex and keeping your fingers crossed for a good die roll. Everyone will have to rethink how they play.

If you do bring up some big stacks, charge head first and take your licks, you might feel robbed when one of those big units gets reduced, or your attack is broken up by a retreat. It requires more finesse and patience. The motto is: don't leave a gun line unmolested on your flank while you charge ahead...