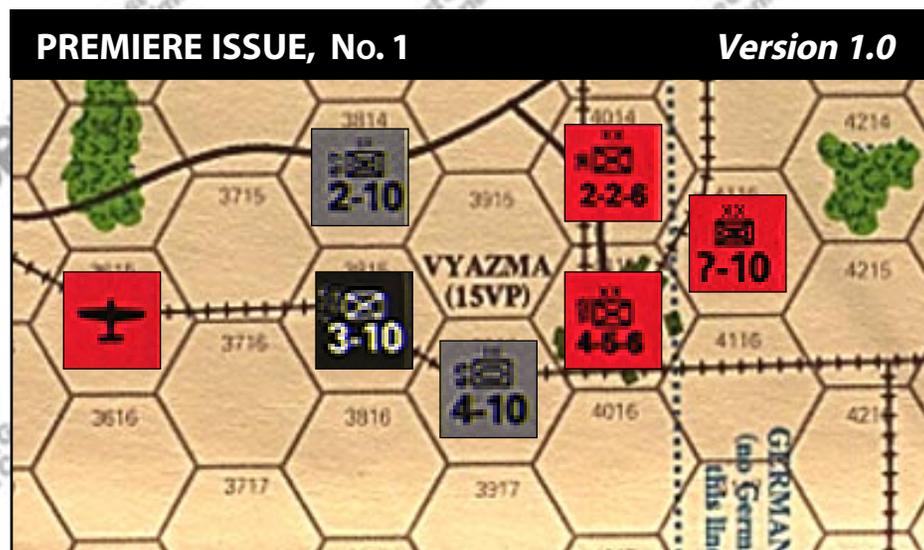
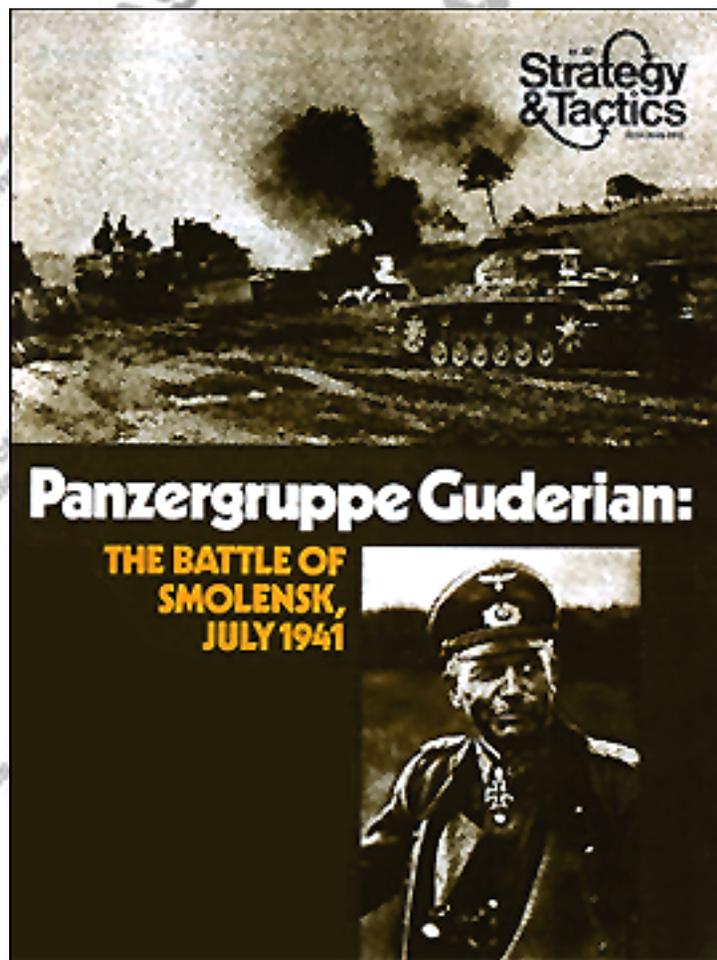


# SPI Revival eZine



brought to you by John Kranz and  
The Virtual Wargamer Headquarters

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## From the Publisher

July 25, 1997

Dear SPI Revivalist,

I'd like to take this moment to welcome you to the premiere issue of SPI REVIVAL. This "virtual" publication is dedicated to the in-depth review of a single SPI game title per issue.

### HOW THIS IDEA STARTED

The brainchild of this project is in large part due to how I was first introduced to consim gaming. Back when I was a teen in the mid '70's, my brother was playing some of the old AH's classics: MIDWAY, GUADACANAL, TACTICS II, and BLITZKRIEG - just to name a few. At the time, I thought Avalon Hill was not only the "last" but "only" word in the hobby. Their games could be found in every toy store.

Lo and behold and I somehow stumbled upon a game catalog from Simulations Publications, Inc. I looked over the catalog, which at the time had a modest selection of games on varying themes and topics, and decided to go with WACHT AM RHEIN as my initial purchase. Considering all I knew about the hobby and that "monster" BLITZKRIEG game I was enjoying with my brother at the time, I was in for quite the shock. Guess what my reaction was when that SPI monster package arrived?

The rest is, as they say, history. I was hooked.

Fast forward nearly 20 years, and SPI is long gone from the game publishing scene as a viable business entity. Of the boardgame publishers doing business back then, only Avalon Hill remains. Gone are Battleline, Nova, GDW, Taskforce, RAND, Sim. Canada, 3W, etc. - the list goes on and on. Yet if one combines all the games published by other publishers, they still don't match the volume of games SPI was pumping out in its prime. To this day, many enjoy a good SPI game now and then, while lamenting about the poor development of many other SPI titles.

This brings up back full circle to how this project got started. SPI still enjoys a large following, witnessed by internet discussions and the many game auctions. However, nowhere out there can one find a publication which discusses their products in depth. This is the niche area SPI REVIVAL will now command.

### WHAT TO EXPECT

Being the premiere issue, one can safely say that this is a grand experiment of sorts. While I don't question the quality of reviews that will be presented within these pages, I am certainly eager to see the response this publication generates. As long as there is a healthy interest in SPI games and the opportunity to revisit them, I know improvements can be made in the format presented herein for your reading enjoyment.

While I would have liked to provide the review for online viewing, the size of the publication is best suited for printing and storage in your SPI

game. If you do not have access to a quality b/w laser printer, you may contact me and receive a hardcopy. The cost for printing, shipping and handling is \$5.00. Please send orders to:

John Kranz  
Attn: SPI Revival  
13426 E. Cindy St.  
Chandler, AZ 85225

It is my hope, of course, that you will be able to rely on a friend to access a quality laser print out to forgo any expense. Please only rely on me as a last resort...this publication is meant to be accessible free of charge.

### SPECIAL THANKS

This publication would have not been possible were it not for the tremendous effort put in by Skip Franklin, Danny Holte, John Leggat, and Ronald Wright. Saving the best for last, however, I want to take this opportunity to recognize Ted Kim for his herculean effort in putting together what is, I feel, the best darn game review I have read since the early days of Fire & Movement magazine. Once I received Ted's initial draft, I realized the responsibility placed before me to do his piece justice. The future success of this publication will certainly not be based on the effort I put in to get the next issue out, but how many Ted Kim's are out there interested in reviewing SPI titles. Based on correspondence in preparing future issues, I'm confident that the benchmark set in this issue can be replicated in the future.

## CSR AWARDS

Needless to say, the next time the Charles S. Roberts award are upon us to select the Best Review/Reviewer, please make a mental note that this effort would have not been possible without Ted Kim. His execution was flawless. Of course, the supporting cast played a big part as well. I certainly don't mean to downplay their own efforts. Anyway, I don't know if Ted will make ORIGINS next year, but it would be an absolute privilege and honor for me to pick up an award on his behalf and present it to him. He's definitely earned it.

Naturally, SPI REVIVAL now qualifies as an amateur publication, so if you want to give BROG (a publication I thoroughly enjoy) a run for it's money, you now know how to cast your next vote as well.

## THE INK NEVER DRIES

One nice feature worth noting is that each issue can be easily updated, so what you have before you now is simply version 1.0 of issue #1. Should others wish to provide feedback or additional materials on PANZERGRUPPE GUDERIAN, I will gladly update and release a new version of this issue. One thing I will do for certain is publish the feedback you provide in version 1.1 of this publication.

## NEXT ISSUE

I hope to get an issue out at least once every two months. Scheduled for issue number two is SPI's WINTER WAR. Contributors are presently working on this piece and I look forward to

releasing it sometime in September if all goes as expected.

## FEEDBACK PLEASE

This being the premiere release, feedback from the readership is critical. Please let me know what you think of the format presented herein, and what improvements you would like to see in the future. Since I won't be able to track who is downloading the Acrobat document, it would be nice to find out who is receiving and reading this issue as well.

There is also a discussion board available on the web so you can chime in with your comments regarding SPI REVIVAL (in the Game Magazine Discussion area). This web site is The Virtual Wargamer Headquarters, located at the following URL: <http://www.manzana.com/webx>

Please also feel free to contact the authors of this issue as well. They would welcome your comments and feedback.

I look forward to hearing from each one of you. I hope you enjoy the SPI REVIVAL, and tell your friends where to find it. In closing, I'd like to share with you some player comments regarding PANZERGRUPPE GUDERIAN.

Sincerely,

John Kranz  
kranz@earthlink.net  
Chandler, Arizona

## Random Thoughts on PGG

"Back in 1976, an Ops Sgt by the name of Charles Sharpe (who subsequently has made a name for himself in this hobby) loaned me his copy of PGG. It became, and remains, one of my all-time favorite solitaire games. There are shortcomings to the game, but the untried Soviet units still guarantee no two identical games for me.

This game also kindled my interest in SPI, and ensured that I had to go be a Friday night playtester when I went to NYC in 1980. That was the experience which launched me into the testing and development I have done since then."

- Tony Curtis, developer GMT's BARBAROSSA

"One of the secret joys of playing the Soviets in PGG is confounding the German player who is so enthralled in the glamour of panzer pushing that he does not recognize the limitations of the magnificent weapon he wields. High summer of 1941 means the Soviet player must think and act defensively, but not passively. He must throw repeated blocking lines in front of the German advance, harry the German flanks, marshal scarce resources for limited ripostes, and confound the concentration of German armor.

What Dunnigan has forged in this jewel is a near perfect wargame."

- Doug Dery

*continued on page 20*

## Game Review

by Ted Kim

### A. Introduction

PANZERGRUPPE GUDERIAN (PGG) made quite a splash when first published in Strategy & Tactics (S&T) magazine, issue 57 (July/August 1976). It was well-liked, innovative and widely played. It was republished in other packaging at least three times. It spawned several other Eastern Front games. Way back when in 1978, Ralph Vickers, in F&M 12, was asking if PGG was a classic [22]. Today, many regard it as a watershed design that still arouses interest. Many place PGG on their top ten list of SPI games and even on their all-time top ten list. Designer Notes for recent releases (e.g. SPIRES OF THE KREMLIN) still pay homage to PGG as if claiming descent from a famous progenitor. Few games can make similar claims. In this review, we take a look at the parts that make the whole of this famous game.

Before proceeding, though, a note is in order about the game's subject. So what is the subject of this popular game? Almost everyone knows that PGG is about an Eastern Front battle. However, Smolensk is not exactly a battle with immediate name recognition like Stalingrad, Kursk or Kharkov. In fact, one would be hard pressed to think of any other game which treats this battle with more than passing interest. The same can be said about books. How many publications have even one chapter focusing on this battle?

To search out this battle, we must dissect Operation Barbarossa and follow the actions of Army Group Center (AGC). We can briefly summarize the context of the battle as follows. Smolensk was the third encirclement in a chain leading from East Prussia and divided Poland some 400 miles towards Moscow. The Battle of Smolensk was the climax of the initial AGC thrust. Fighting around Smolensk took place throughout July 1941; resistance finally ended in the Smolensk pocket on 5 August 1941. While there were still major problems with the Soviet forces at both an operational and tactical level,

***“PGG’s strength is its play value and interesting system. It is both an exciting contest and a game that evokes the feel of Eastern front armored warfare.”***

Soviet forces put up a much more tenacious defense than before. This included an escalating series of fierce counterattacks, which at times stopped the Germans. However, this was not the massive victory that Soviet propaganda has claimed. On the other hand, this was a much better showing than before and foreshadowed much greater potential. Afterwards, this sector of the front moved relatively little as German mechanized forces were diverted south for the Kiev operation. Only in October, did the Germans renew the offensive in this area with Operation Typhoon.

PGG's strength is its play value and interesting system. It is both an exciting contest and a game that evokes the feel of Eastern front armored warfare. Some may argue that the game falls victim to stereotypes of that titanic conflict (perhaps, even in its title! [7]). However, the game is just plain fun. On the simulation side, PGG has a lot of minor faults. For better or worse, many of the abstractions would probably receive the “design for effect” label had the game been designed today. Nevertheless, the game mechanics were innovative for the time and are an interesting study in game design.

### B. Components

When first published in S&T 57, PGG consisted of a 32” x 22” map, a countersheet with 200 counters and eight pages of rules. SPI also sold flatray and “Collector’s Edition” bookcase box versions. The bookcase box version had a mounted map. The flatray version was also used as a free bonus for subscribing to S&T.

#### **Panzergruppe Guderian: The Battle of Smolensk, July 1941**

SPI, 1976 (S&T 57)  
AH, 1984

*Design:* James F. Dunnigan  
*Development:* Richard Berg  
*Physical Systems and Graphics:*  
Redmond A. Simonsen

*Production:* Manfred F. Milkuhn, Larry Catalano, Kevin Zucker, Linda Mosca

## B.1. Map

The map includes the playing area, turn record track and terrain key. Along the map edge are marked reinforcement entry zones. The hex grid and framing is standard SPI tan over an off-white background. Map features and lettering use other standard SPI colors: dark brown and blue. PGG also used green, which came into use in S&T games with BREITENFELD (S&T 55). The standard “cottage cheese” blue forests were given a green overprinting. Also, the city artwork is olive drab, and the swamp graphics are green. Definitely, graphics have come a long way in two decades. In this respect, the map of PGG shows its age. It is definitely functional, but there is not much artistry shining through. On the other hand, the wide open spaces do suggest room for fluid maneuver, which this game certainly delivers.

The map is actually slightly longer than most, about 32.5” long. The playing area uses a short-grain 16mm hex grid with 59 columns of 31 hexes. (As actually printed, though, the hexes seem a hair smaller than 16mm.) At 10.5 km per hex, the map covers roughly an area of 535 x 325 km. The top of the map is oriented towards north with Rzhev appearing on the edge. On the east edge is Kaluga. Further north near the road to Moscow, the east edge is probably around Mozhaisk. Near the western edge are the cities of Vitebsk, Orsha and Mogilev. Going east from the three cities, one crosses a relatively empty area to the next set of objectives: Smolensk, Yelnya and Roslavl. The Dvina and the Dnepr are prominent-

ly featured as well as other rivers. The gap between the rivers is known as the “Orsha landbridge”; this route is the direct path to Smolensk. Also, a road and rail net is printed on the map, including the main highway and rail links running towards Moscow. As with any hex-grid map, distance distortion is most severe (about 15%) in lines parallel to hex-spines (i.e. zig-zagging against the grain). In this case, probably the greatest impact is on those portions of the transportation net that are rendered as exactly east-west on the map.

***“The most serious issue with the eastern half of the map is the distortion of the east-west transportation links.”***

The topography is not all that accurate. When compared to many sources (e.g. Rand McNally Atlas, CIA World Fact Book, [5], [15]), it is clear distances are distorted from reality. According to Berg (the developer) the published map is a composite, replacing the first map given to him by Dunnigan (who was the designer) [19]. In the same source, Berg espouses a philosophy where map fudging can be done to fit the game’s objectives. It’s not clear, though, if that was done for PGG. It is possible some inaccuracies are intentional. In general, the terrain interpretation is rather sparse on forest and swamp. There are also some oddities. For example, Gzhatsk and Kaluga are on the wrong side of the river. It’s not clear what the lake in the northeast corner represents, since this map does not go far enough northeast to

include any of the reservoirs. These are, as one would hope, relatively minor issues with little effect on play.

One might ask why large portions of eastern part of the map are even included, since fighting rarely extends out there. To this reviewer, the map has a nice indicator effect. Because victory conditions are primarily based on geographical objectives, the front line at game end is usually a good indicator of who won. If the front line is far to the west, the Soviets have won. If it’s firmly into the eastern half, then the Germans have won. The most serious issue with the eastern half of the map is the distortion of the east-west transportation links. The bend in the road and rail links between Gzhatsk and Vyazma is overly exaggerated and overextends by about 40 km. Overall, there is probably about 60 km extra distance in the main Soviet reinforcement routes from east edge to Smolensk including hex-grid distortion. There is some uncertainty in this estimate because some terrain features are hard to correlate. For example, the Moscow river should be north of the rail at the east edge but south where the river ends in the west, not the other way around. Anyway, it appears the size of Russia can be a surprise even to Russians.

On the western half of the map, the distance from the western cities (Vitebsk, Orsha, Mogilev) to the next set of game objectives (Smolensk, Roslavl and Yelnya) is simply not accurate. Orsha should be about 110 km from Smolensk. On the map, it is roughly 170 km in a straight-line path or 190 km moving along the hexgrid (this equates

to six additional hexes!). Roslavl and Yelnya are likewise displaced eastward by 30 km or more (an additional three hexes). Also, there are other issues with the terrain around Roslavl. There is too much forest and river in the Roslavl perimeter; in essence, this area has more defensive terrain than in reality. The Iput and the Oster rivers should not join together. Though roads are often a judgment call in Russia, it seems there ought to be a road from Roslavl to Krichev. Such a road would be a tremendous asset to German supply in the south. The net result is that the Germans must go further to get to Smolensk, Roslavl and Yelnya. At the same time, reinforcement of any forward Soviet defense is tougher.

## B.2. Counters

The unit counters are depicted using the standard NATO symbology with the expected combat and movement factors. The counters are backprinted to support German step-reduction and Soviet untried unit status. Soviet infantry divisions have separate attack and defense factors. Other units just use a single combat strength. Historical designations are also printed on the counters. The counters are clear and functional and esthetically satisfactory.

Soviet units and German infantry units are divisions. German mechanized forces are represented at the regimental *kampfgruppe* level. This design gives the German panzer and motorized infantry divisions more flexibility than other units, which is probably warranted given their training. Because of the divisional integrity rule, it is

important to identify regiments of the same division. Reading the historical designations of German mechanized units is important. Unfortunately, PGG does little to help in this task, since the historical designations are in a fairly small font. Today, many games use color banding to easily identify each formations' units. At that time, a color-coded approach was probably beyond the graphic scope of the S&T magazine format. Some games descending from PGG (e.g. KHARKOV, S&T 68) recognized this problem and enlarged the divisional designation on the counter.

The decision to design at the division/regiment level is probably both an intentional design choice and a result of format restrictions of S&T publishing. The game had to fit in 200 counters [19]. PGG abstracts away the non-divisional units. On the Soviet side, much of their strength probably ended up with the army headquarters. For Germans, probably a proportional "slice" was given to each division. If there is an effect on the game, this abstraction probably impacts the Germans slightly more, since it is not possible to use non-divisional units to temporarily hold flanks or stretch the line. For example, Guderian speaks of Machinegun Battalion 5 and its role in the campaign [9].

Soviet counters are orange-red with black lettering. The Soviet side also has army commander counters which list the leader name and historical army designation as well as leader rating and movement allowance. There is also a Soviet interdiction marker. The back sides of Soviet

divisions show type and movement allowance with the combat factor given as a "?" to show untried status. Unit strengths vary widely and do not follow a discernible distribution. The armor and mechanized infantry pool has values ranging from zero to eight. Infantry combat factors go from zero to nine. The zero units represent cases where units literally dissolved in combat. For example, Gorbatov, the deputy commander of 25th Rifle Corps, reported an example of that happening with the 162nd Rifle Division near Vitebsk [16]. Ironically, in PGG, this particular division is given a non-zero strength of 2-5-6. In general, infantry attack strengths average lower than defense. This is by design, according to Berg, to put realistic limits on Soviet counterattacks [19].

Untried units are perhaps the most famous feature of PGG. This type of uncertainty certainly adds to "fog of war" and the excitement the game generates. Its historical basis comes from the idea that Soviet units were of uneven quality and most had never seen combat before. Thus, even Soviet commanders did not know how units would perform in combat [19]. Some have felt the distribution of strengths to be too random for historical fact and good play balance [4, 22]. Attack and defense strength for infantry divisions can also differ by as much as five points and the correlation between the two is not very strong. Here again, some might say there is too much randomness. In this case, it's not clear if there was any intent to show a dichotomy between attack and defense unit quality or if it is merely accidental randomness.

German counters are grey with black lettering. The one SS division is black with white lettering. There is also one cavalry division, air interdiction markers and some game markers in German colors. Panzer divisions are made up of three units: a panzer regiment and two panzergrenadier regiments. Motorized infantry divisions have two motorized infantry regiments, which curiously use only the standard infantry type symbol without any motorization “wheel” symbols. The Reich SS motorized division is an exception and has an extra motorized infantry regiment. There are also two independent mobile regiments. All regiments have a reduced strength backside which is roughly half of full strength. German infantry divisions have four steps and thus need a second counter to represent the last two steps.

The German units are the direct opposite of the Soviet unpredictability; they represent pure vanilla-coded strengths. Their strengths are exactly known and within each unit type category, identical in strength. There is no variance whatsoever as one would expect to encounter from the historical situation. There were certainly differences between individual units! One might expect differences between the veteran and newly established “waves” of German infantry divisions and between the Panzer divisions, some of which differed by more than 100 tanks in strength [12]. By the time of their appearance in the game, some units had experienced significant strength loss. For example, one might reasonably expect some step losses already inflicted on infantry units coming straight from reducing the Minsk pocket. It’s not clear if this was a “Design for Effect”

solution (“all comes out the same in the end” - see Editor’s Note below) or simply that no historical research was applied on a unit by unit strength tabulation basis.

[Editor’s Note]: Design for Cause describes process-driven mechanics that focus on input, while Design for Effect simplifies processes i.e. simpler game system, to focus on appropriate output.

***“The difference in unit size alone cannot explain the vast difference. The disparity was intended by Dunnigan to show differences in cohesion and training.”***

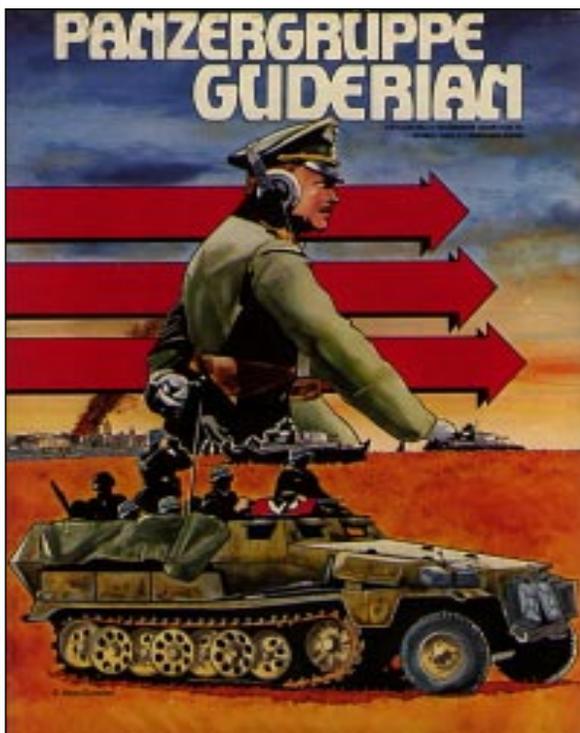
German units are generally stronger and faster than Soviet units. The average Soviet armor or mechanized unit is a 4-10. A German panzer division has a 4-10 panzer regiment and two 2-10 regiments. A German motorized infantry division has two 3-10 regiments. An average Soviet infantry division is a 3-4-6. German infantry divisions are 9-7. German divisions were larger than Soviet ones, but much of the strength difference also comes from the fact that the troop quality gap between the two sides was greatest during Barbarossa. According to Brad Hessel, designer of PGG spin-off game DRIVE ON STALINGRAD (SPI, 1977), some of the German combat strength advantage also comes from an abstraction of German air power effects [10].

Soviet divisions are much more fragile than their German counterparts. Soviet divisions have only one step, while German divisions have four to six steps. (The German cavalry division is an exception.) The difference in unit size alone cannot explain the vast difference. The disparity was intended by Dunnigan to show differences in cohesion and training [19]. Combat events that shattered a Soviet division merely resulted in some strength loss in a German division. Each step loss approximately halves the current strength. Thus, unit strength losses result in an exponential decay. Some other games use different models such as linear loss (e.g. People Wargames’ DUEL FOR KHARKOV) or a “cadre” model (where casualties accumulate until there is a catastrophic loss in strength, e.g. The Gamers’ ARDENNES).

### **b.3. Rules and Avalon Hill**

As with all S&T games of this period, the rules folder could be removed from the center of the magazine. The text is typeset in three columns. All charts are printed on the back page, though victory conditions and some reinforcement listings are on the previous page. The errata for the game, which amounts to a half-column of text, was published in S&T 58. It is easy to miss, because it is on page S4, an advertising insert page in the center of the magazine.

After the death of SPI, PGG reemerged under the Avalon Hill label in 1984. It remained there until going out of print. It still appeared in the limited supply “collectible” game section in a 1993 AH



TAHGC's version of PGG pictured above.

catalog. Exactly who was in charge of the AH version is unclear, since no credits are given. The Avalon Hill version was in bookcase box format with mounted map. Overall, the AH version is nicely done.

The map was reduced slightly from the SPI version, measuring 31.375" x 21.5". As a result, the hexes are slightly smaller as well. The AH version has 260 counters. The units and leaders remain the same. There are additional disruption markers. New markers, not in the SPI version, are included for: out of supply status, German control of objectives and rail cuts. Also, a fair number of blanks are included.

The rules were reset in two columns of 12 pages in a larger, more readable font. Illustrations are now shaded in pink. The errata from S&T 58 is incorporated, and some minor clarifications were added. The only new rule is for rail cuts. The note about play balance from S&T 58 was omitted. (More on this later.) The tables and the reinforcement schedules appear on cardstock player aid cards. Also, two appendices are added to the rules, listing some magazine articles on the game and the distribution of untried unit strengths. (Note, the first two columns on the infantry table have their labels reversed.)

### c. System

***"PGG set a new standard for Eastern Front operational games, and its influence still looms large today."***

The PGG system was quite innovative in a number of respects in 1976. Yet, many of its mechanisms were not original. Rather, they were crafted together in a way that produced new and exciting results. PGG set a new standard for Eastern Front operational games, and its influence still looms large today. Before PGG, the established pattern for the Eastern Front was primarily corps/division level games such as KURSK (SPI, 1971), BATTLE OF STALIN-GRAD (SPI, 1972), DRANG NACH OSTEN (GDW, 1973), WAR IN THE EAST (SPI, 1974) and VON MANSTEIN (RAND, 1975). PGG moved down to the division/regiment level and

added a few ideas such as overrun, trading losses for retreats and untried units. The result was a much more fluid, exciting and sweeping view of mechanized warfare.

PGG was very widely played when it was first released. It seems safe to believe that the game even appealed to those who were not World War Two enthusiasts of tank warfare or the Russian front in general. The system is relatively clean, playable and fast moving. A game can be completed in a day or less. The system is not overly complex. The rules, themselves, are reasonably clear; though, there are still some tiny unresolved ambiguities still lurking to this day.

### c.1. Force Differences

A fair part of the rules center around modeling the differences between the Soviet and German forces. The Soviet forces were not well organized and lacked in tactical training and cohesion when compared to German forces. The discussion about unit values touched on some elements of this. Other elements are reflected in the system through the sequence of play, German divisional integrity, Soviet leaders and untried units.

The sequence of play for PGG is rather conventional. Each turn, which represents two days, is made up two player turns. Each player turn has movement followed by combat. There is a mechanized movement phase after combat. This turn sequence was not new, going way back to such games as FALL OF FRANCE (S&T 27) or even STRATEGY I (SPI, 1971). What is unusual, but

by no means unique, is that the turn sequence is asymmetric. Only the German gets a mechanized movement phase. This small difference has dramatic results. Even though mechanized units on both sides have the same movement factor, German mechanized units get twice as many movement points. They are given the opportunity to drive through a combat breakthrough at full speed. The Soviet player must be content with advance after combat. He must wait until next turn to exploit; thus granting his enemy a greater chance to recover. The mechanized movement phase also allows the German cavalry division to move faster than infantry divisions despite its lower movement factor.

German mechanized forces are represented at a regimental level. This allows these divisions to split up or stay together as desired. The penalty for using the ability to split up is captured in the German divisional integrity rule. On the surface, German panzer and motorized division combat factors look less powerful than German infantry divisions and some Soviet divisions. The divisional integrity rule doubles unit strengths when a complete German mobile division is stacked together. This places the strength of German mobile divisions above all other divisions, German or Soviet. A full-strength German Panzer division has 16 combat factors under this rule. A motorized infantry division has 12 factors, except for the three regiment SS Reich division which has a strength of 18. PGG has no “combined arms” modifier for combat. The divisional integrity rule, however, basically encapsulates this effect.

Some aspects of the integrity rule are rather strange. A division loses integrity if other divisions are present. One would assume that units obeying stacking limits are not squeezed so tightly that they become randomly intermixed. Another odd interaction occurs with retreat rules. Because the enemy controls the direction of retreat, mechanized units are routinely split up to deny them this integrity bonus. This does have the effect of temporarily lowering their usefulness for overrun, as perhaps intended. On the other hand, there is no historical foundation to believe that mobile divisions have less cohesion than other divisions that cannot be split up.

Soviet leaders (army headquarters) are an advantage for German forces because there are no similar command restrictions imposed on German forces. Essentially, Soviet forces need leaders to be in supply, attack or overrun. They also have another role in representing support capabilities by adding strength factors to an attack. This is a rather simple, clean way to show Soviet command limitations. This rule makes Soviet command control a vulnerability, which can sometimes be exploited. For example, pocketed Soviet units without a leader will be unable to break out, because they cannot attack. In fact, because of locking ZOCs such units do not even have to be surrounded. They will just sit there indefinitely until destroyed.

Untried units have been alluded to before. It's worth noting that untried units was not a new concept. The idea appeared first in *INVASION: AMERICA* (SPI, 1976). However, in that game,

the idea was just some extra chrome. In PGG, it takes center stage. In fact, since PGG has been much more widely played than *INVASION: AMERICA*, in the hearts and minds of many, PGG is really where the concept of untried units initially appeared. It's a key aspect to the “fog of war” and excitement of the game.

## c.2. Stacking and Movement

Stacking for both sides is three combat units per hex. Stacking three divisions roughly implies a corps could be put into a hex. For some reason, though, German mobile regiments are counted as just as large as divisions for stacking purposes. At best, you can only get one German panzer division into a hex. Theoretically, other units can be present with a motorized infantry division. However, the divisional integrity rule generally means motorized divisions do not stack with other divisions either. Mobile formations do take more room but not that much. Most games rate panzer divisions as no more than 50% larger than infantry divisions in stacking “size”. For example, *TYPHOON* (GMT, 1995) makes panzer divisions one-third larger than infantry divisions. Within a 10.5 km hex, it seems quite reasonable to have space leftover for another division. Whether for simplicity or some other reason, the stacking rule does not address this distortion. It is interesting to note that the spin-off game *DRIVE ON STALINGRAD* (SPI, 1977) made stacking three divisions of any type per hex, although this change was only made in the errata.

Movement is fairly conventional except for overrun, which is discussed below. As expected, mechanized units have higher movement allowances than infantry or cavalry. In clear terrain, mechanized units move faster than infantry. While forest allows the infantry to outrun mechanized forces, remarkably the swamp does not. Both players have interdiction markers which can slow ordinary enemy movement. However, these markers are rarely used this way. For the German, rail movement is usually the preferred target. The Soviet interdiction marker is more valuable for blocking supply.

Bridges receive unusual treatment. Essentially, there are none for ordinary movement. All road links are broken where intersected by rivers. Not only that, Germans pay a bigger penalty to cross rivers. It's not clear what this models. Guderian does speak about Soviet attempts impede crossings by bombing bridges [9]. One has to wonder, though, if the Luftwaffe wasn't even more harsh on Soviet forces. Maybe it has to do with a lack of bridging equipment or the home field advantage. Oddly enough, rails do cross rivers, and bridges do exist for supply purposes.

Rail movement is fairly conventional. Only the Soviet player gets any rail capacity. This is appropriate since the German rail conversion effort had in no way caught up to the rapid advances achieved so early into the campaign. The AH version adds a rule about rail cuts. This additional rule eliminates the need for German forces to garrison the rail lines. Under the SPI version, Soviet forces could sometimes rail troops behind

German lines. Thus, it became mandatory in that version to assign some units to guard the rail.

### c.3. Closing With the Enemy

***“One expects units with superior mobility to be able to escape regardless of what the enemy did.”***

Zones of Control (ZOC) in PGG are semi-active (attacking is optional) and locking. Locking means that units entering the ZOC must stop, and they cannot voluntarily leave except as a result of combat. This leads to the tactic of pinning enemy units by placing them in ZOC. This is a fairly controversial element of the PGG design. Locking ZOCs are rather unusual for a game in this historical period. This certainly made sense in some other historical periods where all control was lost after the enemy made contact (e.g. hoplite warfare). Why it would be so difficult to disengage from the enemy in a WWII simulation, though, is harder to understand. Units can extricate themselves, but they must attack (or overrun) to do so. To become mobile again, they must destroy or retreat the enemy or retreat themselves. In essence, they must “force the issue” to leave a ZOC. However, this view doesn't always make sense. If the defender has enough steps, higher odds can actually lead to a lower chance of being able to leave a ZOC, since there is a lower possibility of attacker retreats. (If the attacker wants to retreat out of ZOC, the best odds are 1:1.) Also, it hard to believe that mechanized

units can be pinned by infantry. One expects units with superior mobility to be able to escape regardless of what the enemy did.

Locking ZOCs, however, are not all bad news. The idea of “nailing the enemy down” and then maneuvering to concentrate at a schwerpunkt actually seems to have validity in this game. Also, being anxious to avoid the “sticky” enemy, reserves are actually held out of the front line. Unlike other games, a high movement factor is not enough to qualify as a reserve. Though advance after combat ignores ZOCs, such advances go at most a hex beyond the vacated hex. Thus, defense in depth will still entangle the victorious forces in ZOCs. Defense in depth can also limit penetration from overruns as well.

PGG's CRT calls for elimination or step losses. Some results call for losses on both sides. While first contact in combat can be dramatic due to untried units, the CRT, itself, is actually somewhat deterministic. At 3:1, one loss can be guaranteed. At 7:1, two or more losses are assured. (Defender eliminated results start appearing at 6:1.) In many cases, steps are more important to defense than actual combat strength. Perhaps, something like a D10 or 2D6 could have added more “fog of war” to the CRT without distorting the averages. The unusual feature that PGG added to combat resolution was that step losses could be converted to retreat hexes. The concept of trading losses and retreats already appeared in some other games (e.g. WORLD WAR 1, S&T 51). The effect was that combatants could decide between holding their ground and taking losses or

retreating and giving way. This softened the effect of locking ZOCs, so that it did not always degenerate into a deathly choke-hold or endless stalemate. Interestingly, the direction of retreat (which is also the path of advance) is controlled by the enemy. It gives the impression that retreating forces are in a panic and always do the wrong thing. No one gets to retreat in good order in PGG. In combat, the defender's strength is doubled in forest, cities and behind rivers. Strangely, swamp is no help for the defender nor a hindrance to the attacker. Also, PGG seems to show a paranoia for fractions, especially for combat strengths. Halving involves rounding. Thus, doubling does not always undo halving. As a result, the order of applying modifiers (for overrun, terrain, supply and divisional integrity) becomes important. There is some ambiguity in the rules about whether halving and rounding should be done on a unit by unit basis or only on totals. The apparent simplicity of having no fractions is a mirage.

Overrun as implemented in PGG was a novel idea. According to Berg, this was perhaps the most difficult rule to develop in the game [19]. An overrun represents a hasty attack right out of march formation (i.e. during movement phase). This differs in intent with "automatic victory" rules that model attacks so overwhelming that the defender can be ignored during movement. Obviously, hasty attacks have little time for coordination or force concentration. Thus, in the game, overruns are limited to single stacks and combat strengths are halved. But, overruns can be carried out at any odds as long as the required three movement points are available. Since

***"Overrun as implemented in PGG was a novel idea. According to Berg, this was perhaps the most difficult rule to develop in the game."***

overruns are partly based on "momentum", combat results are interpreted slightly differently, allowing the attacker to be stopped in his tracks. Defending units that were successfully overrun, but not destroyed, become "disrupted" for a turn. Disruption robs the unit of many of many of its normal capabilities. The successful attacker can continue to move unless entangled by ZOCs. Obviously, this mechanism is most dramatic with mechanized units, which have a high movement allowances, but it is not prohibited for infantry units.

The implication of overrun is that essentially extra (albeit weaker than normal) attacks can be mounted in the same turn. If these extra attacks are mounted against the same hex, a defender may be worn down by successive attacks before he has a chance to act. For example, if a German attack conducted during the combat phase is not enough to eliminate the last step of the defender, then he can try to overrun the weakened defending force during the Mechanized Movement Phase to clear the position before the Soviet player's turn. In some other games, double lines of weak units are an effective defense, because there is only one combat phase. But with overrun, such lines are easily penetrated

and swept away. Overrun is an early attempt to integrate movement and combat together. This rule helps the game achieve a fluid flavor, despite the presence of locking ZOCs. Mechanized forces can roam freely and overrun weak positions, but they are encouraged to bypass strong ones. Since many units targeted for overrun are of untried strength, there is often added uncertainty and anticipation about the result.

#### **c.4. Supply and Partisans**

The effects of supply are fairly simple. Loss of supply halves movement and combat strengths. Supply is cut by enemy units and ZOCs. The loss of supply is, in fact, the payoff for executing sweeping encirclements. The pocketed units are impaired and probably easy to destroy. The fear of being the victim of this type of development is what causes many unit retreats to occur during play.

As noted earlier, Soviet supply is dependent upon the presence of army leaders. Units must be within a leader radius. The army headquarters, itself, must also trace a supply path to a friendly map edge. Again, there is a nit to pick regarding the swamps. Supply (Soviet or German) cannot be traced through swamp terrain. This is strange because all types of units (mechanized, foot and cavalry) can move through swamps. One wonders how supply is transported if not by one of these modes.

German supply is either traced through 20 or fewer hexes to a road leading off the western map

edge or directly to the west map edge in 20 movement points or less. Units drawing off the road network are probably being supplied by army-level truck feeds. The road method of supply has a drawback; there is a bottleneck (a single road) at the western edge. The Soviet player has a partisan/air force interdiction unit which can block supply. Obviously, the bottleneck is the preferred location. The Soviet player can place the interdiction unit on the bottleneck for three turns in the game.

Those units drawing directly from the western map edge are limited by movement points, because they are probably using their own divisional supply organizations. Unfortunately, checking supply by counting movement points can be somewhat of a nuisance. Because of the differences between mechanized and infantry/cavalry movement, hexes that are in supply range for one type of unit may not be in supply for the other. To muddy the waters further, bridges exist for purposes of this supply rule, though not for normal movement. It may be necessary for each German unit to check supply more than once in a turn: in each movement phase, in each overrun and in combat, whether attacking or defending. This is one place where the relatively clean rules of PGG might benefit from further simplification. Perhaps, the range to the western map edge should simply be a given number of hexes. Alternatively, a supply range line could simply be drawn on the map. Any German units behind the line capable of tracing a path off the western edge would then be in supply.

## D. Victory Conditions and Strategy

While some comments on PGG game experiences and lessons learned are presented in the Battle Report Section, a strategic framework for game play is provided here. The victory conditions of the game are based on victory points. Points are accumulated by the German by occupying cities and east map edge entry zones. The Soviet player can reduce the German total by destroying entire German divisions and liberating cities from the Germans. The Soviet may also concede some points by taking optional reinforcements. The total is compared to a table to determine the winner and level of victory. In most games, only the city points really make any difference. Destroying divisions or retaking cities are rare occurrences as one might suspect. Usually, the Soviet player takes reinforcements up to the four point level (four divisions), since all city points and most levels of victory are based on multiples of five points.

No German forces setup on the board; all of them enter from the west map edge or northwest corner. Drawing supply directly from the western map edge will only carry you so far. Eventually, road supply must be used. This forces the German to clear the main road to Smolensk. Deep independent thrusts in the north or south are really not possible without some support from the main road. A victory point count reveals that the western cities (Vitebsk, Orsha and Mogilev) plus Smolensk leaves the German just short of a marginal victory. One more objective must be

taken to achieve an Axis victory. Usually, Yelnya or Roslavl is chosen. It is practically impossible to win without Smolensk.

The rules, themselves, suggest that the optional Leader Evacuation Rule can tilt the balance of the game. Also, since victory is determined by a point count, it is obvious a bid system could be used to rectify any perceived imbalance. Another suggestion is to vary the Soviet reinforcement rate from Moscow [11]. A German advantage can be countered by adding a fixed number of rifle divisions to any reinforcements entering from entry area "X". But the official word on balance came with the errata published in the following issue of S&T (issue 58, September/October 1976). Among the errata was the pronouncement that the expected and historical result was a German marginal victory. For play balance purposes, it was recommended that a German Marginal victory be considered a draw and that other German levels of victory be shifted one level in favor of the Soviets. Practically speaking, this means that Smolensk, Roslavl and Yelnya must all be taken as well as other objective(s) further east, e.g. Vyazma. For many, this has been the last word on play balance. However, not all agree with this errata.

While the German has to do the bulk of attacking and has several tactical choices, his strategic plan is relatively constrained by victory points and supply. Meanwhile, the Soviet player has more strategic options. The shape of the game is determined primarily by the Soviet plan. While the Soviet commander must react tactically to

German moves, he must also keep his overall strategy in mind. On the first turn, the Soviet commander has two armies near the west edge fleeing east from the Minsk pocket. There are three other armies, but two of them require die rolls to determine if they can even move on the first turn. With these five armies and one reinforcement army, the Soviet player must form the beginnings of his defense on turn one. During the first half of the game, the Soviet player is also prohibited from moving to the western map edge. This gives the German a protected corridor to shuttle his forces north and south.

Only a month after the errata, one of the earliest strategy articles appeared in Moves 29 (October/November 1976) [17]. In this article, Redmond Simonsen advocates a Soviet “Main Line of Resistance” back as far as Smolensk and Roslavl. Only minor forces defended further west to form speed bumps along the road to Smolensk. This strategy relies on the adjustment of victory point levels in the errata. It also paints a rather gloomy picture of Soviet play. Similar thinking has led some to feel that that the Soviet role is frustrating and not interesting to play [4].

Somewhat later in Moves 33 (June/July 1977), a new Soviet defense called the “Egg” was brought forth [6]. The Egg was a much stronger forward defense in an arc-shaped defensive position from northeast of Vitebsk following the Dvina south to the woods just northeast of Orsha astride the main road to Smolensk. The authors of the Egg felt that this strategy was so effective that they advocated using the original victory conditions. In F&M 12

(July/August 1978), a variant of the Egg strategy is advocated [22]. The “Southern Egg” strategy moves the Soviet shield south so that the northern end blocks the road to Smolensk. However, the author does not endorse reverting back to the original victory conditions.

***“The authors of the Egg felt that this strategy was so effective that they advocated using the original victory conditions.”***

When published under the AH banner, the victory conditions did not include the adjustment from S&T 58. Since all other S&T 58 errata is included and reference is made to the above articles, it appears this was intentional. Apparently, the AH developer felt the game was balanced under the original victory conditions. (We cannot confirm this, since AH does not name their developer.) Anyway, after publication by AH, another wave of Soviet strategies appeared. AH players must have agreed with their developer, since each new Soviet strategy seems to be more aggressive than the last. Among them was the “Quagmire Defense” in General 22/4 (1986) [14]. In this plan, the Soviet forward defense is expanded and becomes a full-fledged line defending all the western cities. An even more aggressive Soviet defense is highlighted in General 24/1 (1987) [8]. The “Second Stalingrad” is, of course, not chronologically correct, but it does convey the result that the author feels is possible.

## **E. Game as History**

### **E.1. Order of Battle**

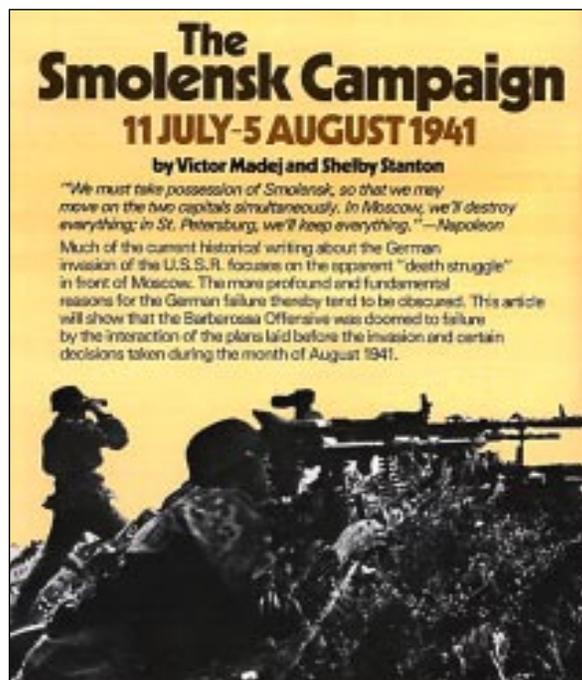
The order of battle in PGG for the Germans is fairly accurate. There are some minor errors. The regiment numbers of the 10th Motorized Division should be 20 and 41. The numbers printed on the counters appear to have been mistakenly taken from the 10th Panzer Division. By this period, the Das Reich SS division should have Der Fuhrer, Deutschland and the 11th regiments. The Germania Regiment was detached earlier to help form the Wiking SS division. Also, Lehr was officially a brigade and not a regiment.

The Soviet order of battle is, as one would rightfully suspect, much less certain. At the time PGG was designed, there was little information about the details of the Soviet army. Even now with material slowly coming out of Soviet archives, many details remain sketchy. According to Glantz, the 13th Army should probably only start with four rifle and no armor divisions, though somewhat later a mechanized corps did join it [5]. It also appears that the armor division counter mix ought to include some of the 100 series divisions, which were renumbered when absorbed into the Reserve Front. In particular, the 101st Tank Division appears to have participated in counterattacks to relieve the Smolensk pocket [5].

## E.2. German View

The history of the battle is well-described in S&T issue 57. Here, we only consider if the game does a good job at simulating history. German campaign objectives certainly included taking Smolensk. It was intended that Panzergruppe 3 with 9th Army and Panzergruppe 2 (commanded by Guderian) with 2nd and 4th Army would meet at Smolensk in a pincer action. While a pocket was plainly intended, it is not clear exactly whether Smolensk or destruction of Soviet forces was the primary objective. The infantry armies were not immediately available. They were tied down by the operation to reduce the Minsk pocket.

Actually, Panzergruppe 2 and 3 forged ahead on a fairly broad front with five different thrusts [16]. Historically, Panzergruppe 3 mounted an attack in the north. Vitebsk was taken on 9 July 1941 [9]. Further attacks included action north and east of Vitebsk. Panzergruppe 2 attacked in the south, eventually including attacks along the Sozh river and the main road to Smolensk. On 9 July 1941, the Minsk pocket capitulated, finally releasing the infantry forces for this battle. A small pocket was formed around Mogilev on 13 July. These defenders of the Soviet 13th Army held out until 26 July [5]. On 16 July, Panzergruppe 2 took Smolensk[9]. However, Panzergruppe 3 did not effectively seal the leaky pocket from the north for about a week. Persistent Soviet attacks were also mounted to relieve the trapped Soviet 16th, 19th and 20th Armies. Exactly, what was to happen after forming a pocket is somewhat hazy. There was bickering throughout the campaign



*Historical Essay as appeared in S&T issue 57.*

about objectives and this continued. By 20 July, forward elements of Panzergruppe 2 had gone on to Yelnya, but were subsequently subjected to fierce counterattacks [9]. Operations along the southern flank captured Roslavl on 1 August [9]. The Smolensk pocket finally yielded on 5 August 1941 [16].

The victory conditions certainly make Smolensk essential to any German plan. However, the supply rules make it difficult to conduct independent thrusts in the north and south as was historically the case. Perhaps, the supply rules overly focus the German assault on the road to Smolensk and discourage a true pincer attack. Even along the direct path to Smolensk, supply rules are

perhaps overly restrictive. Historically, Panzergruppe 2 did not have access to the main road near Orsha as late as 20 July (game turn 9) but was fighting around Smolensk and Yelnya [9]. One could even argue whether German victory should be so heavily tied to geographical objectives. Certainly by doing so, it forces the Soviet player to defend these objectives, which does seem to have a historical basis. At the end of a well-matched game, front lines tend to end up near the center of the board which would be an accurate depiction. Historically, both the taking of Roslavl and the capitulation of the Smolensk pocket occur after the game ends.

Depending on how you read the arguments between commanders, OKH and Hitler, destruction of the Soviet army could also be considered a major goal. Perhaps some accounting of destroyed Soviet units should be reflected in the victory conditions. This would encourage pocketing Soviet forces, though the Soviet player is likely to be more careful than his historical counterpart. Another approach would be to add some variability to the victory conditions to reflect the confusion and dischord about the operational objectives.

At a lower tactical level, the game seems to provide a good illusion of armored warfare. Massive breakthroughs are possible with armored units brushing aside (overrunning) weak units. As we have already examined the various nits of the system, we do not delve into them here. As far as the troops go, the game does reflect a German advantage in several areas. The question is

whether the size of the gap is properly reflected. Here you could get conflicting opinions. But for such an early part of the struggle, it's clear that the difference was fairly large. On the whole, things seem to go as a tank enthusiast expects. At the same time, the German player experiences a shortage of infantry early on. Thus, at times his mobile forces become bogged down in locking ZOCs and attritional fighting.

### E.3. Soviet View

From the Soviet point of view, the German thrust had to be stopped. Smolensk was the next logical target on the road to Moscow. Remnants that escaped the Minsk pocket, armies from Reserve Front (19th, 20th, 21st and 22nd), and a steady stream of reinforcements were gathered together under West Front command [16]. The 16th Army under Lukin was positioned near Smolensk. The 24th and 28th were positioned further back near Vyazma [5]. The 13th Army held Mogilev and was surrounded by Panzergruppe 2 advances. As the German attack progressed, counterattacks were repeatedly ordered. While they did exact a price, they were very costly as well. Starting from 11 July, the 19th Army under Koniev was railed in and went straight into the attack towards Vitebsk [5]. By 13 July, the 19th Army had almost been destroyed. A few days later, the 20th Army resumed the attacks near Vitebsk [5]. These and other attacks to the north and south were supposed to part of a coordinated plan. However, many went off so badly that the Germans felt that they were isolated efforts [5].

***“From the Soviet point of view, the German thrust had to be stopped. Smolensk was the next logical target on the road to Moscow.”***

Fierce battles in Smolensk, eventually forced the 16th Army out of the city [5]. In the north, Rokassovski assembled an ad hoc group to try to prevent Panzergruppe 3 formations from closing the pocket. Rokassovski went on the attack starting 18 July [5]. Starting 21 July, four armies (24th, 28th, 29th and 30th) attacked German forces along a front from north of Smolensk south to Yelnya and Roslavl [5]. On 23 July, from inside the pocket, 20th Army attacked as well. A few days later, renewed attacks occurred to attempt a relief of the pocket. Some forces did breakout [5]. On 26 July, Mogilev finally fell. On 5 August, resistance ceased in the Smolensk pocket.

The game has a few discrepancies with more recent historical accounts regarding army designations and arrival dates. However, given the untried units, they probably have no appreciable effect on play. In general, the Soviet player can attempt a better handled defense than occurred historically. With historical hindsight, he has a better chance of avoiding encirclement. In terms of victory conditions, though, it's not that easy to do much better than a historical result. The game generally comes down to avoiding German conquest of cities. The victory

points for destroying German entire divisions are justified, but very hard to achieve. Similarly, the points for retaking a city are generally not awarded. The minor morale and propaganda victory that retaking a city represents maybe ought to be extended to western edge cities which hold out a long time. Mogilev was a historical example of this. (In game terms, it falls on the last turn!)

True to history, the Soviet commander finds many factors outside of his control, such as the ability of his armies to react on turn one and untried unit strengths. In these aspects, the fog of war is quite thick and appropriate. Likewise, the leader rules are fairly good at simulating the problems of command and control in the Soviet Army. Historically, there were several major Soviet attacks. Many of them suffered from coordination and other problems. In PGG, leaders, untried units and generally low attack strengths discourage the Soviet player from trying many attacks. Perhaps, the Soviet player knows too much to attempt what the historical participants did. Certainly, the payoff in victory points for retaking cities is not sufficient to take many risks. Also, it appears the average game sees lower than historical German casualties. Perhaps, there ought to be a greater payoff in victory points for successful attacks or some additional attack capability is called for in select leaders like Rokassovski.

## f. History of the Game

In S&T 53 (November/December 1975), a number of game proposals for folio games were placed into the Feedback Questions. The proposed games would be folios with 22" x 17" maps. A version with mounted maps would also be available. One of the proposals read as follows:

Question 66. Smolensk, 1941: Guiderian [sic] leads outnumbered German armored forces against massive, but disorganized Russian forces in one of the decisive battles of the German invasion in 1941.

This was the beginning of PGG. Obviously, a different scope or scale was contemplated with only a folio size map. Also notable was the first of many misspellings of Guderian. Berg states that the game was hit in feedback [19]. Apparently, a larger format was already contemplated to counter resentment about smaller folio size games and less traditional topics in S&T.

In fact, by the time S&T 54 (January/February 1976) reported on "Work in Progress", the game, which was scheduled for S&T 57, was described as having a 34" x 22" map at 7 km per hex, 200 counters, division/regimental level and many "new design elements". The map was not at the final scale, but the size of the game had definitely grown. The title of the game was reported as "PanzerGruppe Guderein [sic]: The Battle of Smolensk".

Dunnigan's initial design centered on a few key elements [19]. He worked up an initial CRT. Relying on his background in the area, his initial historical research on the game was completed in only a few hours. The initial map an adapted from the one in DESTRUCTION OF ARMY GROUP CENTER (S&T 36). Dunnigan also set down the basic pattern of overrun, supply and untried units.

Dunnigan wrote all this up in short paragraph form, including an order of battle and preliminary countermix, and then looked for a developer to work it all out. Kip Allen, the developer of WORLD WAR 1 (S&T 51), was chosen. Greg Costikyan notes that this was Dunnigan's style. He would hand his developer "8-10 pages of scribbled notes, a preliminary map and a suggested reading list" [2]. Of course, Dunnigan would monitor progress and be available to consult during development, but it was the developer's responsibility to see that things moved forward. Dunnigan's own recollection was that PGG was an easy game to design [3].

Unfortunately, Kip Allen was in the process of relocating (PGG was his last assignment at SPI). These circumstances prevented him from giving the game the attention it needed. The game needed major work. Results were wildly unstable and had no resemblance to history. Either the Soviets were completely wiped out, or they counterattacked and pushed the Germans back. "With time running out", Richard Berg was called in to replace Kip Allen as developer [19].

Moves 25 (February/March 76) described the game as "Panzergruppe Guederian [sic]: The Battle of Smolensk". Many elements of the final design were present at this time. ZOCs were semi-active. The range of Soviet leader values was two to five. Soviets could use rail movement. Soviet units were single-step, untried and needed to be in the radius of a Soviet leader to receive supply. German motorized units were represented at the regimental level with two steps and divisional integrity. German infantry divisions had four steps. From the onset, Dunnigan intended the larger number of steps in German units to reflect their superior training and cohesion.

However, there were elements reported in Moves 25 that differed from the final version. The game was slated to contain "numerous scenarios". Untried units were reported to have strengths from zero to eight in value. It appears at this time that rifle divisions still had a single combat strength. The final version added separate and mostly lower attack strengths. This reduced the Soviet counterattack ability to realistic levels. The final range of combat values for infantry was zero to nine.

Moves 25 reported that divisional integrity applied when at least two units were together. Dunnigan's original rule also only applied to attack strength. Berg changed this to require all regiments and to include an effect on defense strength. This further encouragement to keep mechanized divisions together made the German attacks more concentrated and encouraged divisional cohesion on defense.

The snapshot in Moves 25 also described overrun somewhat differently. It was implied that overrun was available only to the Germans; it was possible to overrun at half or one-third of strength. The effects of Disruption were also slightly different. Overrun proved to be the hardest rule to debug. Berg had to rewrite the rule several times, especially to clarify the interaction with ZOCs. Dunnigan's original rule allowed for a two movement point expenditure for one-third strength overruns and four points for half strength. Further development simplified things into the final version of half strength for three movement points.

Also, ZOCs were reported to be rigid (allowing units to leave next movement phase). At some point in the design, ZOCs were apparently active (making combat mandatory) as well as locking. After contact, units became locked into death struggles. This meant that Soviet units often were forced to attack at low odds and kill themselves. Berg initially tried to change the ZOC rules to fix the problem. Apparently, Moves 25 captured a snapshot of experimenting with ZOCs. The eventual result was that the semi-active nature was kept to avoid suicide at low odds, but ZOCs eventually went back to locking. Later, we will see Berg eventually added another element for the final fix to the overall problem.

A part of the problem with Kip Allen's wild playtest results was the initial map. Dunnigan frankly admitted that he had suspicions about the map's source. Berg had a new composite map done in about two weeks with the help of Virginia

Mullholland. This map produced much more historical results. German thrusts were "directed into the areas historically chosen" [19]. It quite probable that the map was fixed before many of the other problems. It is clear, though, that something had changed by S&T 55. That issue reported the map was now at a new scale.

***"The fact that the CRT is reported as fairly bloodless is interesting, because Dunnigan's original conception of the the CRT had no possibility of retreat."***

S&T 55 (March/April 1976) reported that "Panzergruppe Guederian [sic]: The Battle of Smolensk" would use a scale of approximately 9 km per hex and two day turns. Double impulse turns allow German mobile forces to advance as much as "twenty hexes a turn". The CRT is reported to be "somewhat bloodless". The time scale reported is as published in the final version. It's also apparent that German mobile units now have their final 10 point movement allowances, in spite of the fact that the map was still not at the final 10.5 km per hex scale.

The fact that the CRT is reported as fairly bloodless is interesting, because Dunnigan's original conception of the the CRT had no possibility of retreat. His original CRT differed from the published version in not having any "split"

results. Also, the "Engaged" results were exchanges. Berg made all these changes to introduce somewhat more variability. But, the most important change was allowing step loss to be converted into retreats. This gave the Soviets control over standing and paying in blood or retreating. This finally solved the problem of locking ZOCs. Now units did not necessarily have to stay in a static defense just waiting to die. Late in development, interdiction was also added to give some flavor of air operations. Victory conditions were not defined until the end of playtesting. Berg frankly admits play balance is not that important to him [1, 19]. More important to him is a representation of the historical objectives. The first formulation required the German to exit three supplied mobile divisions off the east edge. The Soviets requirements were to keep certain eastern rails under their control. These were eventually discarded in favor of the current point system. The original victory conditions are interesting, because they show what playtesting was producing. It was not unusual for the German to get to the eastern edge.

In S&T 57 (July/August 1976), PGG was published. PGG had gone from game proposal to publication in four issues of S&T. In S&T 58 (September/October 1976), errata for the game was published. Then, in S&T 59 (November/December 1976), the first feedback on the game was published. The numbers were astounding. The game was rated at a whopping 7.23. Dunnigan thought the game would do well, but he too was surprised at the overwhelming response [3]. By the time S&T 60 (January/

February 1977) came out, PGG had gone into the Rating Chart at a 7.0 acceptability (popularity rating) with 74% played. At the time, there were 13 games above PGG in acceptability and none higher in percentage played. In Moves 33 (June/July 1977), 434 readers rated PGG in the Playback Review at a 7.60 overall rating. It also was rated well above average in most other categories, including ease of play, play balance, game length suitability, complexity suitability, realism, percentage who would still buy and percentage who received their money's worth.

About two years after publication, the Rating Chart in S&T 68 (May/June 1978) showed PGG had climbed in acceptability to 7.2, though the played percentage had dropped to 59%. Climbing in the ratings chart is rather unusual. At this time, nine games were rated higher in acceptability and two were higher in percentage played. Of the original 13 that were rated higher in acceptability in issue 60, all but three had sunk below PGG. After another year, the Rating Chart in S&T 74 (May/June 1979) showed another increase in acceptability of PGG up to 7.3. Percentage played had dropped slightly to 53%. Also, the price had apparently gone up by a dollar to \$10. There were now only four games rated higher (TERRIBLE SWIFT SWORD, CROSS OF IRON, WACHT AM RHEIN, WAR OF THE RING). Three games had been played more widely. Two of these were related games: COBRA and KHARKOV.

PGG had many children, though none had quite the same success. PGG spin offs started

appearing in 1977 with DRIVE ON STALINGRAD. Also, 1977 saw a derivative system appear in COBRA (S&T 65). In 1978, KHARKOV (S&T 68) was published. ARMY GROUP SOUTH QUAD was published in 1979. In 1980, the last SPI spin-off was published with LENINGRAD. But in the same year, another PGG descendent on the same campaign was published by 3W under the title ASSAULT ON LENINGRAD (Wargamer 14). Finally, yet a third game using PGG derived mechanics on the same campaign was published as ARMY GROUP NORTH by SSG in 1982. Many other games borrowed from PGG and thus maybe should be considered cousins. One of its more famous cousins is OPERATION TYPOON (SPI, 1978).

After SPI's passing, PGG was republished by AH in 1984. TSR republished DRIVE ON STALINGRAD (1984) and COBRA (1985). Lastly, Decision Games published LENINGRAD again in 1994.

## g. Final Comments

To many, PANZERGRUPPE GUDERIAN is one of the all time great wargames. The reasons for its appeal include mechanized combat and a fairly interesting Russian front topic. But its appeal went well beyond that. It skillfully combined such elements as overruns, the ability to trade losses for retreats, untried units, an asymmetrical double-impulse turn, divisional integration, Soviet leaders and even locking ZOCs to produce an exciting, fun and playable system that was not overly complex. Even a reasonable amount of

“fog of war” is included in this clean system. Untried units introduce uncertainty, and Soviet leaders add command control limitations.

Amazingly, the game was produced in only eight months from original conception. There are many nits to pick in the area of simulation. But none are fatal to the system or to the fun. Even at this point, game strategy and balance are not necessarily answered questions. In this reviewer's opinion, the answer to Ralph Vicker's query posed in F&M 12 is obvious.

PANZERGRUPPE GUDERIAN is definitely a classic.

## h. Acknowledgements

The author would like to thank John Setear and Skip Franklin for their helpful comments.

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## RANDOM THOUGHTS ON PGG (cont.)

"I can remember when Panzergruppe Guderian first hit store and the thrill I felt when my cousin and I went to pick up our copies. The excitement in the air as we unwrapped the game and punched the counters was almost palpable. The game had been touted as having some revolutionary rules such as untried unit strengths for the Soviets and a unit integrity bonus for German Panzer and Panzergrenadier Divisions. Back then the rules seemed to be long and somewhat complex (only eight pages back then). I still remember the enjoyment of that first playthrough even though I have no idea which of us won the game. I just remember liking the game and the system."

- Larry Caskey

"A great 1st or 2nd game! I have over the last 15 years introduced many newcomers to wargaming by playing PGG. This game is without a doubt one of my personal favorites, and one of the few non-Napoleonic era games I play."

- Dr. S. Borkowski, M.D, Oslo, Norway

"Those untried Soviets changed the way I played ALL wargames. YAHOO!"

- Michael Balog

# Panzergruppe Guderian Battle Report

by Skip Franklin

German Player: Skip Franklin

Soviet Player: Lloyd Hudgens

## Soviet Turn One: THE RETREAT FROM MINSK

The German planes bomb the rail line just south of Vyazma and a communications breakdown at Stavka keep the 16th and 19th Armies from activating. This shortage in badly needed troops is going to hurt. The retreating 13th, 20th, and newly arrived 22nd Army stop on the Dnepr/Dvina River line. The front line is solid except for a hole near Velizh that 13th and 22nd couldn't close. 24th Army rails to Smolensk and the Reserves march west towards Gzhatsk. The ground commanders are now well placed with all but five divisions in supply on the entire game map. Short of a perfect turn, however, considering that hole in the front line and the ten divisions glued to the ground west of Smolensk.

## German Turn One

Hoth enters the Fray. 39th Panzer Corps enters the map near Vitebsk. In an effort to attack the Soviets before they recover from their retreat; thus denying them of defensive terrain, Field Marshal von Bock orders the crossing of the Dvina River and surrounding of Vitebsk. 12th Panzer and 14th Motorized force the Dvina without much effort (0-10 Soviet armor unit), 20th Panzer and 20th Motorized expel infantry out of the trees south of Vitebsk while 7th Panzer

takes the western half of Vitebsk. Follow-up movement finishes the isolation of Vitebsk. A solid German first game turn.

## GAME TURN ONE RESULTS

A 0-10 Soviet tank unit lost. No German losses.

## Soviet Turn Two: DEFENSE IN DEPTH

The Smolensk defensive belt deploys and Vitebsk is left to the invaders. The northern shoulder is held by 22nd Army, and Smolensk is defended with 16th and 19th Armies, while the 13th and 24th deploy further forward. 20th Army holds the southern flank. Rokassovski is building up reserves using provisional reinforcement divisions and is now up to 10 divisions in strength. These formations now march forward towards Gzhatsk.

## German Turn Two

57th Panzer Corps enters the area of operations. 6th Corps moves up to assist in the attack on Vitebsk, while 57th Panzer Corps slices towards Velizh. Vitebsk holds out with losses, and most of the Wehrmacht is engaged and no major breaks in the Soviet line. Hoth demands more action over the next few days or the army is in danger of becoming bogged down by the Red infantry.

## GAME TURN TWO RESULTS

One Soviet tank and three infantry divisions lost. One German motorized infantry step lost.

## Soviet Turn Three: THE RETREAT

A strategic re-deployment puts the front line from the lake north of Velizh, south to the Dnepr, west

a few miles then south to the Sozh river where it enters the area. A second line is behind the Sozh river near Mstislavl. 21st Army is at Roslavl, 30th Army between Vyazma and Smolensk and Rokassovski still marching in from the rear.

## German Turn Three

Guderian throws his troops into battle. 6th Corps fails to clear Vitebsk with an overrun as hard fighting keeps the Germans out of the city for this turn (engaged). Since the Soviets evacuated the Dnepr river line, 3rd Panzergruppe could not engage the enemy line. 46th and 47th Panzer Corps are able to engage two infantry divisions. Soviet units in the Vitebsk/Dvina River area are eliminated. Mogilev and Orsha both fall.

## GAME TURN THREE RESULTS

Two Soviet tank and three infantry divisions lost. No German losses. The Soviet player has kept the Germans from penetrating their lines and the Germans haven't been able to bring the Soviets to battle.

## Soviet Turn Four: THE RETREAT CONTINUES

More retreating, as Smolensk fills with supplies and stragglers. Another reorganization of the front line now originates from the lake, running south through the trees, along the Kasplya River and swamps, through the open ground where the units are double-stacked then along the Sozh River. The line is fairly strong now in the south, but up north in the open ground, there exists a shortage of units. The 30th Army is strong east of Smolensk with Rokassovski not far behind. 28th Army is now marching onto the map.

Gerisamenko has two tank divisions in reserve at Roslavl.

#### German Turn Four

Assault is the key word. The Dnepr River defense has a hole since the south end (hex 0831) is not being defended. While a unit positioned there is unable to retreat, the 24th Panzer Corps will be able to attack the river defensive position without the defender being doubled. Attacks are conducted all along the line but only the attack in the Kasplya marshes scores a success. The newly-created hole in the Kasplya marshes is now exploited by three motorized divisions and Das Reich. Vitebsk falls during the breakthrough.

#### GAME TURN FOUR RESULTS

Five Soviet infantry Divisions eliminated. One German PzG regiment step loss. The Germans still can't bring the Soviets to battle. This provides the Soviet player with a strong pool of infantry divisions to draw upon in maintaining a defensive posture.

#### Soviet Turn Five: COUNTERATTACK!

The German 18th Panzer has penetrated the Russian defense line. Although the even-odds counterattack is rebuffed, a regiment of the German 18th Motorized Infantry Division is destroyed after repulsing the other regiment. Smolensk is holding firm against all the Germans can bring to bear.

#### German Turn Five

Revenge! 10th Panzer catches the Soviet 16th Army in the open, overrunning it. A pocket west

of Smolensk containing some 7 Soviet Rifle and 1 Tank Division has now been formed. All these divisions are crushed in continued overruns and assaults.

#### GAME TURN FIVE RESULTS

The Soviets lose eight Infantry, one tank and the 16th Army HQ. The German 18th Motorized Division is reduced to a single step, leaving no more than garrison duties for this formation. Das Reich suffers a single step loss during an overrun.

#### Soviet Turn Six: RECOVERY

As only Gerisamenko's headquarters is holding Smolensk, it's very fortunate indeed that Khomenko's 30th army is located just to the east with six rifle divisions. Rail movement brings in another three divisions to Smolensk. Furthermore, six divisions are transferred from the river defensive area south to bolster the Smolensk area. Things aren't looking good for the Russians. Smolensk could fall in a turn or two leaving only Roslavl and Yel'nya for a German win. Too bad the German 18th Motorized wasn't killed outright.

#### German Turn Six

The infantry continues its forward advance, but the Soviet retreat is causing problems for the Wehrmacht. The German infantry are simply unable to keep pace with their key area penetrations due to their lack of mobility. If the Soviets had stood their ground longer, the units could have made their presence felt by assaulting the Russian line. But alas, it is nowhere to be found in the vicinity of the advancing German infantry.

Low-odds attacks on the Sozh river nonetheless is good enough to release the panzers fighting there, as they destroy two Soviet divisions but take a step loss in return. Two Soviet infantry divisions are also eliminated in Smolensk, at the cost of only one step of German infantry.

#### GAME TURN SIX RESULTS

Thus far, the Germans have lost 1 step of infantry, three steps of mechanized and four steps of motorized infantry - three from the 18th Motorized no less. The Soviets have lost no less than 26 infantry and five armor divisions, including Lukin of the 15th Army. The pocket west of Smolensk really hurt the Soviets. Having now reached the halfway point of this operation, it's building up to a German victory with six Game Turns still remaining to take Smolensk and then breakthrough to capture Roslavl or Yel'nya. Only time will tell....

#### Soviet Turn Seven: BATTLE IN THE BALANCE

In light of the tightening grip being put on Smolensk, it's time to start establishing the next defense line. Unfortunately, the Soviets may need to engage the Germans just to achieve A1 results; thus releasing Soviet units trapped in the deteriorating defensive positions presently held.

#### German Turn Seven

Smolensk is a bust as the attack is repulsed, even allowing for some Soviet infantry to advance out of the city towards the German troops. These units will certainly die quickly at the gates of Smolensk, but they have been positioned there for a purpose; to greatly hamper the German timeline!

## GAME TURN SEVEN RESULTS

The Soviets only suffer the loss of an infantry and mechanized division. The Germans lose an infantry step.

Soviet Turn Eight: RECYCLE

The Germans have been careful in positioning their divisions where they can not be surrounded. Soviet infantry are being recycled this turn and reinforcements are being rushed to the Smolensk area to head off the oncoming panzers.

German Turn Eight

A very determined German drive yields glorious results. A determined assault south of Smolensk and an infantry attack in the north represent the turning point. Further attacks are also fruitful. A hole is blown in the Soviet line west of Roslavl, allowing the near isolation of two armies around Krichev. The Germans are now threatening Roslavl, as well as the open road east to Yuknov, while the elimination of all Soviet forces around Smolensk appears only a matter of time!

## GAME TURN EIGHT RESULTS

Although the Germans lose two steps of mechanized infantry during overruns, the results are favorable. A Soviet Leader (Gerisamenko), an armor division, and six infantry divisions are destroyed during the first movement phase alone! Four additional Soviet divisions are destroyed during combat and an additional infantry and mechanized infantry are eliminated during overruns following these attacks. Better than anticipated results for the Germans no doubt. Panic should reign supreme throughout the Soviet ranks.

Soviet Turn Nine: RECOVERY

A partial restoration of the front line. There is still a hole south of Roslavl, however, but fortunately the rivers should keep the Germans from advancing quickly. One lone attack on a German infantry division is disastrous and opens up a hole in the line directly south of Smolensk as three Soviet units are forced to retreat west.

German Turn Nine

The Slaughter Begins. The Krichev Pocket is being prepped for its finish as Roslavl is taken with little resistance. The northern shoulder is being placed in a compromising position as well. Smolensk is surrounded by a panzer division in the south and three infantry divisions in the north. Attacks on Smolensk gain little to speak of at this time, however. Panzers have now pushed over the Desna River south of Yel'nya. Other mechanized troops are flanking the Soviets east of Velizh as well.

## GAME TURN NINE RESULTS

The Germans have destroyed twelve Soviet infantry divisions and Rokassovski is no more. There have been some German losses due to the heavy fighting, but full reports have not come in to the communications center.

Soviet Turn Ten: STILL HOLDING OUT

The Soviets realize the Germans haven't won quite yet. Taking the optional SW reinforcements may have had an impact if exercised two turns ago, but would only make things worse now. It is unlikely that the Soviets can hold out much longer. The women and children of Moscow must

dig deep now to set those tank traps. Good thing the Germans are out of supply due to our partisans.

German Turn Ten

Headquarters says push forward. The Krichev Pocket shrinks to half its previous size and is now only several kilometers wide. The battle for Smolensk has achieved some success. The rest of the front is either stuck in mud, harassed by partisans, or being interdicted by Russian planes. The only loss this turn is a Soviet infantry division in Smolensk.

## GAME TURN TEN RESULTS

The Soviets call out their air interdiction marker, putting a momentary halt on the German drive. This timely delay, along with some much needed luck could work in the Soviets favor. The game is in a tight balance at this time with only two turns remaining.

Soviet Turn Eleven: A STRONG SHOWING

The supply line is re-established to Smolensk and the defensive front is mended on the southern flank. The Germans lose heavily in attacks around Smolensk. The northern front is also sewn up.

German Turn Eleven

Setup for the kill. A minor hole is blown in the north and the noose around Krichev Pocket continues to tighten. Smolensk holds out even though the northern hex is taken. Three divisions bar the way in the south. The last turn will bring back full strength to the Wehrmacht.

## GAME TURN ELEVEN RESULTS

Three Soviet infantry divisions are gone as the Germans regain some momentum. The game now hangs in the balance as we enter the final Game Turn. Smolensk must be taken at all costs!

Soviet Turn Twelve: STAND AT ALL COSTS!

Preparing for the final assault. Every unit tries to pin down the Germans. Smolensk is reinforced. "C'mon Germans!" (Please don't look too hard at Yel'nya.)

German Turn Twelve

Last Gasp Effort for the Germans. Initially, the Krichev Pocket is reduced to two points of resistance via overruns. The northern portion of the line gains a hole to exploit, but Smolensk continues to hold. 7th Panzer blasts through a unit in an attempt to surround Smolensk but can't advance (engaged). The Krichev Pocket is now eliminated except for a provisional unit. The highlight of the last turn is when Das Reich assaults across a river line into trees against an unknown unit which results in a 1-2 odds attack, achieving only an "Engage" result.

Despite the route to Yel'nya being uncontested, the Soviets still win. Even an attempt to jump across the Dnepr to the north side also fails. The force in Smolensk is too large to be overrun at 1-3 odds. One more Game Turn would have allowed panzers to break through to Vyazma or even take Smolensk.

## GAME TURN TWELVE AND THE GAME

As usually happens in PANZERGRUPPE GUDERIAN among equally-matched opponents, it more often than not comes down to the final Player Turn. In the dozen games seen here the Germans plow through Soviet infantry like a large truck through football fans, but the Soviets have a preponderance of men and the interdiction marker which can put the Germans out of supply for three turns. This game is balanced so well that most games are decided in the last three game turns. The German player must be ready to absorb losses in panzer units in tight situations and the Soviets must just be ready to lose lots of men. Considering that half of the German tanks were in this part of the Eastern Front, it is no wonder the Soviets had such a hard time. When Hitler sent the panzers south to help out in the Kiev Pocket the prize of Moscow was lost. With Moscow and its transportation hub gone, the war may have well been over. After a winter of survival the German could have attacked out of Moscow to take the Crimea, Leningrad, Stalingrad and the oil fields. The Germans had four enemies on the Eastern Front: Time, Mud, The Sons of the Soviet Union and Hitler.

***"The Soviet Player must take on the role of aggressive defender and be willing to carry out well-placed attacks into the teeth of the panzers."***

## KEY LESSONS LEARNED

Soviets: Retreating in front of superior forces will lessen the blow, but you have to turn around sometime and fight.

Germans: Don't advance in the face of strong reserves without flank support. The German 18th Motorized was victimized by this oversight.

A lot can happen on the battlefield in three days. Ten divisions were lost by the Soviets through one turn of maneuver. Attacks are easily won when the enemy is surrounded and out of supply. Try this threat against an opponent sometime, "I plan on taking that city (or whatever) BY NEVER ASSAULTING IT...i.e. the Russian will concede the objective." In fact, you can take most geographical locations solely through proper maneuvering. Simply cut off your enemy supplies and in more cases than not, your objectives will simply fall in your hands - at least until it comes down to that "Do or Die" objective. If the Soviets are keen enough to pull out of such a situation - fine. Then you can easily mop up pockets so long as you pay heed to your timetable.

The Soviet player must take on the role of aggressive defender and be willing to carry out well-placed attacks into the teeth of panzers. At least two divisions must be destroyed or a firm grip held on Roslavl and Yel'nya. The Germans can normally take Smolensk and still only be halfway through the game to take Roslavl or

Yel'nya. The trick is to get advancing German units surrounded and out of supply. The Soviets must husband their forces carefully for the last half of the game. To stand and fight early will only chew up your valuable units in the face of the fresh panzers. Poor management during the swirling battles and not realizing when to give ground will result in pockets and the Soviet Player's undoing.

Game Turn Nine is the final turn in which the Soviets can place their interdiction marker. It can't be used on Game Turn Twelve. The Soviet player screwed up in this game by not placing the marker one turn earlier.

## PLAYER'S NOTES

In defense of the Soviet Player, Lloyd has spanked Skip in TAHGC's GETTYSBURG (2nd Ed.) and most other games with linear tactics (stand 100 yards apart and blaze away with muskets). Skip needs tanks to support his morale.

For a marginal win, not counting friendly losses, the German player must take Vitebsk, Orsha, Mogilev, Smolensk and either Roslavl or Yel'nya. The five cities will give the attackers 55 Victory Points. The Soviets could take two cities back temporarily or destroy one German division and still lose. According to what I've read and heard, the Germans should be able to win the majority of the time. However, a resourceful or sneaky Soviet player can pull off a win. The best plans know for

the Soviets is the Quagmire Defense, as published in The General magazine.

Interesting side note. Normally the Soviet provisional reinforcements don't show up at the right places for the Soviets. The first two turns brought divisions to Rokassovski and the third turn came in with Gerisamenko. Turn Four, Five and Six brought a division to point 6 for the river defense. Turn Seven and Eight brought them to point 5 near Roslavl just where they were needed. Turn Ten was point 1 where the German were attempting to flank the Soviets. Right on time! Turn Eleven is the first bad turn with the point being number 3. This unit will not enter battle in this game. Turn Twelve brings infantry in behind the German at the Krichev Pocket. Never has such good rolling been seen for the provisional units.

The only rule change I would like to see is a disengagement rule as in COBRA for at least the leader units. You spend half your movement to exit an enemy zone of control (EZOC) and cannot enter another during the phase. I don't like how leaders get trapped in an EZOC and usually end up dead. Seldom do they get a chance to use the optional evacuation rule.

## BONUS SECTION

### “My Best Panzergruppe Guderian Game”

by John Leggat

Over the years, I've played a bunch of PGG and have found it to be highly variable and well balanced, with either side able to develop winning strategies. I've seen every possible outcome, from a Soviet Decisive with them holding Vitebsk, Orsha and Mogilev to a German Decisive with no Soviets left on the map and the Germans sitting on the eastern edge of the board. It's been my experience that two experienced and reasonably paced players can complete a 12-turn game of PGG in about four to five hours. Of course, I've been in games where, due to the manner of play, it has taken twice that long.

My preference in most wargames is to move play along, trading perfect moves for a bit of spontaneity and uncertainty and more closely simulating the fog of war. I don't especially like playing with opponents who agonize over the perfect move of each piece, the total optimization of each position or the perfect attack. This is one of the reasons I prefer limited intelligence games, of which PGG was a prototype. It is with this in mind that I now describe what, for me, was my most memorable and enjoyable game of Panzergruppe Guderian - a tournament in which the participants all played with chess clocks.

The way the tournament was organized, each pair of opponents had a chess clock and following the usual bid for victory points and the right to be German, each side was given a specific amount of clock time. As I recall, it was 3 hours for the German and 2.5 hours for the Soviet. The chess clocks were set for those amounts with the understanding that either side running over their allotted time would forfeit victory to the opponent. So, to have any chance of winning, each player had to complete the twelve turns without exceeding their clock time. The clock time included all movement and overrun combat, but the clock was stopped for each player's combat phase.

With twelve turns in the game, the German player had an average of 15 minutes per turn and the Soviet had 12.5 minutes per turn. So, each side was forced to budget their time and prioritize their movement. It was not possible to sit and ponder endlessly. Both sides were in the game at all times as even while the opponent was moving, each player had to be considering his alternatives and preparing to take his turn. The result was a very tense and highly charged game. I recall that, early in the game, both of us planned to spend more time as, for the Germans, their earlier offensive requires opening holes in the Soviet line by shredding their defense. During the middle game, both players were assessing their position and checking their elapsed time against the amount remaining to determine how to best allot the remaining moves. By the end of the game, both players were feverishly moving in the least amount of time with only the most critical

activities allowed. Gone were the beautiful lines of perfect stacks every other hex. Instead, the end of the game centered around getting the last victory hex without running out the clock.

At the end, both players were moving and passing frantically and the last couple of turns were just a couple of minutes long. But, both of us made it with scant seconds to spare. I truly forget who won the game, but I vividly remember that both of us considered it the most exciting game of Panzergruppe Guderian that we had ever played.

## BONUS SECTION

### “My Variant Rules for Panzergruppe Guderian”

by Ronald J. Wright

I have been playing this game off and on since it first appeared in S&T Issue No. 57; even after twenty years it still remains one of my all time favorites. I have played it solitaire, competitively, and have used it with great success in teaching newcomers to our hobby.

I enjoy playing the game as it was designed, but I also have developed a few variant rules which I feel better balances the game and makes it less gimmicky. I believe that the German player has a slight advantage in the game, as even SPI later admitted when they suggested that a German marginal victory be considered a draw. I have never particularly liked the impact of the Soviet

"air interdiction" rule, because it often leads to the ludicrous, ahistorical placement of a string of German units "guarding" the supply road to area E. The fact that some Soviet units have no defense strength certainly heightens the tension of the game, but it can ruin the best laid plans of the Soviet player when a key hex is discovered to contain nothing more valueless red cardboard. To "fix" these perceived problems I offer the following variant rules, which have been tested. All of the rules should be used together.

5.2 Soviet First Turn Special Rules: Do not roll for the 16th and 19th Armies. Instead, the Soviet player may move the units of one of them - his choice. The other army stays in place and the units comprising it must satisfy stacking restrictions.

10.4 Evacuating Soviet Leaders: Use this rule.

12.3 No-strength Units: All Soviet units have a Defense Strength. All "0-0-6" rifle divisions are considered to have a value of "0-1-6." All "0-10" armor divisions are considered to have a value of "0-1-10."

13.4 Soviet Interdiction: Omit this rule. The Soviet interdiction marker is never placed on the map.

14.2 Soviet Southwestern Front Reinforcements: The Soviet player receives four rifle divisions on turn two. The Soviet player must enter them, and the German player receives four points. The Soviet player receives only these four units from

the Southerwestern Front for the entire game.

15.2 Levels of Victory: This rule is altered as follows:

**50-79** German victory points = Draw

**80-124** German victory points = German marginal victory

**125+** German victory points = German strategic victory

Increase these levels by one at the end of the game if the German player achieves a victory level on or before turn six; e.g., if the German player achieved 50 points by turn six, he would

## Panzergruppe Guderian Game Errata, including AH version rule change

gain a marginal victory rather than a draw at the end of the game.

[3.4] CLARIFICATION: The Soviet Mechanized units are considered to be Armored Units for set-up and reinforcement purposes. There are more Soviet Armored units in the countermix than are needed for play. This was done deliberately to give wider fluctuation to Soviet armored capabilities in the game.

[6.59] CLARIFICATION: Supply for all units involved in Overrun attacks is determined at the instant of overrun.

[15.11] CORRECTION: In the last paragraph of this case, the reference should read **14.23** (not 13.23).

[15.2] ADDITION: The actual outcome of the German campaign was a German Marginal Victory. The Play of the game reflects this to some extent (i.e., there is a bias in favor of a German Marginal Victory). If the players so wish they may consider a German Marginal Victory a "historical" victory, but a German "player" may win only if he achieves a Strategic Victory or better. In such a case, a German Marginal Victory would be considered a draw.

[16.1] CLARIFICATION: The Reinforcement schedule in the rules is right, not the table on the map. i.e., the Soviet player does **not** receive Turn 12 reinforcements.

[16.2] CORRECTION: In Game-Turn Two, the German Player receives the **26th** Infantry Division, not the **16th**.

[16.2] ADDITION: On Game-Turn Seven, Entrance Area E, the German player receives, in addition to those units listed, the 268th Infantry Division.

[6.7] TERRAIN EFFECTS CHART; CORRECTION: Under Road Hex, the referral to Case 11.14 should read **11.13**.

## Avalon Hill Version Change

6.37 (addition to AH version): German combat units moving through a Railroad hex may cut that rail line. Mark cut rail lines by placing a Rail Cut Marker in that hex. Soviet units may not use Rail Movement into or through a Rail Cut Marker. Rail Cut Markers are removed by Soviet combat units entering the Rail Cut hex while moving normally during the Movement Phase. Rail Movement may resume over repaired rail lines during the Turn following their repair. The number of rail cuts permitted is restricted by the number of markers provided with the game (6). The German Player may, however, remove Rail Cut Markers previously placed by moving a German combat unit over the cut, and thus make the marker available for new cuts.

## Panzergruppe Guderian Order of Battle and Organization

by Danny Holte

### Game Counters - Soviet

Soviet Organization in Panzergruppe Guderian should be considered as loosely historical. Since they are setup unknown at the beginning of the game, this is not a serious consideration. They were presumably somewhat abstracted for design effect rather than strict historical simulation.

### Infantry Divisions (78 Divisions)

0-0-6	8	0-1-6	1
1-1-6	3	1-2-6	1
1-3-6	5	1-4-6	1
1-5-6	1	2-1-6	2
2-2-6	3	2-3-6	4
2-4-6	5	2-5-6	3
2-6-6	1	3-3-6	3
3-4-6	6	3-5-6	3
3-7-6	1	3-8-6	1
4-3-6	1	4-4-6	2
4-5-6	5	4-6-6	1
4-7-6	1	5-4-6	1
5-5-6	3	5-8-6	3
6-5-6	1	6-6-6	1
6-7-6	1	6-8-6	1
7-6-6	1	7-7-6	1
8-8-6	2	9-8-6	1

### Mechanized Infantry Divisions (10 Divisions)

1-10	1	2-10	1
4-10	3	5-10	1
6-10	1	8-10	3

### Tank Divisions (10 Divisions)

0-10	3	3-10	3
4-10	1	5-10	2
7-10	1		

### Headquarters (15 - In order of appearance)

24th Army	Rakutin	(2)	10
16th Army	Lukin	(3)	10

19th Army	Koniev	(5)	10
13th Army	Remezov	(4)	10
20th Army	Kurochkin	(4)	10
Reserve Army	Rokassovski	(5)	10
22nd Army	Yershakov	(3)	10
30th Army	Khomenko	(3)	10
21st Army	Gerisamenko	(2)	10
28th Army	Kashalov	(2)	10
29th Army	Maslennikov	(3)	10
31st Army	Dolmatov	(2)	10
49th Army	Zakharkin	(3)	10
32nd Army	Vishnevsky	(2)	10
33rd Army	Onuprienko	(2)	10

### Air Interdiction Counter (1)

## Soviet Order of Battle

All Soviet Order of Battle information is located in the Game Rules.

## Game Counters - German Unit Organizations

Panzer Division (9 Divisions)  
 2-10/1-10 Panzer Grenadier Regiment (x2)  
 4-10/2-10 Panzer Regiment (x1)

Infantry Division (18 Divisions)  
 9-7/4-7 Infantry Division (x1)

In addition, each infantry division has a 2-7/1-7 counter available for further breakdown due to combat losses (4-steps total).

Panzer Grenadier Division (5 divisions)  
3-10/2-10 Motorized Infantry Regiment (x2)

20th Pz Gren Div - Zorn  
76/20 Mot Inf, 90/20 Mot Inf

29th Pz Gren Div - von Stockhausen  
15/29 Mot Inf, 71/29 Mot Inf  
46th Panzer Corp - Vietinghoff  
10th Pzr Div - Schaal  
69/10 Pz Gren, 86/10 Pz Gren, 7/10 Pz  
SS Das Reich Pzr Gren Div - Hausser  
2/DR Mot Inf, 3/DR Mot Inf, 4/DR Mot  
Inf

Das Reich SS Motorized (1 division)  
3-10/2-10 Motorized Infantry Regiment (x3)

57th Panzer Corp - Kuntzen  
12th Pz Div - Harpe  
5/12 Pz Gren, 25/12 Pz Gren, 29/12 Pz

Independent

Lehr 3-10/2-10 Panzer Grenadier Regiment  
1st 4-5/2-5 Cavalry Division  
Gross Deutschland 4-10/2-10 Panzer Grenadier  
Regiment

GAME TURN TWO

3rd Panzer Gruppe - Hoth  
Lehr Pzr Regt  
Lehr Pz Gren  
57th Panzer Corp - Kuntzen  
19th Pzr Div - Knobelsdorff  
73/19 Pz Gren, 74/19 Pz Gren, 27/19 Pz  
18th Pzr Gren Div - Herrlein  
30/18 Mot Inf, 51/18 Mot Inf

Gros Dtshld Pzr Gren Regt  
24th Panzer Corp - von Schweppenburg  
3rd Pzr Div - Model  
3/3 Pz Gren, 394/3 Pz Gren, 6/3 Pz  
4th Pzr Div - von Langerman  
12/4 Pz Gren, 33/4 Pz Gren, 35/4 Pz  
10th Pzr Gren - Loeper  
69/10 Mot Inf, 86/10 Mot Inf  
1st Cav Div - Feldt

Air Interdiction Marker (x3)

Disruption Marker (x3)

Game Turn Marker (x1)

**Order of Battle**

ARMY GROUP CENTER - von Bock

2nd Army - von Weichs  
6th Corps - Forster  
6th Inf Div  
26th Inf Div (listed as 16th Inf Div in Game  
Rules)

GAME TURN ONE (Note: In the game, the  
12th Pzr Division is listed as part of the 39th Pzr  
Corps. It should be attached to the 57th Panzer  
Corp.)

GAME TURN THREE

9th Army - Strauss  
5th Corps - Ruoff  
5th Inf Div  
35th Inf Div  
8th Corps - Heitz  
161st Inf Div  
2nd Panzer Gruppe - Guderian  
47th Panzer Corp - Lemelsen  
17th Pzr Div - Weber  
40/17 Pz Gren, 63/17 Pz Gren, 39/17 Pz  
18th Pzr Div - Nehring  
52/18 Pz Gren, 101/18 Pz Gren, 18/18 Pz

3rd Panzer Gruppe - Hoth  
39th Panzer Corp - Schmidt  
7th Pz Div - von Funck  
6/7 Pz Gren, 7/7 Pz Gren, 25/7 Pz  
20th Pz Div - Stumpff  
59/20 Pz Gren, 112/20 Pz Gren, 21/20 Pz

14th Pz Gren Div - Furst  
11/14 Mot Inf, 53/14 Mot Inf

GAME TURN FIVE

4th Army - von Kludge  
9th Corp - Geyer  
137 Inf Div  
263 Inf Div  
7th Corp - Fahrmbacher  
23rd Inf Div

GAME TURN SIX

4th Army - von Kludge  
9th Corp - Geyer  
292nd Inf Div  
2nd Army - von Weichs  
12th Corp - Schroth  
258th Inf Div

GAME TURN SEVEN

4th Army - von Kludge

7th Corp - Fahrmbacher  
 7th Inf Div  
 15th Inf Div  
 2nd Army - von Weichs  
 13th Corp - Felber  
 17th Inf Div  
 3rd Panzer Gruppe - Hoth  
 20th Corp - Materna  
 268th Inf Div

GAME TURN EIGHT

ARMY GROUP CENTER - von Bock  
 252nd Inf Div  
 4th Army - von Kludge  
 7th Corp - Fahrmbacher  
 78th Inf Div

GAME TURN NINE

2nd Army - von Weichs  
 12th Corp - Schroth  
 31st Inf Div  
 34th Inf Div

**Reference List for  
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 Game Analysis: Panzergruppe Guderian  
 Larry Lippert, Gregory Mumm • Strategy

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 Charles Starks • Analysis

**Fire & Movement #5 • pg 43**  
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 Friedrich Helfferich • Review

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 Panzergruppe Guderian: The Battle of  
 Smolensk, July 1941  
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 Rick Swan • Review

**General Vol. 21 #4 • pg 5**  
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**Moves #29 • pg 4**  
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 The Smolensk Campaign, 11 July - 5 August  
 1941  
 Victory Madej, Shelby Stanton Accompanying  
 Historical article w/game issue

**S&T #58 • (Insert)**  
 Errata and Addenda for Panzergruppe Guderian

*Special Thanks to Danny Holte for providing  
 this Reference List. He will be selling a  
 Comprehensive Reference List for all consim  
 games published in these periodicals shortly.*

# Panzergruppe Guderian Counters (Front)

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Kubarko 20th Army (2) 10	Gromsko 11st Army (2) 10	Kachko 20th Army (2) 10	Odessko 11st Army (2) 10	Yuhovko 23rd Army (2) 10	Odesko 11st Army (2) 10	Lubko 16th Army (3) 10	Yuhovko 23rd Army (3) 10	Krasno 20th Army (3) 10	Mubko 20th Army (3) 10
Ziskhko 20th Army (3) 10	Romeno 13th Army (4) 10	Kachko 20th Army (4) 10	Romeno 13th Army (5) 10	Mubko 20th Army (5) 10	- 2-4-6	- 2-4-6	- 2-4-6	- 2-4-6	- 2-4-6

0-10	0-10	0-10	3-10	3-10	3-10	4-10	5-10	5-10	7-10
1-10	2-10	4-10	4-10	4-10	5-10	6-10	8-10	8-10	8-10

## Soviet

1-4-6	6-5-6	5-5-6	5-5-6	5-5-6	4-5-6	4-5-6	4-5-6	4-5-6	4-5-6
3-5-6	3-5-6	3-5-6	2-5-6	2-5-6	2-5-6	1-5-6	7-6-6	6-6-6	4-6-6

4-4-6	4-4-6	3-4-6	2-3-6	1-3-6	1-3-6	1-3-6	1-3-6	3-3-6	3-3-6
2-3-6	2-3-6	2-3-6	2-2-6	2-2-6	1-2-6	4-3-6	3-3-6	1-1-6	1-1-6

2-6-6	7-7-6	6-7-6	4-7-6	3-7-6	9-8-6	8-8-6	8-8-6	6-8-6	5-8-6
5-8-6	5-8-6	3-8-6	3-4-6	3-4-6	3-4-6	3-4-6	3-4-6	1-3-6	5-4-6

2-1-6	2-1-6	2-2-6	0-0-6	0-0-6	0-0-6	0-1-6	D	D	✈
1-1-6	0-0-6	0-0-6	0-0-6	0-0-6	0-0-6	✈	D	✈	✈

9-7	9-7	9-7	9-7	9-7	9-7	9-7	9-7	9-7	9-7
2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7

9-7	9-7	9-7	9-7	9-7	9-7	9-7	9-7	4-5	Game Turn
2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	3-10	4-10

## German

4-10	4-10	4-10	4-10	4-10	4-10	4-10	4-10	4-10	3-10
3-10	3-10	3-10	3-10	3-10	3-10	3-10	3-10	3-10	3-10

3-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10
3-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10

