The most oft-asked question has been, "how do you design a game?"

The General is not going to give away any trade secrets — but it is liberty to repeat in this column the trials and tribulations of obtaining historical data. And this area of game production is the hardest part — the actual designing of the game is somewhat secondary and often comes quite easily to the imaginative and creative mind.

But getting accurate data is bulk work; work that often is short-cut for the sake of turning out a product. Avalon Hill avoids this short-cut pitfall, preferring instead to "publish when ready" instead of rushing a new game into print simply to maintain a seasonal schedule.

A typical case in point deals with our latest effort — Luftwaffe. This game is approximately 2½ years late. Originally scheduled to follow 1914 dissatisfaction in many areas of both design and research heaped delay upon delay. At one point three different — and competing — Luftwaffe games were making the rounds among testers.

Our game is a successor to "12 O'Clock High" which was released by The Simulations Corporation (S&T Magazine) in the Fall of 1970. Designed by S/Sgt. Lou Zocchi several years prior, his attempts to sell it to Avalon Hill met with considerable opposition mainly on the strength of its original design weakness. Mechanically it moved with lead-foot speed. We had too many of these already in the line. Meanwhile, the Simulations Corporation had, themselves, designed a game on the Luftwaffe. This they developed as a Test Series Game. Then re-developed — and sold — as "Flying Fortress." Then re-revised as "Flying Fortress II," a kit for expanding upon FFI.

This game was a strategic game; Zocchi's was on a tactical scale.

But Simulations' attempts to sell theirs to Avalon Hill also met with opposition. Neither game was historically accurate as we shall point up later. But both games were now developed to the playability stage and outstanding games within their particular concepts.

How did we choose one over the other?

Simple. We held a "contest." Both games were play-tested by the same people. Zocchi's version scored higher. Still, Zocchi's was far from optimum. It is to the credit of Simulations Corporation that they helped us reach optimum with Zocchi's version. They agreed to publish it, as "12 O'Clock High," for the express purpose of using their customers as a sounding board for further debugging the game.

Historical Accuracy

Avalon Hill's major preoccupation has been with historical accuracy. Not constant to believe what is written in text matter, it has been customary for AH to go to "live" sources such as heroes and/or witnesses to the events for corroborating of data.

Early versions of Simulations' Luftwaffe Game included B-29s which never even flew in Europe. You also played with P-80s and P-51Hs which never flew in World War II. Yet there they were in the game, big as life. Apparently these planes belonged in the "What If" version of the game. Suppose 25,000 games would have been printed commercially before discovery of the omission. Egad.

This resulted in Avalon Hill's insistence that Zocchi place his research under closer scrutiny, double checking all material against all reliable sources — and then some. The "then some" appeared in the person of Paul J. Vercammen, editor and publisher of AIR COMBAT Magazine.

A three-way rapport was established between Avalon Hill, Zocchi and Vercammen. Vercammen took more than just a cursory interest in the project. He presented historical data that, in a few cases, corrected Zocchi's research data which in itself had been exhaustive and derived from rather un-impeachable sources. Vercammen also furnished Avalon Hill with all aerial photos used in the Manual. He also questioned and re-wrote portions of the manuscript that now appears as background material in the Manual. At various points in the preparation of the manuscript, Vercammen and Zocchi had differences of opinion. So it went — back and forth between Vercammen, Zocchi and Avalon Hill until we had what we considered the "finished" manuscript.

Some of Vercammen's correspondence to Zocchi and Avalon Hill was more verbose than the actual manuscript, as if he had a personal interest at stake. Some of the exchanges went like this:

(Zocchi's text in italic; Vercammen's in bold face):

Vercammen to Zocchi:

Mr. Zocchi wrote me a long letter defending some of his viewpoints. In general I think Mr. Zocchi has done a fine job. His viewpoints differ from mine — well that seems to be the general problem with "historians." However I do feel it is somewhat stereotyped — the viewpoint found in most postwar publications. The corrections I made are views based on reports only come to light in the past few years. I think by correcting here and there, a better perspective will be presented.

Zocchi to Vercammen:

I am particularly grateful for your comments on my historical summary. Your comments have enabled me to re-write the summary with a much better perspective. When I look at the considerable number of corrections you've made, I feel called upon to discuss further with you my reasoning for a few points which you've indicated are wrong. For instance, if the British and French had attacked promptly Hitler's western wall would have crumbled and the blood bath might have been averted — your comment, "I doubt this," leaves me wondering.

Vercammen to Zocchi:

I agree with the political aspect which you described so well. Militarily and technologically, it would have been impossible for both France and England to do much about Germany's interference in Poland, Germany's motorized divisions...
were far superior to France's and England's. Germany's supply lines were far superior. Britain at that time had little to offer in motorized equipment. Type for type, Germany's tanks and artillery were far superior to what France and England (and Poland) had to offer. And we haven't even mentioned the Luftwaffe — as you know — at that time was far superior to what England or France or the Low Countries had to offer. Because of these points I doubt if the western wall would have crumbled — or a major war averted. For this reason I feel the sentence should be altered.

For Vercammen to have gone to such great length to check out but one sentence of historical opinion, readily gives the reader an idea of to what lengths he went in helping Zocchi and Avalon Hill present a properly researched game. We have only quoted the highlights of his western wall opinion — his actual text on this subject ran 340 words.

Zocchi to Vercammen:

Why have you deleted my reference to the German Pilot training program? Hitler made no effort to increase pilot training until 1944.

Vercammen to Zocchi:

Hitler foresaw a short war. Numerically during the Battle of Britain period it was hardly necessary to increase fighter pilot training. The impression I got from reading your text was that the "battle" was lost as a result of pilot shortage. Actually, the bomber threat of U.S. aircraft over Germany became realistic near the end of 1943. Nightfighter training was increased effective 1940.

Zocchi to Vercammen:

Thanks for telling me that the losses I had for the Luftwaffe also included its land army units. I did not know this was the case and am most grateful for your calling it to my attention. I wish I had known of your academic achievements before. I had a field of a time deciding which aircraft was better than which. I'm beginning to feel as though the only time I open my mouth is when I want to change feet. I'd like to have your opinions on the ratings given to each plane.

Vercammen to Zocchi:

The "number rating" for each aircraft is very interesting. I think the numbers given to the planes you listed are realistic enough and do not warrant any changes. I do have some comments on a few aircraft — I am not sure what part they play in your game. JU88 — "G" — Is this as daylight fighter? If so, your "O" seems correct if fighter opposition is encountered. As a nightfighter however, I would guess a "3" would be in place; as an attack bomber at least a "2."

HE112 — "G" — This one is strictly theoretical. Some sources claim that the 162 never made an operational flight. I talked to an ex-162 pilot who did claim a few operational missions. I have doubts about entering this plane in the game. The ME262 did have its own starter unit and was therefore independent from ground carts.

The starter consisted of a Reidel two-stroke engine which had its own fuel supply — B4 fuel in a small tank of approximately four gallons. There would not have been any problem starting up the engines. The aircraft fuel used by the ME262 was basically J2 diesel oil. I believe, but may be wrong, that there was not a serious problem obtaining this fuel. A large percentage of German army equipment used this fuel. In addition, it is a crude form of fuel which did not have the refinement of the higher octane conventional aircraft fuels. J2 storage facilities were well dispersed. So I don't feel there was the problem of "having the stuff available." I question whether it was feasible for the German transport network to distribute this fuel to the bases from which the 262 operated. The bases were, as you understand, a network of small wooded areas near large highways from which the planes took off.

FW190 vs P-51: I would say the aircraft were equal. This of course is a generalization. Some subtypes were better than others and combat conditions varied from low to high altitudes, etc. In general — yes — they were just about equal.

While I think of it, to start the small Reidel engine a 20 volt battery was required. These batteries were standard military hardware — found in heavy trucks, tanks, etc. Therefore no problem would be encountered if the 262 had to land at other bases or highway stretches.

Mr. Zocchi, I am not trying to be over-critical — merely trying to express some feelings and bring out some points. The main objection I had was the "toning down" of German equipment. I am not a German, far from that — lived under occupation during the war years as a young boy in Holland about two miles from a large Luftwaffe base. The villa of my parents was taken over and used as Staff HQ. Consequently, I was able to make several trips to the base. In defending some of the equipment used I am not putting in personal feelings. Sure, I have seen 110s down P-51s, 110s down Mosquitos. This is beside the point. I am looking mainly through S&T and your academic chief's eyes. I never saw a P-51, P-51, P-51, P-51. The 110 was a great aircraft. And, in a way, so was the Stuka. I have done a lot of research on enemy equipment. I understand design philosophy, being an Aeronautical Engineer by profession — plus flight test experience.

Your article gives me the impression that the Luftwaffe was an easy victim. It wasn't. It was an outstanding organization using top personnel and equipment. This makes the victory so much sweeter, doesn't it?

Your research was well done — the statistics are impressive. But I do feel more objectivity is required in the Manual, and the Avalon Hill people need do this in their games which, after all, are conducted by a professional "customer."

It is impossible to reproduce here every word that passed between Vercammen and Zocchi — an entire issue of The General would be required. We have summed up the highlights to give you an inkling of what transpired during the various development stages of a new game. In one of his literary exchanges with Zocchi, Vercammen details his eyewitness accounts of an RAF raid on the airfield of Gizele-Rijen.

The day was September 3, 1944 — about 5 P.M. on a Sunday. 200 plus Lancasters blew up the entire base. The formation included several Halifaxes. One of them was shot down and a DO217 became the victim of a Spit. With this I will close my letter, it turned out to be much longer than I anticipated. I can only congratulate you on the research done. On your article, as I said before: The Luftwaffe — too much blame on Hitler and Göring, not considering other factors such as numerical advantage of the Allies. You undersell the RA F's effort in the war in the air. You have the USAAF just about right. On Russian and Luftwaffe, no comment. I do not have sufficient material which could make me agree or disagree. On your statistics — great job.

The "great job" is Vercammen's — for taking the time, trouble, and effort to play the part he did in the capacity of Technical Advisor. We must assume that as editor and publisher of AIR COMBAT, the same attention to accuracy goes into the pages of this fine magazine.

Actually titled AIR COMBAT 1939-1945, it is distributed by Eagle Aviation, P. O. Box 92, Rockaway, New Jersey 07866 for $6.00 per year, $1.00 per issue. Photos that appear in this bi-monthly magazine are not of models, but almost impossible to come by — black and white and color shots of actual planes, many with the war-aces who flew them. All photos appearing in the game Manual were supplied by AIR COMBAT.

Authentication of the research material thus cleared the way for the final phase in the design of the game. With proper data on hand, the "number ratings" were properly adjusted although, as Vercammen stated, Zocchi had pretty much nailed this aspect down in its proper perspective.

Nevertheless, it was Avalon Hill's job to coordinate with Zocchi the relationship of the number ratings to the actual game mechanics. At this juncture, the game was already being distributed through S&T Magazine as "12 O'CLOCK HIGH."

But at Avalon Hill's insistence, Zocchi effected many rule changes and clarifications. R & D people at AH always take a controlling hand in some phases of design, regardless of who the original work is consigned to. Even with Panzerblitz AH found it expedient to effect last-minute changes for the sake of production and instructional clarity.

So it was with Luftwaffe. During the Trade Show phase Luftwaffe was still being tested, even after the Box, Board, and Plane Counters had been printed.

And by the time this final testing procedure was finished, Luftwaffe resembled very little its predecessor, "12 O'CLOCK HIGH."

Designing a new game is not all "peaches and cream," nor is the procedure so cut and dried as many amateur designers contend.

And without touching the design procedures and problems in the above text, we hope that the above has been sufficiently exacting to make one stop and think twice before embarking on the long and winding road of game designing.

At the very least, we hope this column has answered some of your inquiries by shedding light on a very important phase — design and documentation — in the many-phased procedure of publishing a wargame from scratch.
Panzerblitz MSM

by Dennis G. Mehaffey

It's the end of your half of turn 9. You are playing Situation No. 10 and you are the German commander. For 8 turns now you have successfully held a defensive line, preventing the Russian units from moving onto board No. 3. You have just finished maneuvering your Panzers, making sure that they were all safely tucked away in forests and towns. You have also made certain that your anti-tank guns and mortars were stationed on hilltops, ready to demolish any enemy units that dared to approach your position. Leaning back in your chair and snickering sarcastically, you inform the Russian player that, although there is no hope for him, he may now move.

Suddenly he jumps to his feet, giving forth a sinister laugh and wringing his hands. At first you think that the strain of defeat was too much for him, and that the poor fellow has finally lost his mind. But then you see it. Your heart is throbbing wildly and your eyes are beginning to swell. Soon, tears are streaming down your cheeks, as you are forced to just sit and watch as three-fourths of the Russian army pours through the one hex you left unguarded and stalks triumphantly onto board No. 3 for a decisive victory.

Panzerblitz players around the country should recognize this scene. Not only is it painful, but also very frequent. It is the result of a method of movement which is universal to practically all wargames to this date: a method that forces one player to sit still and watch as his opponent's units move right by. The method's limitations have been felt in every wargame, but never so strongly as in Panzerblitz.

Panzerblitz MSM (Modular Simultaneous Movement) is a playble system of simultaneous movement which I developed in response to many demands made by fellow wargamers that movement and fire in Panzerblitz was just too unrealistic. MSM has been play-tested over and over and is presented here in its full form so that others might enjoy a more realistic method of play.

MSM is based on the theory that "a unit's AF is simply the total amount of force that unit can exert in the time of one turn." A similar theory may be stated regarding movement.

In MSM, each turn is divided into six parts, called modules (mods). Each mod lasts one minute. Before each mod begins, players secretly write down orders for each unit, to be carried out on that mod.

These orders are written on an Orders Sheet, which looks like this:

**ORDERS SHEET**

<table>
<thead>
<tr>
<th>unit PICS #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
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</table>
|             | B7| B8| LOT| A/D9| A/D9|--

An Orders Sheet may be as long as you wish, but it must always have six vertical columns. The numbers across the top of the Orders Sheet refer to the mods. It is advisable to make ditto or mimeograph copies of the sheets, because one game could take 6 to 48. At the beginning of the game, each player is given an Orders Sheet and lists the PICS number of each unit along the left side of the sheet.

There are seven possible orders a player may give a unit, although a unit may never be given more than one of these orders on any one mod. These orders are: Move, Attack, Engage, Lock-on-Target, Load, Unload, and Stand-and-Defend.

**MOVE**

Each unit's movement factor has been spread out, as evenly as possible, among the six mods in a turn, as shown in the following table:

**MAT (Movement-Attack Table)**

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<th>3</th>
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</tr>
</tbody>
</table>

The numbers on the left of the MAT refer to the MFs of the various units. The numbers in the boxes refer to the number of clear terrain hexes a unit with that MF can move on any particular mod. As you can see, a unit only receives a small part of its MF on each mod. A unit with a MF of six can move one clear terrain hex per mod.

To order a unit to move on Mod No. 1, refer to the number on the left side of the MAT which corresponds with the MF of the unit to be moved. The number in the box to its right will give you the number of clear terrain hexes it can move on Mod No. 1. Now refer to your Orders Sheet. In the box to the right of that unit's PICS number, write the coordinate of the hex on which that unit will be located at the end of that mod. If a unit is to pass through several hexes on a mod, list the coordinates of all hexes passed through.

It costs 1/2 MF to move along a road. Therefore, if a unit has a MF of two on Mod 3, it may move 4 road hexes on that mod. However, it is not necessary to write down all hexes passed through. Simply write down the coordinate of the terminal hex and put a small case "r" next to it. This signifies that it moved along the road.

Units may not use the road bonus while stacked together (unless they are carrier units stacked with non-vehicular units). Units entering the board along a road may not end the mod stacked together, but must stop, one behind the other. This is a realistic representation of having to "string" one's units out along a road in real life situations. Units may, however, travel along road hexes while stacked together, but only one may use the road bonus. The others are considered to be moving along the side of the road and are subject to the terrain surrounding a road.

When two friendly units pass each other going opposite directions on the same road, or meet at the same time at a road junction, both units must stop as soon as they reach a common hex. On the next mod, one unit may continue along the road while the other must wait until the next mod to move.

If a player chooses not to move a unit on a mod, the MFs for that mod are lost and may not be used at a later time.

**SLOPES**

A unit must wait until a mod in which it has enough accumulated MFs before it can move onto a slope hex. In MSM it costs 3 MFs to move up a slope and 2 MFs to move down a slope. It costs 2 MFs to move along a slope, as long as the unit does not cross a brown hex side. It costs 3 MFs to cross a brown hex side.

**STREAMBEDS**

Units must wait until a mod in which they have enough accumulated MFs before they can move out of a streambed. When a unit moves onto a streambed hex, the player must specify whether it is moving into the streambed or not. If it does not move in, it may move off the hex as long as it does not cross the streambed. If it moves into the streambed, it must spend MFs getting out. Note that although trucks have a modular MF of 2, they may only move 1 clear terrain hex per mod, because it costs them 2 MFs to move through clear terrain.

**ATTACK**

Attack factors are spread out fairly evenly among the mods in the same manner as movement factors. The numbers on the left hand side
of the MAT also represent AFs and the numbers in the boxes represent that unit’s allotted number of AFs on each mod. A unit with an AF of 8 has an AF of 2 on Mod No. 2.

To order a unit to attack, write “A”/ and then write the PICS number of the unit being attacked. When attacking units that are more than one hex away, use LOT. When attacking adjacent units, use Engage.

LOT (Lock-on-Target)

Before a unit may fire at an enemy unit that is more than one hex away (not adjacent), it must spend one mod locking to the enemy unit. To lock-on to a unit, simply write “LOT”/ and then write the PICS number of the unit being locked onto. Beginning with the next mod, the attacking unit may attack that unit and may continue firing for up to six mods. It may still fire even while the target unit is moving. As stated earlier, a unit must stand still while it is firing. Lock-on firing is cut off as soon as the target unit moves out of the LOS or range of the firing unit, or if the firing unit decided to stop attacking.

Once a unit has fired for 6 consecutive mods, it must spend the seventh reloading and locking onto targets, if it wishes to begin firing again. A unit may move and LOT at the same time. A unit may never lock-on to a unit it cannot see.

Resolving LOT Battles

1) Find the attacking unit’s attack factor on the first mod that it fired (after locking on).
2) Divide the firing unit’s AF by the total number of hexes over which the target unit moved on that mod (not including the hex from which it started).
3) Figure the odds for each hex moved over, building up factors each time.

Units in woods or towns being spotted may not be fired at if the spotting unit moves away or is destroyed. Dispersed units may spot.

ENGAGE

When two or more enemy units move into adjacent hexes, a battle takes place. At the end of the mod in which the two units moved adjacent to each other, each player states whether he wishes to engage the other. The unit(s) being engaged may not move for one mod after being engaged. On the mod after that, if the engaged unit has not been dispersed or destroyed, it may move away, unless the other player brings another unit up to engage it. If a unit is dispersed on the mod after being engaged, it must wait one extra mod after it becomes undispersed before moving away.

On the mod in which the engaged unit is forced to stay put, the engaging unit may
1) make a regular attack
2) make a CAT attack
3) make an Overrun attack
4) lock onto that unit so that if it moves away it can be fired upon.

A unit engaged being may do one of several things.
1) stand and defend
2) counterattack the engaging unit
3) lock-on to targets
4) fire onto units it has already locked onto
5) spot the engaging unit.

A unit may always attack the unit it is engaging. It may not attack other units. Engaged units may not overrun the engaging units. A unit may never close assault or move through a hex being sheltered, nor may it close assault a unit on a mine field.

OVERRUN

A unit may only overrun an enemy unit if it has just engaged and then only when it has sufficient MFs to do so. If, when a unit is overrunning an enemy unit, another enemy unit moves into what would be the exit hex of the overrun attack, the overrun may not be made. Units may not overrun hexes that are being sheltered.

LOAD

It takes 6 consecutive mods to load a non-vehicular unit onto a carrier unit. After 6 mods of loading, it may move away. To order a unit to load, just write Load in each mod it loads. Units may not move or attack while loading, but may defend.

If loading units are attacked during the first three mods of loading, the attacker must specify which unit is being attacked (the carrier unit or the non-vehicular unit). If the loading units are attacked during the last three mods of loading, the two units are treated as one for defensive purposes. Units may spot while loading.

UNLOADING

It takes one mod to unload. Units may not move, attack, or engage while unloading, but they may spot. When unloading units are being attacked, the carrier unit is the one considered to be under attack.

OVERRUN

A unit may only overran an enemy unit if it has just engaged and then only when it has sufficient MFs to do so. If, when a unit is overrunning an enemy unit, another enemy unit moves into what would be the exit hex of the overrun attack, the overrun may not be made. Units may not overrun hexes that are being sheltered.

LOAD

It takes 6 consecutive mods to load a non-vehicular unit onto a carrier unit. After 6 mods of loading, it may move away. To order a unit to load, just write Load in each mod it loads. Units may not move or attack while loading, but may defend.

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THE GENERAL

DISPERSALS

If units are dispersed by attacks from enemy units or mines, and the attacker rolls a “D” the defending units are dispersed for 2 mods. If the attacker rolls a “DD” the unit is dispersed for 3 mods.

STAND AND DEFEND

To order a unit to stand and defend, simply put a dash (“-”) in the box on the Order Sheet. This means that the unit is not moving or attacking. It just sits in its position and defends against enemy fire.

OPTIONAL RULES

All optional rules should be used, except for the ammunition rule. No experimental rules should be used.

Although it takes a little more time to write down orders for all your units, I think you will find that, using this system, Panzerblitz will take on a new feel. All questions, comments, and criticisms will be gladly answered.

Dennis G. Mehaffey
9102 E. Leroy St.
San Gabriel, California 91775

More Panzerblitz Variants

by Tom Oleson

In the May-June issue of The General, I suggested a system for giving each unit a relative weight, making possible a contest between equal forces. Many other situations are possible, and here are a few:

13%). Time did not permit a few corrections to situation 13 —

a. Obviously, in order to make the contested center board something new by matching up halves of any two of the boards 1, 2, and 3, while still retaining a symmetrical layout, it will be necessary to use more than 3 boards. Although I personally prefer novel board arrangements, I do not find it a majority view, nor is it at all necessary for this situation.

b. The reason for assigning cavalry a cost of 20 points (incorrectly totalled at 21 in the article) is this: alone among all the units of low or no mobility, it cannot be transported. Therefore, if calculated on the same basis as infantry, its value is artificially high, and as one becomes familiar with the game, cavalry is not used. So, count MF as only 1, for a total of 20.

c. When using the optional indirect fire rule (optional, not experimental), count C.P.s not 1, but 5.

d. Considering their CAT value, engineers obviously have more combat strength than any other infantry unit. To fairly reflect this, double the Attack Factor. Thus, German engineers would cost 18 points, Russian, 16.

14. “He who defends everything, defends nothing.” A maxim seldom heeded either by Hitler or Stalin, when things were going bad. In the early stages of the war, hundreds of thousands of Russian troops were surrounded, sometimes when timely retreat would've saved them. Later, partly because of Hitler's fanatical aversion to retreat, partly because the vast distances made a well-defined front difficult, the Germans used hedgerows - strongpoints ready to resist attack from any side. This is the background of this situation.

Use the same point system as corrected above (true of all the situations described here). The defender is also allowed to use, anywhere on any or all of the 3 boards, the 8 bunkers, 12 roadblocks, and 11 mine fields supplied with the game. To man these defenses, the defender has 500 points from which to choose his force, the attacker 1000.

The defender sets up first, anywhere on any or all 3 boards. The attacker moves first, entering at any point on the edge of any board but the center board. Nor must he enter all his forces in one place; they may be spread out in any fashion he chooses, so long as at all are brought on during his first turn.

Note that the defender moves last. This is to prevent the attacker from "hiding" throughout the game, then rushing onto the center board at the last moment. It would work if the attacker moved last.

And for this same reason it has been suggested to me that in situation 13 the attacker (that force with less units) should not be obliged to move first, but should have the option of moving first, or last. It's an interesting idea.

To return to situation 14, although the defender may set up anywhere he wishes, the contest, as in 13, is for mastery of the center board. The winner

(continued page 12)
FRENCH STRATEGY

by John S. Hathaway

French success at Waterloo is actually nothing more than an exercise in logic. What we have to do is set the situation before us, and then carefully examine it to deduce just exactly how and why we can be successfully opposed so often by an army approximately ½ the size of our own. Once having determined how it happens, we then decide how to prevent it. A critical examination will reveal that, with two players of about equal ability, it is not the PAA player who wins the game, but rather the French player who throws it away! In other words, the pressure is on the attacker to perform flawlessly; if he does, he cannot lose. If he doesn’t, he beats himself.

All Avalon Hill games can be profoundly influenced by the correct application of certain basic principles of war. In no game, however, can certain of these principles be so graphically illustrated as in WATERLOO. The key principles to keep in mind here are (1) MASS, (2) MANEUVER, and (3) ECONOMY OF FORCE. These might be succinctly defined as follows:

(1) MASS: The application of an overwhelming force against a much smaller enemy.

(2) MANEUVER: Deploy your units so as to maneuver the enemy out of their strong defensive positions without having to fight for them.

(3) ECONOMY OF FORCE: NEVER waste a unit! Each unit can always be positioned so that its next move can contribute to either (1) or (2) above.

You will be surprised to find that these principles can be utilized turn after turn, with great gain, in WATERLOO.

Let us examine the opening situation: Frenchie is confronted by an inferior (in size) army. He can therefore either use his superior force to win by Mass (attrition), or he can pin down the enemy forces with an equal number of his own men and use the excess units to outmaneuver the enemy. A combination of both of these is best.

Well, then, what should the French player think as he looks at the blank board before him? First, he gets no reinforcements – on the other hand, his opponent gets stronger with the passage of time. It is therefore to Frenchie’s advantage to close for combat as rapidly as possible, on as many fronts as possible in order to spread the enemy thin. At the same time, he must constantly poise his units so they can either concentrate for attack, or quickly break to the PAA flanks. It does not make sense to attack doubled positions if you can outflank the enemy and later force him to stand in the open.

The PAA player has much going for him. He has inferior lines, and his units are better suited to both attack and delay. My experience has been that the really excellent PAA player must be beaten by a double-development maneuver combined with a battle of attrition in the QB gap.

This means we must organize our army into a Nivelles wing, a main body across the approaches to QB, and a flanking force down the Waale corridor. The balance between these forces is delicate, and may vary slightly depending upon PAA’s distribution. But it is imperative that we maintain pressure in all three areas.

I usually organize a Nivelles wing of 60-65 factors: four 6-4’s (II Corps), three 5-4’s, and the rest cavalry (I and II Corps and units from RR-15 and SS-15). While the infantry presses on Nivelles, 12-14 factors of this cavalry have an even more important mission. Poised at X-42 and Y-42, they threaten both toward Nivelles and toward V-45 and V-46. By extending the flank in this direction, you force PAA to leave at least two units behind from his 11AM arrivals. If he leaves the 2-4 and 1-4 (or either of these) at V-47, you will be able to seize V-46 and thus force the second arrivals (Clinton et al) to enter at Hal. The strategy here is to use the principle of Maneuver to force PAA to disperse and thereby weaken his armies. You also delay his reinforcements and, by forcing him to disperse, nullify his ability to counterattack. Your main line should be able to advance upon Nivelles without fear. Should PAA decide to reinforce Nivelles from QB, he should in so doing weaken Blucher to the point where Napoleon can break through there. I re-emphasize that he simply does not have the men to hold at every point. But perhaps I could further amplify the importance of this flanking movement by stating ourselves of actual research done upon Napoleon’s personal strategy and tactics by a noted fellow wargamer:

“Proper use of the flanking maneuver, one of most fundamental importance, is essential to the success of an army if not its very existence. It remained for Napoleon alone, among the generals of his time, to seize its possibilities to their...”
If you’re up against an aggressive PAA player and all the good ones are – it’s especially necessary that you learn to use your cavalry units just as effectively as he does as “buffers.” The usefulness of this is to gain that extra square or two of zone of control every turn without exposing large units to massive counterattacks. Consider an example: If PAA is falling back on QB and leaves a 1-6 at Z-22, you place a 2-6 at either AA-22 or Y-22 and support it with stacks of 15 factors. This precludes an effective counterattack; it is not likely that he will give you a good shot at two large units just to kill your 2-6. Of course, you can apply this principle boardwide, but you should never expose too many light units simultaneously; you cannot afford to squander them. And recall, Frenchies, you must never lose sight of the following two very important factors: first, the PAA forces are much better suited to attacking, and secondly, the reason for this is their soak-off units which allow them to lose one factor to our two and leave another large defensive factor in every stack. A successful campaign against these units removes his capacity to counterattack. And finally, once you have successfully employed Maneuver and Economy of Force to overextend the enemy, you’ll find yourself with superior mass available locally to defeat him in detail. The principles all interact.

A concluding statement about the “playability” of WATERLOO: the fluid action and necessity for planning ahead make it in my opinion one of the most interesting games to play. It is very difficult to play either side to perfection but, given two players of near-perfect ability, I’d have to give the edge to the PAA. This is simply because the pressure is on the French to perform perfectly, or lose. Unless French does deploy flawlessly, PAA can frustrate his efforts and the game will then be decided by how daring he is and the luck of combat. There is, however, no need to rely upon luck. Mistakes in deployment are fatal to either side, and the careful player (by that I don’t mean cautious, but calculating) will be the winner. You have only to keep the pressure hot’n’heavy from the start, and your opponent will eventually crack.

PAA STRATEGY

by Harley Anton

THE DEFENSE OF TILLY

Most players in their early games of AHI’s WATERLOO will consistently lose the PAA. The reason for this is that there is a great temptation to “play the Frenchman’s game.” The key to victory is to entice the French player into mistakes instead of helping him avoid them.

In the actual campaign, Marshal Grouchy was decimated down the Tilly corridor and cost Napoleon the battle. The problem the PAA player faces is to decoy the Frenchman down the corridor and at the same time keep the main part of his army between Quatre Bras and Waterloo to nullify the deception victory condition.

There are two methods of achieving the decoy. The second one has proved to be the most successful for players, but each individual commander should use the one best suited to his style. For this reason both are presented.

In method No. 1, all PAA 1-6’s and the PAA 2-4 arti are started or moved into the corridor. From Z-18 to R-20, the Frenchman may be stopped at the cost of only one unit per turn. An aggressive PAA opening (discussed later) can prevent French heavy units from reaching Z-18 for three or four turns. The eleven units allotted to the corridor can be sacrificed one per turn (see map) and when the next to last unit is hit at Q-21, the 4th Corps comes busting on and it’s off to St. Helena for Nappy.

This defense has several strengths in that for a 12-factor sacrifice the French in infinite numbers can be held up for 11 turns and that large numbers of French units can often be trapped in the Tilly corridor by the arriving 4th Corps.

The weakness in this defense is that the Bors De Metz woods can be infiltrated about 1 PM/17. Also, all early PAA cavalry is out of the main battle area and soak-offs are hard to find on counterattacks.

Because of these weaknesses, most PAA players prefer the following hyper-decoy defense or some slight variation thereof.

Three Prussian 1-6’s, three English 1-6’s, and one Prussian 2-4 are put in the Tilly area. In addition, the three 4-4’s and one 5-4 take up a defensive line along the Dyle River (Y-18, X-19, W-20, and W-21) line. This defense allows ten turns of delay (six cavalry, one 2-4, and three turns to reach Tilly) and a reserve force of 17 counterattack factors. These 17 factors can prevent penetration of the Bors De Metz at Z-24 and U-24, hold the Dyle River and let the French attack at 3-1 and possible exchange early in the game, or best of all be used late in the game in an attempt to turn the tide with timely counterattacks. By astute placement of delay factors the French can often, late on the second day, be enticed into a situation where three 5-4’s can be attacked at 1-2 surrounded by two 4-4’s. With a 40% chance of victory this move can cripple the French army with little risk to the PAA, if it is carried out at the right time.

The only weakness of this defense is that if the French player gets smart and doesn’t push a
Simulating the Art of War - Part III

In Part I (Jan-Feb '71) Professor Poumelle demonstrated that simulation gaming requires the application of the principles of war to create a coherent, logical game. In Part II (Mar-Apr '71) Poumelle showed how the principle of pursuit can be built into a game like Afrika Korps. Here he examines Waterloo and proposes some advanced rules to reflect the era in which it was fought.

PART THREE: NAPOLEONIC WARFARE

WATERLOO is the most frustrating game Avalon Hill ever published. Although Waterloo certainly wasn't Napoleon's finest battle — he made so many mistakes he would have won — it was the only battle in which the two greatest generals of the XIX century faced each other. Had Wellington enough of his Peninsular veterans — many were in America being slaughtered at New Orleans under Packenham — the outcome would have been decided in advance. Instead, he commanded in his own words "an infamous army" only one third British (including Scots), the rest composed of King's German Legion, Dutch-Belgians ready to go over to Napoleon (they and everybody else called their King "Frog" and thought him a fool), Bruns- wickers and Nassauers, with only 196 guns. His allies, the Prussians, were the last army in Europe to employ the old linear tactics. Officers dressed lines with surveying transits. After Ligny, twenty thousand Prussians carried their colors home: they couldn't be induced to rally even under the threats of Blucher's horse artillery.

Although the Prussian army employed rigid discipline and loaded faster than any other army, their marching pace was slow even by Austrian standards, and that was slow indeed. Their cavalry was nearly useless, and although they had 312 guns, the artillery was old, badly supplied, and badly served.

The best Wellington would say of his best troops (and he seems to have undervalued them, particularly the Guards) was "they will not run away, and it will take a long time to kill them all." He couldn't even say that of the Dutch and the Prussians.

Napoleon on June 14 could issue this Order of the Day:

"Soldiers! this day is the anniversary of Marengo and of Friedland which twice decided the destiny of Europe. Then, as after Austerlitz, we were too generous!... Soldiers! at Jena against these same Prussians now so arrogant, you were one to three, and at Montmirail one to six!"

"Madmen! one moment of prosperity has bewildered them! Soldiers! we have forced marches to make, battles to fight, dangers to encounter; but with firmness victory will be ours. The rights, the honor, and the happiness of the country will be recovered!"

"To every Frenchman who has a heart, the moment is now arrived to conquer or die!"

This from a man who had never lost a major battle when he commanded a full army, to soldiers who had torn apart every army the allies could put in the field; whose charge of bayonets had seldom been met no matter what the odds. Yet Napoleon was not the young general of 1815 in Italy, or the Emperor at Austerlitz. His marshals were worse, and he had left the best one, Davout, in Paris under protest. When he was told to stay and keep the city, Davout replied "But sire, if you are victor Paris is yours, and if you are beaten neither I nor anyone else can do anything for you!" So it was to happen, but as dawn broke on June 16 no one could know that. After it was over Wellington with justice could say "It was a damned nice thing; the nearest run thing you ever saw in your life. By God! I do not believe we could have done if I were not there."

The elements of high drama are all there; but the game is disappointing. Easy enough to say, and of course Waterloo was one of the earliest. All games. Harder to improve it, especially if you are, as I am, determined to keep the game equipment. Few of us have time to make new counters or a new board.

Before we can simulate Napoleon warfare, we have to understand how it was conducted. Here is a description of a French charge in Napoleon's time by General Foy, a contemporary: "The action is opened by a cloud of skirmishers... they harried the enemy, escaped from mass by speed and from guns by scattered order mounted artillery rode up at a gallop, firing grape and canister at point-blank range... the line of battle moved, the infantry in column for it did not depend on fire, the cavalry units mingled so as to be disposable everywhere and for everything... the columns took to the double-quick with the bayonet, the drums beating the charge and the air reverberating with cries a thousand times repeated, "FORWARD! FORWARD!"

Such a charge generally carried everything before it: IF the preparation had been sufficient, Napoleon did not throw men against an unshaken enemy, although improvisers including his own marshals did.

The preparation generally consisted of artillery pounding, often combined with a charge of cavalry to force the enemy to close ranks and form square. If the cavalry caught infantry dispersed, the battle was over; just as, after the enemy lines were broken, pursuit by cavalry caused more casualties than the rest of the battle together. Fearing the carreus and lancers, infantry would form packed squares, to be pounded down by artillery. When they began to break, the columns of bayonets moved forward.

Once the enemy line was penetrated, the battle usually ended swiftly. Men surrounded were men dead, and cavalry poured through the gaps, moved behind them, cut them off from retrench, forage, and supply. No army threatened with isolation would stand firm in those days (as few will now). Threats to lines of communication were the object of grand tactics of the time, while to break through enemy lines and roll up the flanks simultaneously delivering charges of cavalry against the rear, was the object of tactics. And in battle, this was done QUICKLY. Ten more hours of daylight on the 16th and Napoleon would have won. One hour might have done it.

None of this is possible in the game. The artillery has no function, the cavalry is merely weak last infantry, and the stacking rules make no sense. The feel of Napoleon warfare is gone. So is the Principle of Economy of Forces, of sort of combining different kinds of units into an invincible weapon. The force of the charge is gone, although in those times attacking forces quite often won battles in which they were greatly outnumbered.

You cannot maneuver during the battle as the game is now structured. Intelligence is perfect, orders never miscarries, there is no delay between intent and actuality. In almost every respect WATERLOO is unsatisfactory.

Yet somehow, despite using an inappropriate combat results table, despite everything else there is a flavor to WATERLOO that makes it one of my favorite games. It is, as I said, frustrating. I keep thinking it could be the finest of all AG games, if only...

I don't think it can be perfected with the units furnished, but let's try. The following rules make an interesting game; try them, work out your own changes, and let me know the result. I want to see WATERLOO both playable and realistic... I'd like once again to hear Napoleon tell Ney "The fate of France is in your hands!"

ADVANCED WATERLOO

1. Add 7 PM as a move on all days. This is self-evident.

2. STACKING UNITS

2.1 At the END of a player's turn, no more than 2 infantry divisions, 2 cavalry divisions, 3 cavalry brigades, or a combination of infantry and cavalry, not to exceed one unit of each, may remain in a square.

2.2 The TOP unit of a stack, and only the top unit of a stack, counts for purposes of defense against an initial attack. (See ARTILLERY rules for exceptions.)

DISCUSSION: A square is 1/3 mile across at widest. Given 3 feet to a man, three ranks deep, that's over 5,000 men. It's simply not possible to put more in that area and have them effective in defense. Actually, it would be somewhat less than that. Nor could you put more than 2 divisions in a half-mile box without so hopelessly mixing them up that they couldn't fight.

French and Anglo-Allied forces may stack ALL INFANTRY units from a single corps, as well as two divisions or three brigades of cavalry, wherever from that corps or any other, for the attack. For purposes of this rule, the Allied 5th (Pichon's...
61h, $Quare to this phase Headquarters units art. any other If in combat I'd dif the earth charges, has stack. artillery muSI six. Anglo-Allied Non well as may NOT be an unobstructed primary or his cavalry six, they are Cornland Prussian rules as south edge units in the resol'Oed, combat enemy Afler A has declared the drums roll. two II 'h an come to fight but being artillery phases. The board. containing Wellington not square, one addilional factor per unit up A gets lus slacks use added to a defensive bonus: 6 position in a stack. the die as the other units in the north or west are removed. Retreating may be placed at A's option. The Prussian Empereur! isolated if they cannot trace retreating fall adverse the game. If Wellington these rules one square, an enemy artillery is eliminated if A has declared his artillery battery against units in squares adjacent. Artillery chassis against artillery, combat odds fractions are resolved in FAVOR of the CAVALRY charging. D rolls the die as if he were "the attacker" in the CRT. 4.5 After A has declared his artillery attack, but BEFORE combat is resolved, D may declare a cavalry charge; he may "charge" any A artillery adjacent to any D cavalry unit whether or not the cavalry is engaged, and regardless of position in a stack. ONLY cavalry may charge; horse arty may NOT charge. In charges against artillery, combat odds fractions are resolved in FAVOR of the CAVALRY charging. D rolls the die as if he were "the attacker" in the CRT. 4.6 Counter-charges are resolved. Units forced to retreat will be dealt with in the rules for retreats. Units eliminated are removed. 4.7 Surviving D cavalry may choose to continue their charge or withdraw. If they withdraw, they return to the square where they started (actually they have never left it) without penalty of any kind. If they continue the charge, they may attack the enemy artillery units previously chosen, with odds rounded in favor of the charging cavalry (i.e., 3-2 becomes 2-1), the charging cavalry being the "attacker" for purposes of combat resolution. Destroyed units are removed. Retreating artillery rolls die; 1, 2, or 3 is rolled, the retreating arty is destroyed. If 4, 5, or 6, it is turned upside down, and may take no further part in combat this turn. 4.8 A's surviving artillery now attacks the previously designated targets. Odds are rounded in favor of DEFENDER. Artillery engaged against infantry or cavalry can suffer no adverse effects; treat A-elim or A back 2 as "no result." 4.8.1 Artillery engagements between opposing ARTILLERY units are rounded in favor of ATTACKER. Attacking artillery does suffer adverse results.

4.8.2 Artillery does not retreat. Units required to retreat are turned upside down in place. They may not move or take further part in combat during this turn.

5. MOVEMENT

5.1 Units in enemy zones of control require 2 basic movement factors (BFM) (one hour) to withdraw, and receive only ½ road bonus to which they would be entitled.

5.2 Upside down units (forced to retreat) require 2 BFM to reform in place, receive ½ road bonus. Upside down units in enemy zones of control may turn right-side-up and move one square only.

5.3 (Optional) FRENCH troops receive following road bonus: 6 squares first class road; 3 squares second class road. Anglo-Allied get 4 and 2. Prussian get 3 and 1. This is consistent with marching speed of the various armies.

5.4 To receive road bonus, units must not move in stacks.

5.5 Units joining stacks use two moves to enter a stack at the bottom, and three moves to go to the top. A formed stack may only move at ½ speed of the slowest unit in the stack.

6. HIDDEN MOVEMENT

All units remain upside down until they come within 2 squares (one mile) of enemy units. They are not thereafter turned upside down unless forced to retreat. Each player receives five blank units which move as cavalry and may be placed with whatever force he pleases. When dummy units are revealed they are removed from the board. Players may also use HQ units as they please.

7. HEADQUARTERS UNITS

7.1 A French stack containing Ney gets one additional combat factor per unit in stack, up to four factors. A French stack containing Napoleon Bonaparte gets two factors per unit up to six, except that Imperial Guards units with Napoleon get three per unit up to a total of nine.

7.2 A Prussian stack containing Blucher receives one additional factor per unit up to three. An Anglo-Allied Stack containing Wellington receives two factors up to a total of six. Anglo-Allied cavalry units get one additional factor per unit up to four if Uxbridge is in the stack.

7.3 Rules 5.1 and 5.2 do not apply to units adjacent to their own corps, army, or supreme commanders when the move begins.

7.4 Headquarters units are captured if enemy combat units enter a square they are in. If in a stack forced to retreat, they retreat two squares. If in an annihilated stack, they are killed.

7.5 If Blucher is killed, all Prussian units retreat toward Wore, If Napoleon is killed the PAA player wins the game. If Wellington is killed the French win the game.

8. INITIAL POSITION

Prussian units on board at 7 AM 16th must be north and east of Fleurus.

9. ISOLATION AND FLANKING

9.1 Prussian units are isolated if they cannot trace an unobstructed primary or secondary road route to either the north or east edge of the board. Anglo-Allied are isolated if they cannot trace a road route to the north or west edge of the board. French units are isolated if they cannot trace a road route to the south edge of the board. Isolated units fight at ½ their combat factors.

9.2 Flanking: Units are outflanked if they are attacked from three different squares. Outflanked units fight at ½ their combat factor.

Whether through these rules or others, I am determined to see WATERLOO what it should be; to hear the drums roll, feel the earth shake as the bear skins of the Guard come over the hill, and the dread ery chills the ranks: " Vive l'Empereur!"
What! Another Stalingrad Variant?

by Daniel Kronemyer

Yes folks, this is another one of the many Stalingrad revisions, or as some like to call them, variants. Both these terms mean essentially the same thing, mainly adding a little balance to the game. I imagine that there have been countless attempts to create play-balance in the game. In fact, Stalingrad, since it first appeared way back in 1963, has probably seen more than Johnny Unitas has touchdowns. There have been articles introducing the Luftwaffe, variants such as Stalingrad II, or Stalingrad III, which take into consideration all things from hedgewagons to partisan "welfare." But they also add considerable hassle. Most wargamers sit down to relax over a nice, quiet, 2-4 hour game, not a marathon thing, where the player who loses is the one who "contracts" battle fatigue first. But this is nothing new to anyone. The trouble is that these variants still don't truly simulate the method of defense and offense employed thirty or so years ago.

During World War II, the Russians built their defenses in depth, creating massive "reserve fronts." When the Germans broke through one line of defense, the Russians would have another. Now where in any variant will you find the Russian player doing that?

In all the variants I've played, I still find the Russian player hiding behind the rivers, and in the case of AH Stalingrad, sending out screens of 2-3-6's. The Germans on the other hand, instead of making quick breakthroughs, surrounding whole armies, and taking thousands of square miles, have to bash their heads against 3-1 proof lines, and endlessly eliminate those pesky little 2-3-6's. Alright, we know this is not only ego-shattering for the German player, but historically inaccurate.

So how do we remedy this? Many assumed correctly that the main hang-up lay in the CRT. The bulk of these people advocated using either the Bulge CRT (great for advancing, but lousy for killing units), or a "first turn surprise table." This consisted of using the standard CRT, but moving the odds down a few notches on the first turn. But this table is only good for the first turn. The Axis armies were able to advance hundreds of miles each month, slaughtering whole armies as they went. How to recreate that? Greg Long, a noted wargamer and Diplomacy editor, devised such a table. It solves the problem of the delaying units very nicely. After playing with Mr. Long's CRT in numerous FTF games, I added a few modifications which, in my opinion at least, make the table more realistic (and understandable).

Rules Pertaining to the CRT:

1. Units may attack, and be attacked more than once per turn.
2. Once you choose not to attack again after advancing, you lose your right to attack for the rest of that turn.
3. Units that are designated to be ineligible for further attacks may not attack or advance.
4. All units must be soaked-off against first (if need calls for it), then attacked again.
5. Units may advance in any direction, as long as the first square of advance is the defender's vacated square. Units may not advance through zones of control.
6. Retreat is determined by the defender.
7. Units may not advance after combat beyond their normal movement rate, including movement before entering the hostile zone of control and engaging in combat. Example: If an armored unit moves four squares before entering the hostile zone of control, and if an advance of three is indicated, the armored unit could only move two since it had already moved four and its maximum movement is six.
8. Units may never use the railroad bonus when advancing. Advancing units must also follow movement restrictions as required by the rules. Example: movement through swamps, rough terrain, etc. Units may not cross rivers when advancing unless the unit(s) had started on a river, and to cross would be the unit(s) first square of advance.
9. During mud or snow months, movement restrictions must be followed. The movement of a unit when advancing after combat combined with its normal rate of that month must not exceed ½ of its maximum clear weather movement rate. Example: During December, an armored unit which moves two squares on open terrain could only advance one square after combat. During winter, only the Russian player may use the Revised CRT. The German player must use the one provided in the game.
10. As mentioned above, the Revised CRT is to be used in conjunction with the CRT provided with the game. The German player attacks at 2-1 during the month of June. He (or she) rolls a one using the revised CRT. By combining the revised...
A Look at an Old Favorite

by Mitch Gniadek

In the summer of 1863, a Confederate army under Robert E. Lee out-maneuvered a Union army defending Washington and marched deep into Pennsylvania. As the Union army moved to intercept the invaders, a clash of arms became inevitable. It was the town of Gettysburg that was chosen for one of the bloodiest, and perhaps the most critical, battles in American history.

Thus the stage is set for Avalon Hill's version of the historical engagement. Although one of the most playable wargames around, Gettysburg seems to have been by-passed for some of the newer, more complex titles; this is only obvious by the amount of space it receives in the pages of the General. The argument heard most often about Gettysburg is that the same strategy will work time after time, and there really is no room for a fresh strategical outlook to take hold. Perhaps by adding a few optional rules new life can be brought into an old favorite.

I. Artillery

The element most brought under fire by critics of the game is the role that artillery is forced to play in the game. The rules provided by Avalon Hill are historically correct, but for those desiring a little more depth, try using the following rules:

a. Attacking artillery has a combat factor of one. This factor may not be increased in any way.

b. Artillery which is to be fired in the same turn as it is being moved has its movement factor doubled.

c. The Blue player may "fire" his artillery without limit. The Gray player may "fire" his artillery units only 30 times per unit during the course of the game. A unit is considered to have "fired" whenever its combat factor is applied to a battle. An artillery unit with no "firing" left is eliminated if attacked, without infantry or cavalry support.

II. Partial Elimination

Although partial elimination has been discussed in many articles before this, one important factor has been left out; that is the confusion factor. Therefore, the following rules:

a. A roster system is used, and the combat results tables to Blützkrieg or Guadalcanal are to be used.

b. A unit which has lost combat factors during the battle portion of a turn (regardless of how many) has its movement factor halved for the next turn.

III. Organization

Whereas games with a large number of units do not lend themselves to this rule, Gettysburg is particularly adaptable to this option.

a. In order for a unit to move its full movement factor, it must begin its turn within five squares of another unit of its corps, or the H.Q. unit of the same corps. If the unit is not within five squares, its movement factor is halved.
More Panther Blitz Variants (from page 5)

is that player having the most pieces on it at the end of the 12th and final turn, NOT counting bunkers, road-blocks, or mines.

15. Board configuration: numbers vertical (like situations 7 or 8), random juxtaposition.

Defender gets 500 points plus 4 bunkers, 6 blocks, 6 mines, all of which he sets up first anywhere on any or all of the 3 boards.

Attacker gets 1000 points and moves first, entering all forces on the initial turn anywhere on the left edge of the left board.

Victory condition: attacker must pass through the center board to the right hand board, because he wins by having more units on the board, not counting bunkers, blocks, or mines. Note: although the defender sets up anywhere, only those units which he has on the center board at the end count towards victory.

All of these situations last 12 turns.

16. Board configuration: numbers horizontal (like situations 3 or 4), random, as usual.

The defender gets 500 points – that’s it. Attacker, 1000.

Sequence of play: attacker enters first on far left edge of left board (left and right side figures each being the defender’s side). Defender enters thereafter, at any one point (one only) on either edge of the center board. Needless to say, an external edge, and only one, not both! In all of these situations, all forces must enter immediately.

Victor – that player having more units at game’s end on the right-hand board.

A comment on play-balance: situation 13 seems quite even, despite the German stacking advantage. The only way to achieve such a dependable balance in situations 14, 15, and 16 is to play a set of two games, like a race run in two heats, the winner being the player with the better total both games considered. If this is done, it is a good idea for both players to select both their forces in advance, so that the lessons learned in the first game won’t unfairly influence the second. Personally, I dislike this play balance solution, but there are so many different board combinations, not to mention the infinite number of forces which can be selected on a 500 or 1000 point basis, that it is difficult to be sure that 500/1000 is the right ratio. The defender’s view of 500 points as an adequate force depends a great deal on which board he is defending, and the units he and his opponent have picked!

Tom Oleson
115-7 Hilltop Road
Smoke Rise
Kinnelon, N.J. 07405

PAA Strategy (from page 7)

corridor drive then 17 factors are wasted. This can be turned to advantage late in the game, however, by a well-timed counterattack toward Quatre Bras.

Although losses with the PAA are excusable, losing the game because of Tilly should never happen!

THE DEFENSE OF QUATRE BRAS

A unit on EE-23 on the first turn (preferably a 1-6) is a must. Steinmetz and any 6-4 should be in a position to move to AA-27 and AA-25 respectively on turn two. Most people start Steinmetz at AA-25.

A good opening set-up usually resembles this one: two 6-4's at EE-14, EE-16, and EE-17 and one 6-4 and one 7-4 at DD-20. If the French player has stacks of cavalry at JJ-13 and KK-13, a 6-4 may be lost, but this risk is worth it because with that much cavalry there the French Niveles drive will be severely retarded. All units fall back slowly to the areas Y-22 – BB-22 where they stand and fight or back slowly toward Quatre Bras. If one decides to stand and fight he must never let the French have more than two squares on any one stack. On any one turn a delay unit can be placed and all the above units shifted to Y-29 and Y-30 to prevent woods infiltration or to counterattack in the heights area.

The real key to an excellent PAA defense is to get Opstal or a 1-6 to Z-27 immediately. A 6-4 can also be placed there to the PAA advantage, but only as an addition, never as a replacement for Opstal. This seemingly worthless maneuver makes the heights almost 2-1 proof. If the French player makes an attack at 2-1 on AA-25 he will probably advance if he wins. If he does not advance then the PAA player can counterattack and still be doubled at the end of his turn. When he does advance Opstal (and possibly the 6-4 if he was allotted to Z-27) moves to AA-26. Stacks move to AA-24, Z-25, and Z-26 and voila, instant surrounded counterattack with Opstal furnishing the soak-off (after the attack, of course).

Once the heights are breached or outflanked, the X and W rows may be held with one delay factor per turn as a last-ditch prelude to a fall-back to the Genappe river. Once again the PAA player must decide the French three squares on any stack and two squares as often as possible. A delay unit at V-27 and stacks at V-31, W-31, and S-31 can be a final defense before falling back.

There are several variations of PAA counterattack which are very effective if the PAA player wishes to run a risk. These occur when the French PAA have missed any or all of the Tillys. Tilly is completely outflanked and does not exceed 60 factors. In two turns the bulk of the PAA army is shifted toward Niveles while only one or two delaying units jam the Bors De Metz corridor against French attacks there. The trick of this attack is speed, for a late return to Quatre Bras will be disastrous. The merit of this strategy is the look of dismay on the French commander’s face as his units piled three rows deep between Tilly and Quatre Bras beat helplessly on the 1-6’s while his Niveles cavalry thrust melts before his eyes.

To summarize: 1) A soak-off unit at Z-27 is essential, 2) Good use should be made of the existing interior lines between Quatre Bras and Niveles, 3) Try to achieve a superior position and counterattack only when despite the worst result of the attack, one still be in a relatively advantageous position at the start of the French move, 4) When outnumbered in factors try to deny your opponent squares to attack from, 5) Kill as much French cavalry at high odds as possible in early attacks. Leave the infantry for later when everybody has arrived on the board.

DEFENSE OF NIVELES

Niveles can be either the easiest or the hardest area to defend. I have found that Perponcher is a valuable asset for this area. On the second turn he should be at U-41. This guarantees the road to Braine Le Comte, which can be cut by an enterprising French cavalry commander before the 11 AM reinforcements arrive on the board. If your opponent sends a large cavalry force to Niveles, and most people do because of the location, I would put Cooke at V-47 and Alten at V-44. If the Braine Le Comte River is broken early, the French cavalry force can force arriving British units to take part in costly delaying attrition over a wide expanse of hostile clear terrain rows U to O.

Once Alten reaches V-44, Perponcher or Chasse should always be at Z-39, because it is a doubled position until flanked. Delay down the DD and CC rows is possible at one factor per turn.

The PAA has two basic problems at Niveles: 1) when to counterattack, and 2) infiltration through the woods (V-33 and AA-33). Perponcher is excellent for solving the infiltration problem because he is a 6-4. Fifteen factors coming through the forest cannot get a 3-1 on him and a loss of 12 cavalry factors at 2-1 would just about destroy any chance of French victory in the game, let alone Niveles.

Cavalry should be at top priority for counterattacks. Units which can be surrounded by the complicated terrain features often present a choice target for counterattacks. W-36 is a great position and it is advisable to launch at least one counterattack to prevent being outflanked.

Shuttle as many arriving factors and extra Prussian factors as possible towards Niveles from QB. The fall-back to the Niveles River (T-39, T-40, etc.) should be synchronized with the Quatre Bras fall-back to the Genappe River, if at all possible.
Dear Sir:

My friends and I agree that your Justard is an all skill, exciting and top-notch war game up and we processed it with a lot of letter. It is at this point that skill is abruptly replaced with luck, because dice roll to determine a hit or a miss, nor did any other artillery employment. What counted was their skill with cannon.

I cannot for the life of me understand why you did not follow through and include a more appropriate method for doing battle with this fine game I have done.

Wanting not to see the game put on a shelf and never played because of a few lousy dice, I devoted my own way of making battle. It's very simple.

I developed a cannon that shoots elastic bands at a simple target which represents any factor of any ship in your Justard game. The target ship has knuckled down turrets, protective factors and one plan for a direct hit. When hit by an elastic, they simply stop in and thus score.

Now when it's time to do battle, we simply throw the cannon to the target ship and a targetting cannon.

Your game between ships is simply replaced by actual feet for the distance between the elastic firing cannon and target ship. Example: 24,000 vds. = 12 feet

Why not offer something like this as an option or include plans for building something as at home on the war game war game fans who want a true all skill game. This type of firing system can be incorporated into any type of game by simply changing the type target and it's very safe.

Anthony Bennion
3A South Street
Dakotta, SD 57002

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Dear Sir:

I must say, your latest contest (No. 42 - the Panzerblitz variant) was a vast improvement over your previous efforts. It was indeed a pleasure to see at least one contest that could be submitted in a professional manner.

Your solution, while essentially correct, did overlook one possibility, namely, that one of the Russian cavalry units can square to V-5 and down-assault the German units on V-3. Indeed of a Russian success probability of 1/3 (6.25%) is certainly a threat, I offer the RSP with your attack up, as it should become:

A-B 010 0-0 0-0 14-0 14-0 12-0 12-0 0-0 0-0 0-0 0-5 0-5
B-C 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0

Through even 5.1% RSP is very good, there is a less likely chance of a German counter-attack on the Russian Blinds. The German units should still occupy the same squares as in your original solution (unit 112 is an V, not W-V-3's error), but the Russian units, 934 and 938 should not be in a combination at 3-1 odds; instead, German units 41 have adjusted odds (quadrupling its elimination), unit 212 can hit 933 in 1, units 17-1 and 17-18 at CAT 906 street 5a at 1-1 odds. This results in a RSP as follows:

A-B 010 0-0 0-0 14-0 14-0 12-0 12-0 0-0 0-0 0-0 0-5 0-5
B-C 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0

Well, keep on perfection is just around the corner.

Riley R. Gary
City, California

We may not always be 100% correct, but we do try harder - to upgrade the quality of the contests. When they become more interesting, they become more complicated, hence more mean for error. But we do appreciate the compliments.

Gentlemen:

A suggestion to your fans who play Panzerblitz, an emotionally satisfying game. A trip to a stationary store and an investment of approximately $20.00 will provide you with the possible unit to be on the move. These will represent some of the complications involved in design, as well as illustrating the fact that different situations do indeed yield different results.

As an aside, the belief that there is a better job of differentiating among the various game types than do your guidelines. With regard to the group of 22-22 to everyone who returns the registration form from a particular game.

You've done quite a job of supporting the strong aspect of wargaming through the example. In summary, what I suggest is that you try to get the essence of this aspect of the thing to a longer fraction of your customers.

Robert Nidever
27 Redbud Lane
Rolla, Missouri 65401

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Dear Sir:

Please find enclosed the Avalon Hill "Club Registration" organized for the Boys of the Salvation Army Boys Home, Kingdwood Road, Raney North, in the State of New South Wales, Australia. New Center in the capital of Sydney.

As we have the facilities at the home for large groups, we are hoping that we will be able to encourage the establishment of other groups in the Sydney area utilizing our facilities for tournaments.

Our newsletter, Blood and Fire, is not as sample a title as might appear at first. Blood and Fire is the Salvation Army's motto - the


We have thirty-two members divided into three classes - Primary - for primary school boys, High School and Adult (three adults at present). Until the boys become better organized, I will act as president, the rank used in a Salvation Army company, not a club one. I am one of the "Boys Officers," an adult on the staff of the home.

Wishing you all the best,

Bill Cole
Color Sgt.

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AUCTION ORDER FORM - $5.00 per game minimum bid

1961 Civil War (3) Bid $1.00
1968 Dispatcher (2) Bid $1.00
1959 Gettysburg "Battlefield" version only sold at Gettysburg for $2.49 (1) Bid $1.00
1969 Dispatchers' game (4) Bid $1.00
1961 Management (2) Bid $1.00
1961 New Orleans (2) Bid $1.00
1969 Original Version (2) Bid $1.00
1961 Vendetta II (2) Bid $1.00
1961 The Original Word Power (7) Bid $1.00
1970 Advertising (1) 0000 point game printed for Westhouse Television - never sold over the counter) (4) Bid $1.00
1970 The Order of Good (2) Check with check and money order by August 15, 1971 to "Auction." The Auction Hill Company, All bad checks will be refunded.

IMPORTANT: Address your order to "AUDITION," P.O. Avalon Hill, 5017 Hartford Road, Ballston, Maryland 21214. Write "Auction" on the face of your check or money order. Mail before August 15, 1971.

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Contest No. 44

This month's contest finds Renned outside of the Tochol defenses on his second May Turn. All units are shown except:

German: 19th Panzer division at Mass, Renned Unit at German Home Base.

British: Supply Unit No. 2 at British Home Base.

Your objective as the German commander is to initiate an attack plan that will enable you to capture Tobruk before the arrival of the British June reinforcements. Combat and movement are limited to whole squares shown in the diagram above.

Simply put the units' combat movement factors in the desired location and write the battle odds and combat order in the accompanying chart.

IMPORTANT: Circle all units that you wish to move, indent units that do not move, indicate units that do not move by drawing an "X" over them. Contest deadline is August 15, 1971.


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Knightsbridge

7/31/71

22/16

Pol.Camp.

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Headlines of 3 Best Articles:

Name

Address

City

State

Zip
Opponents Wanted

We're experiencing growing pains. More subscribers means more Want Ads. We just don't have the space for every subscriber to wax rhetorical as in the past. To make it easier, and more meaningful for all concerned, we introduce the Mini-ad. All you do is strike out the words provided below that do not apply.

1) Print your city and state in Box A above.
2) Cross out words and phrases that are not applicable.
3) Insert copy where required on lines provided.
4) Print your name and address where indicated.

We cannot list speculative offers for sale or trade. Interested parties must write you direct for complete details.

I am: novice, average, expert player of: high school, college, adult age desiring: FTF and/or PBM opponents for . Also seek members for . Will trade or sell games. Please reply to:

NAME (in all caps)

STREET PHONE

CITY STATE ZIP

D-DAY questions and answers to:

Q. May Allied units move beyond the 17-square supply limit?
A. Never, except for paratroop units, which are then isolated.
Q. Can isolated paratroop units "jump"?
A. No. They must be supplied first.
Q. Can paratroop units move before they "jump"?
A. Yes.
Q. May paratroop units land on the dyke?
A. No.
Q. May units stay on the dyke?
A. Yes.
Q. May the Allies make a SAC attack against the ZOC of Allied ground units?
A. No.
Q. May the Allies make only a SAC attack on the first turn and make the troop invasion on some later turn?
A. No. The invasion must come on the first turn.
Q. If ¾ of the units on a square are eliminated in a SAC attack, are the remaining units immobilized?
A. No.
Q. What are the corps counters for?
A. Originally they were meant for substitute counters. The substitution did not save time, so the idea was dropped.
Q. Can one friendly unit move into an enemy ZOC (and attack no units) while a second friendly unit attacks the enemy unit?
A. No. All units in enemy ZOC MUST attack some enemy unit.
Q. May a unit in a surrounded fortress move one square out of the fortress into a vacant square and then attack only the enemy units it is adjacent to?
A. Yes.
Q. If the first Allied invasion is a failure, do the German units move in the intervening weeks before the second invasion?
A. Yes. If the Germans pushed the Allies off the continent in the third week, for instance, they could move their units five times. The Allies could, of course, make a SAC attack at the end of any of the five moves.
PANZERFAUST Magazine claims that Stalingrad remains "the top interest-keeper among the hard core game fanatics." As such they plan to publish a special Stalingrad Strategy Booklet that will feature the best articles of all time on the subject. Only the "classic" articles will be included. The General is honored to be asked to contribute some of the classics that date back to the very first volume. The booklet will be approximately 50-75 pages upon completion; inquiries should be made to their staff at 124 Warren Street, Sayre, Penna. 18840 . . .

TIME GROWS NEAR for the IFW's 4th Annual Lake Geneva Convention, which is going to be held August 21 and 22 at Lake Geneva. Much of the convention activities are centered around the armored fighting vehicle in miniatures matches and board games. Also, displays and dioramas of AFV's will be judged, with the best models receiving an inscribed trophy. Pre-registration advised if you plan to attend. Write Len Lakofka, 1806 N. Richmond St., Chicago, Ill. 60647 (312) 342-8637.

A NEW PUBLICATION for miniatures buffs, The Wargamer, is available at 2717 Elnora St., Wheaton, Md. 20902. Published six times a year, subscriptions are a very reasonable $3. Also in our mailbox this month was an issue of AFV-G2, a monthly magazine for armor enthusiasts. This publication covers AFV's for modelers, historians, and wargamers. Rates are $5.00 a year from AFV-G2, P.O. Box 293, La Puente, Cal. 91747.

The SICL will be throwing the "largest wargame tournament in the history of the hobby." The total prize list will be in the $600.00+ area, with 23 total prizes. First prize is $150.00+ trophy & medal. The entry fee is $5.00 for SICL members, $10.00 for non-members. Also, any non-SICL contestant who enters the tournament will receive a FREE SICL membership upon request. Registration deadline is November 30, 1971. Send all inquiries and fees to: Spartan International, Inc., 5820 John Ave., Long Beach, Calif. 90805.

NEBULA 19, a simulation of interstellar warfare, is being published in a limited edition by Harry Mishler. Billed as a playable game for wargamers-cum-science fiction buffs, it features simultaneous 3-d movement, no luck factors, and professionally printed game components. It is available, for $5.50, at Mr. Mishler's Box 2626, La Mesa, Calif.

CONTEST NO. 43 was, more than anything else, a demonstration of one of the cardinal axioms of Avalon Hill gaming: KNOW YOUR RULES!

If you are knowledgeable with the rules to Waterloo it would have been immediately apparent that both Brause and Langen are not, as it first appears, doubled. That being the case, it becomes an elementary problem of arranging two 3-1's and a soak-off.

These divisions are not doubled because of two different, albeit obscure, rules. In Brause's case, this division is not doubled because a river square is defined as a square "through which a river line crosses any two sides of the hexagon." Langen is not doubled because it, like its attackers, is also resting on a river square. What seems to be a very strong defensive line is in fact an illusion.

Therefore, while there was some variation in execution the solution below reflects the best balance between French and FAA losses and a tactically "clean" final disposition.

The five Best Articles in last issue were: Panzerblitz Situation 13, by Tom Olson; Exploiting the Initiative in Bulge, by Don Lowery; Random Thoughts . . . , by Len Lakofka; Gettysburg, What Price Victory?, by Alan Augenbraun; and Daniel Lee's Anzio I - Defense Plan Alpha. Congrats and a toast to the old bugle to these gentlemen.