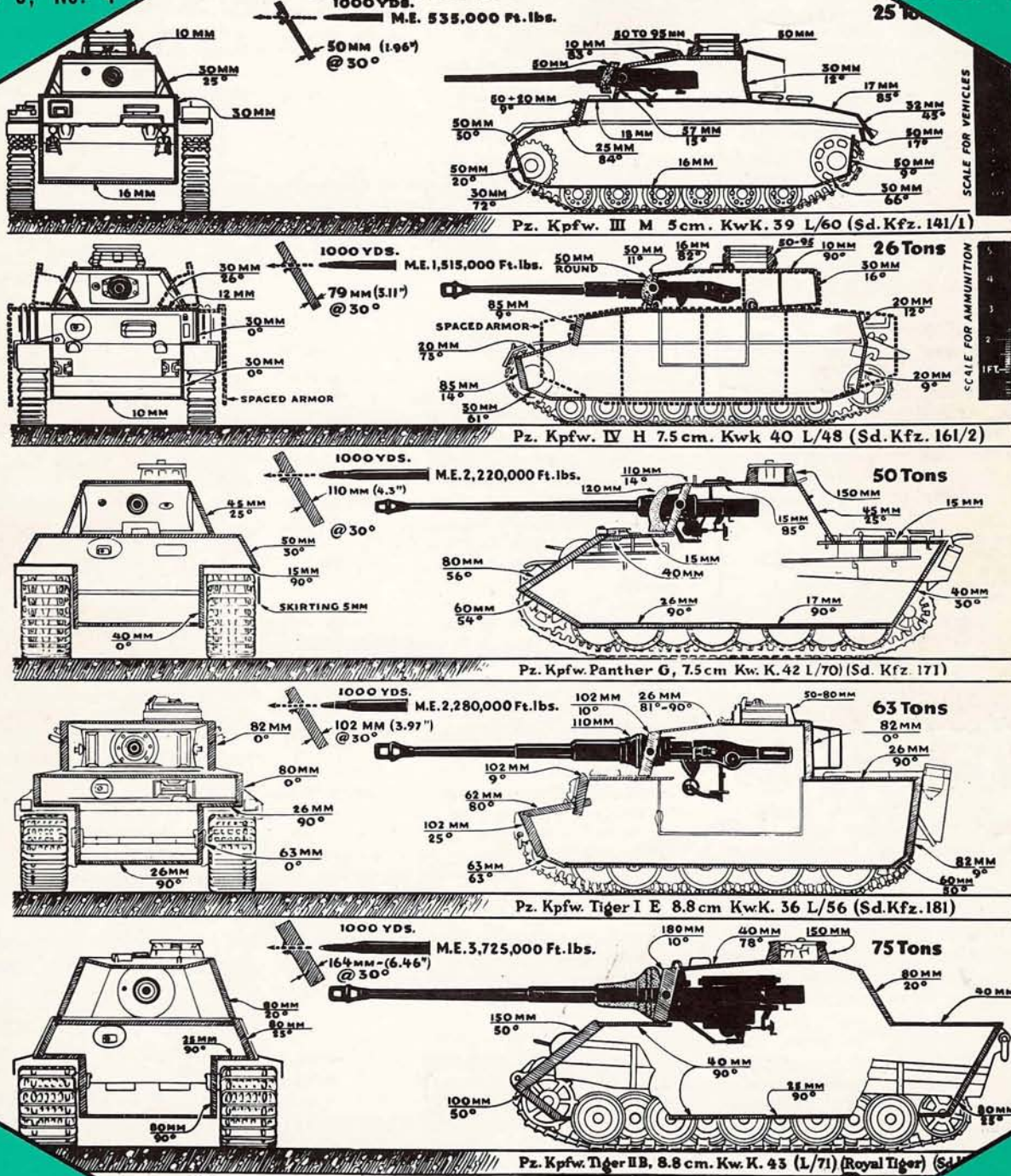


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## GERMAN TANKS



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What's in a (German) Name?

FULL YEAR \$4.98



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The AVALON HILL **GENERAL**

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## COVER STORY

"Put some tanks in a game, and I'll guarantee you a winner," so spaketh our marketing director and chief sales prognosticator. Well, it takes no mental giant to figure that one out. Sales of games over the past three years have been directly proportionate to the number of tanks that play a part in the games.

Why the mystique with tanks? Our marketing people have collectively decided that much of this mystique can be attributed to nomenclature. And because we have not really emphasized nomenclature in any of the "tank games" battle manuals, we hope to make up for this bit of oversight with the following excerpts appearing on pages 182-183 of "Tank Data 2," an excellent source edited by E.J. Hoffschmidt and W.H. Tantum IV. The book is available from We, Inc. publishers, Old Greenwich, Connecticut.

### German Armored Vehicles Nomenclature

The nomenclature used for German army vehicles and components was somewhat similar to

(continued page 3)

## Avalon Hill Philosophy - Part 30

### Why The Luftwaffe Never Loses

In spite of the fact that the number of loyal A. H. fans grows larger everyday, we do not buy as many games as the general public. This means that even when we are wild about a game, it can be withdrawn from sales because the general public is apathetic.

LUFTWAFFE was designed to meet both market demands. The Public wanted something which was not too difficult and rather quick to play while the hard core wanted unlimited realism and a longer game. The general public will probably not go beyond the Tournament game. But the Tournament game is merely a transitional vehicle to teach the advanced game and all its options.

We did not expect the hard core to stop with the tournament or Advanced games or to FREEZE them into the formats used for initial presentation. This is why we opened the door to experimentation with paragraph A of the OPTIONAL GAMES section. We know that the Advanced and Tournament games are balanced for players who don't play too often. Naturally, those who play frequently discover ways to achieve superiority which will not be learned by the general public who plays occasionally. Those of you who are true fans have learned to make the Luftwaffe unbeatable. Here's why this is possible.

The Germans win because the game is too accurate! *How is that for a rapid fire contradiction?* Goering ordered his fighters to ignore American fighter escorts and concentrate on the bombers only. If the German player was forced to abide by Goering's orders in the game, there would be a different outcome. (To play out this situation, the close escort fires first at attacking fighters and extracts casualties before the surviving attackers may trade shots with the bombers.) Because such a foolhardy tactic puts the German at a decided disadvantage, we wrote the rules so that it would be impossible for the German to ignore the escort. We couldn't see any point in forcing the German player to limit his tactical options to loosing tactics. Players who rack up a string of German victories recognize the value of fighter superiority and exploit it properly. This is something Goering forbid his pilots to do.

Allied air commanders estimated that if the Germans had started using jets 6 months earlier, the LUFTWAFFE would have regained air superiority. The Advanced game shows what would have happened IF the Germans had gotten their jets as early as it was possible for them to get them. What happens on the gameboard is what would have happened in real life if the Jerries had gotten their Jets sooner. While this is very realistic, it favors the Germans more as you learn how to properly employ the jets. The public thinks both sides have an even chance for victory because they do not play as often or as well as

the hard core. Giving the Germans jets earlier makes them invincible when properly commanded, but WHAT IF HITLER had been obeyed back in 1941 when he ordered jet production discontinued because he didn't need them? To find out, play the Advanced game without any jets at all. Where jets are authorized, use FW 190's.

These alternatives we've suggested are not balanced games. They are not meant to be balanced for people with game expertise. They are designed to show what WOULD HAPPEN IF. For play balance instead of Historical accuracy, Paragraph A of the Optional Games specifies the procedures to follow. "Diminish German production if he wins too easily or increase it when he loses too often."

No two gamers have the same degree of skill and this made it difficult to determine the exact point of balance which is fairest for everyone. During the past months we've had several well known gamers working out the point at which the game balances for them. Although we've published their findings below, this does not necessarily mean that you and your usual opponent will find balance at the same point as our investigators. Since your degree of skill must be greater or less than the investigators, their suggestions will hold little validity until you pit yourself against the same conditions they've tried.

The investigators, almost to a man, determined that play balance was arrived at when the German Production rate was lowered to read, "German needs 9 undamaged factories to make one replacement factor." This was an adjustment to the original "4 for 1" requirement for the Tournament Game. Most claimed that this change applied also to the Advanced Game.

### Rule Revisions Now Available

But this did not prove to be the end of our investigators' suggestions. Many other factors contributed towards the play imbalance of the original script. And so thoroughly were they tested, and so great was their validity, that many of their play-balance changes have been incorporated in the second printing of the Instruction Folder, now available from the Parts Department for 50 cents. (Make sure you ask for "Second Printing," otherwise you are liable to get a copy of the original rules that may still be sitting around.)

Our thanks for taking much of their free time to conduct these experiments go especially to Tyrone Bomba, Michael Forte, Michael Dean, Leonard Devine, Rodger Hart, members of Interest Group Baltimore with Randy Reed, and a host of guinea pigs whose names were withheld from us (because they were losers, maybe?). And of course, to T/Sgt Lou Zocchi who initiated the experiment under the program he titled, "Field Marshals' Handicap."



# Panzerblitz Championship Situations

by Lenard Lakofka, President IFW

The 4th annual Lake Geneva Convention is history. The two day event, reported in the previous issue, promoted two major events: the Armor Team Game and the Panzerblitz Tournament. For those of you who couldn't attend, we are presenting those exact Panzerblitz Tournament Situations (Games No. 2, No. 3, No. 4) for your replay. We are setting up the three situations similar in fashion to the way Situations 1 thru 12 are presented in the game. Objectives and forces are purposely printed separately from the victory conditions . . .

## COVER STORY — continued from page 2

that followed by the United States Army. Separate designations were assigned experimental and production vehicles. As an example, the German experimental tanks ordered by the Heereswaffenamt (German Army Ordnance Office) were designated as Vollketten-Kraft-Fahrzeug (full-tracked vehicle) and their prefix was VK, based on a system as follows:

VK(X) 1234, where the initial VK indicated the Vollketten-Kraft-Fahrzeug; the (X), when used, indicated the manufacturer; the first two digits (12) indicated the weight classification in tons; and the last two digits (34) the prototype number assigned that series. Thus the VK 4501 was a 45 ton experimental tank and the first (01) of that development series.

Near the end of World War II another system was adopted in which the VK prefix was dropped and the experimental vehicles indicated by the prefix "E" and a series of digits, indicating the weight of the vehicles in tons. When the vehicle was standardized and adapted for service use, its designation was changed to Sonder Kraft-Fahrzeug (Sd. Kfz.) and a serial number assigned. Along with this designation, the tanks were also noted as Panzerkampfwagens (Pz. Kpfw.), such as the series Pz.Kpfw. I, II, and III.

Half-track vehicles all had model designations starting with the letters "HK" followed by a number. The basic chassis designation for such vehicles was Zugfuhrer Wagen (Z.W.).

The self-propelled artillery were called Selbstfahrlafette, abbreviated Sf. or Sfz. Dependent on the anti-tank vehicles' tactical mission, these were called Panzerjagerkanone (Pjk.) or Panzerabwehrkanone (Pak.) Some tank hunters or anti-tank vehicles were also called Panzerjagers (Pz.Jag.) with the gun carriages, Geschutzwagen (G.W.). The assault guns were called Sturmkanone (Stu.K.)

This nomenclature was developed from the actual German names and was typical of their custom of combining root words to form a new word. Thus, where Panzer referred to armor, Jager meant hunter, Wagen meant wagon or vehicle, and Kampf meant war; the Panzerkampfwagen (Pz.Kfw.) was an armored war wagon.

### PANZERBLITZ Tournament Game No. 2 German — defense

Time Limit: 12 turns

Board Configuration

North		
3	1	2
South		

**Objective:** Keep as many of the hill tops as possible on board *one* while holding hill tops on boards two and three secondarily. Avoid excessive losses. Judging will be by a point system. Keep track on a piece of paper of all hills lost and all units lost and have your opponent ok it at the end of turn 10.

**Forces:** Set up on boards 1 and 2 only! 2 CPs, 2 150 howitzers, 2 50mm AT, 3 road blocks, 2 mines, 1 fortification, 4 rifle, 1 SMG, 3 trucks, 2 81mm mortars, 3 M IV, 1 MV, 1 SG III. Russian to enter from north edge.  
Note: enter losses of fighting units ONLY, do not count mines, road blocks or trucks.

### PANZERBLITZ Tournament Game No. 3 German

Time Limit: 10 turns

Board Configuration

North	
1	3
3	2
South	

**Objective:** Enter on north edge of board one and move *armor* off of south edge of entire board configuration; keep track of units that have exited and units that have been lost. Do not count trucks or half tracks in *either* tabulation.

**Forces:** 3 81mm mort., 2 eng., 3 rifle, 3 SMG, 4 trucks, 4½ tracks, 1 wirblewind, 2 SG III, 5 M IV, 2 M V, 1 M, VI b.

### PANZERBLITZ Tournament Game No. 4 German

**Objective:** advance west if possible, otherwise hold a mobile defense keeping as much terrain with minimum losses. Keep track of all armor lost. Record the position of each armor unit, not dispersed, on turn 12; i.e. record on which board it is located (not grid number).

**Forces:** Set up on the far eastern two boards only. 6 rifle, 3 SMG, 1 120mm mort., 1 150mm how, 3 75mm AT, 1 Jgd Pz IV, 2 Jgd Pz V, 6 M IV, 2 M V, 1 M VI b.

North				
Board	2	1	1	2
Configuration	2	1	1	2
South				

The German and Russian objectives within each situation appear on separate pages to simulate the conditions at Lake Geneva where neither player was informed of his opponent's objectives. During the championship series, Situation No. 1 was not counted. Winners were determined from a point system in which overall totals were gleaned from play of Situations No. 2, No. 3 and No. 4.

### POINT SYSTEM (Victory Conditions)

**Game No. 2:** Give the Russian one point for each German infantry or armor unit destroyed plus these points for hill tops captured by undispersed Russian units or through which the Russian was the last to pass: 104, 126, 107 1 point each; 129, 132 2 pts. each; 109, 127, 130 3 pts. each; 135, 123 4 pts. each. Give the German one point for each Russian infantry for armor unit destroyed. (do not count wagons, ½ tracks, or trucks).

Decisive German victory: Russian with 6 pts. or less  
Tactical German victory: Russian with 10 pts. or less  
Marginal German victory: Russian with 15 pts. or less  
Marginal Russian victory: Russian with 19 pts. or less  
Tactical Russian victory: Russian with 23 pts. or less  
Decisive Russian victory: Russian with 24 pts. or more



## PANZERBLITZ Tournament Game No. 2

Russian attack

**Objective:** Capture as many hill tops as you can, give preference to the ones on board one, but hills on boards 2 and 3 are of value. Keep track of each hill you capture and of each unit you lose, for losses count fighting units only — do *not count* trucks and wagons in the loss column. Your opponent is keeping a similar list. At the end of turn two compare lists. If there is any argument as to hill ownership CALL A JUDGE! The specific point value of hills is known only by the judge. Avoid excessive losses.

**Forces:** 2 engineers, 2 recon., 2 guards, 2 rifle, 6 wagons, 3 trucks, 2 SU 76, 2 SU 85, 2 SU 100, 2 KV 85, 2 JSU 122, 1 SU 152, 1 T34/85. Russian may enter on the two roads of the north edge of board three or the farthest west road on board 1.

## PANZERBLITZ Tournament Game No. 3

Russian

**Objective:** prevent German infiltration of this area and exiting from south edge of board. Avoid excessive losses.

**Forces:** Set up Board one only: 3 rifle, 1 SMG, 1 120mm mort., 2 76mm AT, 3 trucks, 2 T34/76, 1 T34/85. Board two only: 2 fortifications, 2 minefields, 2 guards, 1 120mm mortar, 2 SU 100, 2½ tracks. Keep track of all ARMOR that you lose and all infantry units (including mortars and AT groups).

## PANZERBLITZ Tournament Game No. 4

Russian

12 turns

**Objective:** push the German back to the far eastern board, or reduce total German armor forces significantly with proportional losses. Keep track of each armor unit lost, count JSU, SU, KV, JS, and T34 only. Keep track of each armor unit that enters the far east panel and is still there at the end of turn 12 in fighting position (not dispersed).

**Forces:** Enter on all roads on far western edge. 2 57mm AT, 1 120mm mort, 1 122mm how, 2 engineers, 6 rifle, 2 guards, 4 wagons, 2 trucks, 2½ tracks, 2 JSU 122, 2 SU 100, 6 T34/85, 2 JS II, 2 JS III, 2 KV 85, 2 SU 85.

**Game No. 3:** Russian points: one per German ARMOR unit destroyed or dispersed in turn no. 12. German points: one per Russian ARMOR unit destroyed or dispersed in turn no. 12. 3 points for each German armor unit off south edge of board.

Decisive German victory: German has 18 points or more  
Tactical German victory: German has 13 points-17 points  
Marginal German victory: German has 8 points-12 points  
Marginal Russian victory: German has 3 points-7 points  
Tactical Russian victory: German with zero-2 points or Russian with 1-2 points  
Decisive Russian victory: Russian with 3 or more points.

**Game No. 4:** German points: one point for each Russian ARMOR unit destroyed or dispersed in turn no. 12. 5 points for each German armor unit on the far west board. 4 points for German armor unit on the far west board no. 1; 2 pts. each for German armor units on the eastern board no. 1.

Russian points: one point for each GERMAN ARMOR unit destroyed or dispersed in turn no. 12; 4 points for each armor unit in far eastern board; 3 points for each armor unit in eastern board no. 1; 2 points for each armor unit in western board no. 1.

Only in Situation No. 3 have we altered from the original Lake Geneva script: here, it is extended to 12 turns; and one Russian T34/85 has been added. Otherwise, you will be playing exactly as if participating in the Lake Geneva championships.

Here is how each side fared during the championships: Situation No. 2 produced 4 Russian and 4 German winners; Situation No. 3 produced 3 Russian and 1 German winner; and Situation No.

4 produced 1 Russian and 1 German winner.

For readers interested in more complete details on the championship series, and IFW information in particular, I invite your continued correspondence.

Lenard Lakofka, President  
International Federation of Wargaming  
1806 N. Richmond  
Chicago, Illinois

# Bismarck by Mail

by Alan Augenbraun

Although face-to-face competition is undoubtedly more exciting and faster-paced than play-by-mail, not every wargamer has the time or energy available for the many hours (or days) necessary to complete most wargames when played in person.

Avalon Hill fortunately recognized this problem and wisely provided PBM systems for most of its wargame line. It is no mere coincidence then that the most popular wargames are also those which are playable by mail and hence most widely played.

I believe that almost any wargame can be successfully adapted to play-by-mail. This article, hopefully the first of others to come in the near future, is devoted to the game of *Bismarck* and its adaptation to play-by-mail. *Bismarck*, one of the three Avalon Hill naval games, contains the standard naval wargame elements of strategic search and tactical maneuvering while it is both short and simple to play.

The rules that follow give the step-by-step PBM procedure for the game. Unless otherwise specified, all AH rules for *Bismarck* remain in effect.

## AREA SEARCH:

Step 1: In their respective homes, both the red (German) and the blue (British) players move their ship counters on the search board. This starts the game.

Step 2: On a postcard, Blue lists the areas in which his counters lie and which he wishes to "call out." Blue mails this postcard to Red.

- a) If the *Bismarck* is not in any of the listed areas, Red so informs Blue, and play reverts to Step 1.
- b) If the *Bismarck* is in a listed area, play proceeds to Zone Search.

## ZONE SEARCH:

Step 3: On a postcard, Blue lists the zones of the *Bismarck's* area in which he has his ship counters. Blue must also indicate what type of ship(s) he has in each zone.

Step 4: When Red receives the postcard, he informs Blue of the results of his Zone Search.

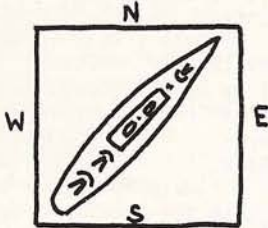
- a) If the *Bismarck's* exact zone is *not* listed Red has not been "sighted." Play reverts to Area Search, Step 1.
- b) If the *Bismarck's* exact zone *is* listed, Red has been sighted.
  1. If sighted by a carrier or cruiser, Red must inform Blue of the *Bismarck's* exact zone location. Play then reverts to Area Search, Step 1.
  2. If sighted by a battleship, play proceeds to Battle.

## BATTLE PROCEDURE:

Step 5: In their respective homes, Red places the *Bismarck* battle counter in the middle square of the Battle Board, and Blue places the counters for each of his ships that sighted the *Bismarck* in the Zone Search on any of the outer squares on the Battle Board. (NOTE: For purposes of unit



location, label the northernmost squares of the Battle Board from "A" in the northwest corner to "G" in the northeast corner. Next, label the sidemost squares from 1 to 7, starting with "1" in the northwest corner and finishing with "7" in the southwest corner. Using this grid coordinate system, the center square in which the *Bismarck* starts is D-4. The southeast square which contains the stern portion of the ship illustration is thus G-6. ship facings *must* be indicated by noting the bearings after the square coordinates, e.g., "G-4, NE," as in the accompanying diagram.)



Step 6: Blue records his ship movement on a postcard and sends it to Red.

Step 7: Red records the *Bismarck's* movement on a postcard. He also indicates his salvo count, listing one stock for each salvo. If more than one

target is involved, Red must indicate exactly what ships he is firing at.

Step 8: Blue records the results of Red's attack. He also indicates the British salvo count and lists one stock for each salvo.

Step 9: Red records the results of Blue's attack. Steps 5 through 9 are then repeated until the *Bismarck* or the British ships are sunk or until a withdrawal occurs through Chance Table play.

#### CHANCE TABLES:

**Search Board:** If Blue has failed to locate the *Bismarck*, he has the option of playing the Chance Table. To save game time and unnecessary postage, Blue may indicate on his Area or Zone Search moves whether he wishes to play the Chance Table in the event that he does *not* locate the *Bismarck*. Thus, in Step 2-a of the Area Search or Step 4-a of the Zone Search, Red would also inform Blue of the results of Blue's Chance Table play, if any.

If Blue does not wish to play the Chance Table, Red may elect to do so. In this case, when Red informs Blue of the negative results of Blue's search, Red also lists a stock for the Chance Table. When Blue sends his next search move, he informs Red of the results of the Chance Table play.

**Battle Board:** If Red wishes to play the Battle Board Chance Table, he follows the procedure outlined above. Red should indicate his Chance Table stock after Step 9 in the play procedure. Upon receipt of his salvo results, Blue informs Red of the results of Red's Chance Table play. Blue may then play the Chance Table himself at this time.

If necessary, extra steps are inserted as dictated by the results of Blue's Chance Table play, after which game play reverts to Step 5.

It should be pointed out here that since the Search portion of this game depends very heavily on the integrity of both players, *Bismarck* will not be suited to tournament play *unless* a third player/referee supervises all moves on a third set of game boards. Alternately, both players could maintain an accurate record of all moves for comparison at game's end.

Despite this minor drawback, the above rules will provide a means of enjoying *Bismarck* through the leisurely PBM system, a chance all PBMing armchair admirals have certainly been awaiting.

Alan Augenbraun  
1755 Ocean Parkway  
Brooklyn, N.Y. 11223

## "...there never was a body of 15,000 men who could make that attack successfully."

by Paul McBrearty

Being a Civil War "buff" (I dislike that word; let us say "historian") from my earliest days, and more recently an Avalon-Hill nut (here, there is no more appropriate word) — I went into the play of *Gettysburg* with interest, excitement, and enthusiasm. And thinking back on the few games I've gotten into compared with the more experienced Lees and Meades of the country, I can say that the game was well worthwhile.

I read an article not too long ago by Mr. Augenbraun, (Vol. 8, No. 1), which attempted to remedy the defects in the game he felt existed concerning victory conditions. I felt these same weaknesses and was moved to take pen in hand and make a modest attempt myself to help clear up the question, I may at times criticize Mr. Augenbraun's work, but I am under no illusions as to the difficulty of preparing an article containing both valid and workable solutions to the wargamer's problems. Perhaps this article will only serve to fuel the furnaces of discontent and offer no real answers. I hope to at least encourage interest and invite more worthy contributions from others.

It was nearing dusk for the second day upon the field and I, as Union Commander studied my surviving men, who were many, in their positions on the Round Tops, along Cemetery Ridge, and on Cemetery Hill. In short, I had my artillery up and my positions position was classically excellent. My brother, posing the past hour as Robert E. Lee and dedicated to the proposition that all Yankees were skunks, had retained the best part of his army, losing perhaps in vital quality what I lost in expendable numbers during the first two

day's fighting. He sat along Seminary Ridge. According to the rules, the South had to take the initiative and attack or be lost. This would mean suicide for my brother with his relatively weaker force. I threw caution to the winds and told my brother he wouldn't have to knock himself out against my position for I would attack him, and have him whipped, I thought to myself, in short time.

To get to the point, I went through a Pickett's Charge in reverse, losing my men, the battle, and lengthening the war for years. I was certain my forces were adequate enough to have overwhelmed my brother's line and beaten him if not easily, at least decisively. But I lost.

As I mentioned earlier, Mr. Augenbraun offered some changes in the game which would have called for a Northern offensive. He fails to define what exactly an offensive consists of, but in any event he suggested this with the intention of depriving the Union of the option of sitting upon his defenses and forcing the South to attack as per the rules. Both sides would be induced to attack, and any other situation that did not result in elimination of one force or the other, would be considered a draw. His other examples of cat-and-mouse play are highly improbable if not ridiculous and should be dismissed on that account.

It is true that the South carries a burden in the game in that it must attack easily defensible ground in the vicinity of Gettysburg. *But I maintain this is as it should be.* After thinking it over on many occasions I have come to the conclusion that the Confederate forces must use every opportunity they receive to deal death-

blows to isolated Federal units while praying that the die leaves them with little or no casualties.

Robert E. Lee was in Pennsylvania to do something. Above all, he had to accomplish some sort of victory. The burden of attack is with these men in grey. If they should leave the North having made no decisive action, their hope for victory in the war has evaporated. Lee was committing himself to a gamble, something he was well acquainted with. Lee's superiors were told they would have results, and some definite victory had to be obtained north of the Mason-Dixon Line to take the pressure away from Vicksburg and the last hope on the Mississippi.

Mr. Augenbraun hinted at a general Northern superiority in arms which early in the game is simply not there. The South has the upper-hand the entire first day. And artillery is the key to that strength. Why Avalon-Hill chose to give the Confederate more artillery in its game than to the Yanks is beyond me. In the actual engagement the Union had more artillery and used it more effectively. Anyway, the South must employ this early advantage to its greatest potential (easily said, I know). I have not yet determined where the balance lies between exploiting this advantage and conserving your units. I shall leave this for others to theorize.

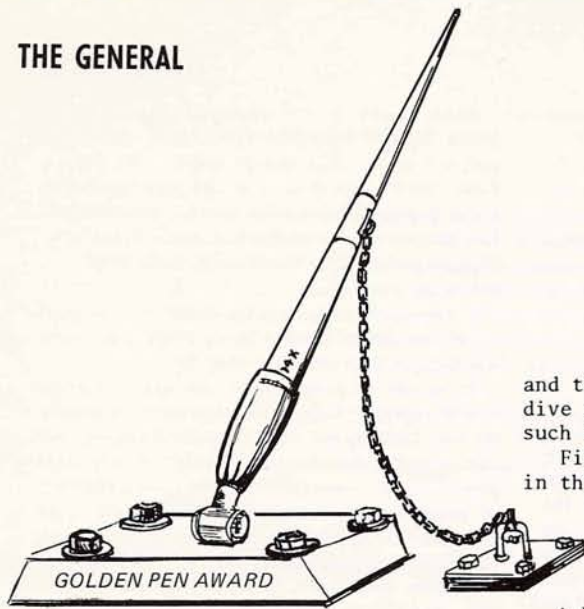
In the game, the defender with sufficient numbers will be able to break a considerable attack upon his position and form an effective counter-attack. This becomes more important in later stages of the game when any Confederate dominance begins to wane as Union artillery arrives. The next time I find my Rebel brother perched upon any ridge in a situation that seemingly favors my launching an attack, I will pause, glance at my own ridge position and remembering Longstreet's words remark, "Well, I guess you've got your work cut out for you."

Paul McBrearty  
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# Anzio?

by Norman Beveridge, Jr.



*This month's "Award Winner" is Norman Beveridge's fine article that first appeared in the July issue of Spartan International Magazine, reprinted here with permission from Spartan International, 4121 Long Beach Blvd. Long Beach, Cal. 90807...*

I look at ANZIO and thrill at the prospect of great battles with AV situations and second combat carrying the lines at a lightening pace. I sit down and spend 45 minutes sorting counters and setting up. Three moves pass and the U.S. Army bogs down. A stiff wall of German units inhabit the hills and river positions. The U.S. player attacks and gets slaughtered. By November IV, 1943 the U.S. player has had it. He might continue the struggle for fifty more moves before the outcome of the game becomes inevitable. But he quits because the game has bogged down and now he is bored. Six attacks at maximum odds of 1-1 all bomb out, losing 14 steps while the German lost 5, plus only gaining one square. Granted, he did force the enemy off that river position, but a retreat of only two squares on a three square front re-established the solid defense line. During this time, the U.S. player replaced 12 of the 14 lost steps, while the German replaced all five and actually accumulated an excess of five. All this with only average die rolls!

Obviously, U.S. strategy lacks something. His moves have become too stereotyped. (1) Invade Salerno. (2) Advance to capture Foggia. (3) Back to Naples. (4) Attack one key position at 1-1 each turn, once the German finds a defensive position. (5) Pull wounded units out to take replacements sub in others to keep up the attack. (6) Hold some units at sea to keep the Germans worried.

GARBAGE. Anytime the enemy knows what you are likely to do, he can meet you head to head and you have lost. Too many players lack inventiveness,

and their gaming record takes a nose dive as word gets around. So how can such an error be avoided in ANZIO?

First let me assume that the rules in this game include all optionals in Game III, Extra Units, and Game Variations with SRT for combat resolution.

A key decision in the outcome of the game lies with the U.S. player in selecting the first invasion beach. Salerno is nice, and the Allies actually chose it, but that does not mean it is the best site. First of all, no other beach is so far from the objectives necessary for satisfying the victory conditions. Further, the first turn advance of invading units could not capture enough of the good defense positions in the Pompeii-Avellino-Auletta-Vallo line to prevent the German from bottling the invasion on turn one. Capturing the Vallo hills does little good, for the German can defend Eboli-Auletta-Sapri, and U.S. has abandoned the port of Salerno. If U.S. goes for both Vallo and Salerno, the German can counterattack and blow the Allied units right off the board. The one advantage at Salerno is the small chance of invasion reaction troops. This does not offset the loss of the Italian units.

Looking northward a bit, we see Napoli. HG has the city and good placement of 16 Pz should severely restrict any ranger attack aimed at surrounding Napoli. That port must fall to the Allies if they want any chance of success, and an invasion right on the wharves can precipitate a battle very quickly. Probably only a small part of the Rome Garrison leaves the board, and the chance of invasion reaction remains small. The beach is still very far from Bologna, and except for the cramped positions below Vesuvio, this area is vastly superior to Salerno.

Set your sights a bit farther north to Mondragone. The invasion squares encompass a very important area of German defense. Invading units can occupy a cornerstone of the Cassino line, providing 15 PzGr does not mind too much. Also Napoli lies exposed. Unfortunately, so do the initial positions for the invading units, which invites a German counterattack. A 33% chance of invasion reaction troops loom over the area, though the Rome garrison could bottle them up and delay a counterpunch one turn. And the

beach is quite a ways from the south end, of which I will speak on later. This site is risky for both sides.

Terracina enjoys the advantage of having no garrison. HG and 15 PzGr flank Mondragone, and the German has a choice of covering Salerno, Mondragone or Terracina. Salerno and Terracina both have good defenses for the German so 16 Pz usually goes somewhere near Napoli. Too bad Terracina is so constricted. 2 Para and 15 PzGr seal it off very quickly. Invasion reaction and Rome Garrison have the same effect as Mondragone. No room for expansion makes this site of little value for an initial invasion.

Termoli or Pescara could work, simply because of the shock effect on the German player. Invasion reaction is very unlikely, but so is Italian help. At Termoli, Foggia falls by default, and at Pescara the Cassino line stretches a bit longer and weaker than the German might like. Slow buildup and IL capabilities hinder the Allied player too much for the German to take these areas seriously.

What can I say about Rome? A lot of Italian help, and 67% chance of invasion reaction troops coupled with open positions points to one side or the other gaining a great advantage very early. Paratroop drop on Rome and a ranger attack force a German counterattack. Italians play havoc with German roads, bonus replacements, and capture of road junctions spurs on the Allied player. Happy 4th of July!

Civitavecchia might surprise the Germans and the U.S. player as well. Unopposed landings north of Rome look nice, but lack of defense and slow buildup make this area more risk to the good guys than it is worth. Same applies to Grosseto. These areas could turn out very important as second invasion areas.

Cecina invasion could capture Livorno, but then why not invade the Livorno beach? Nearness to North Italy units and probability of invasion reaction could kill the U.S. chances from the start. Also, 94 Inf at C-13 makes a Genova invasion just as untenable.

IL of 10 (+3 for paratroop rules\*) makes Rimini look sick. Italian units melt away, but very few invasion reaction troops appear. 2R SS and 24 Pz come automatically, though, and if the invasion fails kiss good units goodbye. Remember that no good airbases fall easily to the Allies when they invade north of Rome.

The choice of an invasion area is tough. If you know what the rest of your strategy involves, pick the invasion area best suited to it. Avoid choosing an area and then looking for a strategy.

Tactics used in the invasion can spell success for a few turns or an early defeat. Often the best idea is to avoid combat on the first move unless high odds are possible. Even



then the possible losses must come only with a gain of a very good position or the attack is worthless. Most areas have such low IL values that no steps should be risked. Second combat might look inviting, but do not forget that at the end of your move the German can attack you in return. Always keep in mind that the first turn ashore presents the best chance for German reaction, and the invading units must have some protection. This brings up a very common question: should the Allied player place units in two weak stacks in adjacent positions which the German cannot surround or should he make one strong stack that Jerry can outflank? I would choose the last configuration. The following example shows why:

Allied units in question: 56 and 78 Br. inf. German units available for counterattack: 1 Para, 24 Pz, 16 Pz, HG, 15 PzGr. Other German units used to seal off the beachhead. Possible positions for the U.S. units: P-60 or P-61 or both. The attacking Germans can reach almost any of the following squares: P-59, Q-59, Q-60, Q-61, and P-62; also P-60 and P-61 if the U.S. units are not there. If U.S. holds both, German attacks like this: 1 Para, 15 PzGr, 26 Pz, HG against one unit at 3-1 odds. 16 Pz against the other at 1-2 odds. With ERS units in the stacks to absorb any losses, the 3-1 will likely leave a big stack adjacent to the other British unit. If the 1-2 works, scratch two divisions. Second combat on the second unit could move the stack down to the beach. I admit that the chances of this are small, but well worth a try for the German. If the Allied player would stack the two together, the attack would be only a 1-1 surrounded. Jerry has much less chance of coming to the beach, although the U.S. player must then extract his two units. Low odds and a greater chance of high losses probably will deter the German from making the attack. He may even find some of his own units surrounded, or the U.S. player may breakout somewhere else. Further, IF the U.S. player chooses P-61 for the defense, only 29 PzGr can make P-62, and Jerry might

find that unit destroyed and the two divisions extracted. I doubt that if some invasion reaction troops did not come the German could make the 1-1 attack. If they do come, then the big U.S. units arriving Sept. III and South End Option units would outflank the Germans and kill him. This is only one situation, and quite a few IF's are involved, but I think this illustrates my point.

Another crucial decision comes on the second turn when the Allied player must decide on what units to use for BU. Strong units usually come on, naturally, rather than more numerous weak units. This follows the idea set forth in the previous example that one strong stack beats several weak ones. Some situations may demand a large number of units to cover the positions gained in advance. But be careful. Those rinky-dink brigades disappear fast!

Also, I think an injustice is done to the Allied armored brigades. I agree that two is realistic for invasion points. Tanks do take much more room than infantry on the landing barges. But a more realistic stacking value for these units would be 1 1/2. Count this as two for the first unit but only one for the second. A stack of four then costs six stacking points rather than eight. A maximum of five could occupy the square. The difference is small, but it makes a great difference in the usefulness of the units.

Anytime an invasion comes in any area south of Rome, exploitation of the South End options could mean the difference in the game. Besides helping to get more units on the board than otherwise possible, use of this rule forces the German to delegate a number of units to bottling up the units, or else he will soon be outflanked and cut off from Rome. They generally have little value for invasions north of Rome. They generally have little value for invasions north of Rome. I would go either way at Rome. Advance of southern units might force the Germans to abandon Napoli and maybe turn his flank, but it might also leave the U.S. invasion units outnumbered beginning turn three, which could spell disaster.

Breaking out from the beachhead on the second or third turn causes many players problems, including me. Quick expansion through a small hole could leave several units cut off if Jerry counterattacks and closes it up. More often one of the enemy units on the shoulder of the hole presents an easy target. I would not suggest hitting any units at less than 3-1 odds and if I could not, I would exploit the hole, but very cautiously. Often when no hole exists, a small stack or single unit may provide the Allied player the means of creating one. If two such positions occur on one turn, take the

one with the higher odds, even if it means moving south instead of north. Jerry's big weakness is replacing losses. Early in the game he can hardly afford to pull units out of the line. The extra casualties you cause by going the wrong way may provide another excellent target on the next turn. Even when a higher odds attack works, take care when deciding to make a second combat attack. Where will the units end up after the attack? And will the results be better if you attack rather than simply moving adjacent and forcing the enemy to attack or withdraw? I.E., can the U.S. risk the possible loss? In most cases, I doubt it.

This does not mean that the U.S. player should play chicken. If a risky advance through an AV hole or around a flank or maybe the chance for advance after second combat would cut off German units and still give the surrounding Allied units a fighting chance to survive, I say take it. One side or the other may end up with fatally crippled units, but either way the U.S. side gets more replacements and should recover sooner than the German. Such a chance is rare, unless the German is stupid, and then he deserves to lose.

A time will come when both sides have lines completely across the peninsula. The German may still retreat in front of the Allied player. Take care that the Allied units do not overextend their lines. The Allied player may feel that he can gain plenty of squares without an attack which could cost steps. This idea can cost the Allied player dearly. Besides letting the German have two moves to set up a position, he has at least one turn free of attacks to replace losses. If the Allied player risks only one well-selected attack, he can force the German to continue falling back rather than solidifying his line. Here is where the Allied player wins or loses. NEVER leave the Germans alone for even one turn. He may even take the offensive!

Never have I seen an ANZIO game played in which the German could not form at least one fortress line and hold for many turns. Here is where the German wins. If the Allied player can hit a square anywhere along the lines at 3-1 or better, do it! This may be the only chance for breaking the line without an invasion. If not, pick an unfortified spot and attack it at 1-1. Choose the stack with the least steps in it, unless that position is meaningless to the German defense. Avoid 2-1 attacks unless you are very desperate. Often one spot in the German lines can force the Germans to retreat if lost.

Find it! Look over the situation from an unattached view. Maybe a neutral result on the SRT calling for neither side to retreat will leave your units next to a road which any





reinforcements must come down. Maybe the loss of one step will invert a unit. Maybe a one square advance will cut off part of the German units because of adjacent High Appenines squares. If two such places exist, attack in both places. Success in only one of them will cause the German to sweat. The biggest mistake the Allied player can make is to let up the pressure to replace units with only one step gone. These units can take many more losses than you imagine!

But of course the easiest way for the Allied player to break a fortress line is with an invasion. Terracina or Pescara could break the Cassino line fairly easily if accompanied by a big push in some coordinated area. But if the German has any junk to spare he generally covers all the close beaches. For this reason the Allied player must choose an area far away from the line. Try finding an area far enough away from the Axis reserves to be secure, yet important enough to force the German to pull at least a few units off the line. Roma would hurt the Cassino line by cutting off the major roads. Cititavecchia or Grosseto would break a Rome line because it outflanks the positions and threatens isolation. How much to send in causes special problems. Enough should be sent to secure the area and cause damage to the German. Too much might weaken the front lines enough for a German counterattack into Naples or some other important port. Too little may needlessly lose units and have little effect on the German front.

I think I should end with some comment on Genova. If some opportunity presents itself for an invasion by some relatively minor units which can grab good positions in the hills without combat, do it! Isolating Genova often causes the Allied player to lose. If the German gets too far behind he may concentrate on holding the Genova and Verona areas, counting on counterattacks to hold onto Verona to the end and maybe even opening the northeast edge to Genova. Usually the Genoa Garrison units stay too close, plus several North Italy units within 10 squares to make this move practical.

The main idea of this article is to suggest that the U.S. player not waste too much time rebuilding units that have taken a one step loss rather than attacking. The German not only must withdraw to replace losses, he has very few replacements! Keep the pressure on him and he will run down very quickly. But be aware that one messed up attack can cost many many issues at the wrong time. Montgomery, Britain's greatest general, preferred to build up and unleash all at once, then stop, build up, and unleash again. Patton preferred to push steadily along, and never give the enemy a moment's rest. Both strategies may work in most cases, but I cast my vote for George in ANZIO.

# Dissimulating the Art of War

by R. E. Fauber

Simulation is not a very dependable way of understanding human behavior and should be regarded with the greatest suspicion. What a simulation tests is not alternative courses of behavior and outcomes in real situations but only alternative courses of behavior and outcomes possible within the framework of the assumptions of the simulation designer. It is all an Alice-in-Wonderland world. Depending on the quality of research and design it may be very like the real world, but it is still not the real world. The outcomes, then, have no scientific validity and suggestive value only in some cases.

One of the least valid attempts at simulation appeared in *The General*, Vol. 8, No. 2, J.E. Pournelle's "Simulating the Art of War - Part III." From the beginning we may justly question whether he is describing Napoleonic warfare as it was or as he wished it had been. He insists that a bayonet charge "generally carried everything before it: IF the preparation had been sufficient." It is well that he puts "if" in all capitals. If the enemy infantry were already shattered by artillery and under pressure from the flanks, they would give way. If there were no units available to support them, they would stampede. The charge was not the moment of glory; it was just the unfortunate tactical finale needed to effect breakthrough. Neither was the bayonet much of a killer. David Chandler in *The Campaigns of Napoleon* asserts that they were best employed at the Pyramids when bent into fish hooks to retrieve Mameluke corpses from the river for plunder's sake.

Marshal Bugeaud described a charge where the preparation had *not* been sufficient: "About 1,000 yards from the English line the men became excited, called out to one another, and hastened their march; the column began to become a little confused. The English remained quite silent. . . . This steadiness invariably produces an effect on our young soldiers. . . . The contrast was striking; in our innermost thoughts we all felt the enemy was a long time in firing, and that this fire, reserved so long, would be very unpleasant when it came. . . . At this moment of intense excitement, the English wall shouldered arms; an indescribable feeling would root many of our men to the spot. . . . The enemy's steady, concentrated volleys swept our ranks; decimated, we turned round seeking to recover our equilibrium;" then the English charged, scattering the *grogards* in all directions.

One also has to demur about the pursuit of a broken enemy by cavalry causing more casualties than the main combat phase. During the initial phase of disintegration the attacker's kill would increase sharply, but the main point of pursuit was to accentuate disintegration, to prevent units from reforming. Their presence was most powerful as an inducement for soldiers to toss away their muskets and packs the better to run away. Such a pursuit, however, could hardly be effected until the whole army was broken and routed, an extremely rare occurrence.

Pournelle's tentative rules for Advanced Waterloo also leave one with questions. His stacking

rule is inane. Armies regularly deployed 20,000 men in half mile squares. At Bautzen in 1813 Marmont delivered a charge with his VI Corps, two divisions of the Guard and two divisions of cavalry in exactly such an area. At Waterloo Lobau, the Guard, and Jacquinot's cavalry division formed up in a half mile square. Marcognet's 4,200 man division assaulted Wellington on a front of 200 yards and at a depth of 52 yards. It was a dumb thing to do, but rules ought to permit plausible stupidity.

It is equally a mystery why Pournelle wants to permit cavalry to charge artillery before the artillery get to shoot, nor why the only riposte allowed is a counter-charge. Cavalry should be permitted to charge but so as to absorb losses in place of infantry. At Waterloo the cavalry charging the English line were pelted by case and grape until the moment, whereupon the gunners withdrew into the red-coat squares, and the infantry completed the execution. When the cavalry retreated, the gunners resumed their posts and hastened the horsemen on their way. Even unsupported artillery crushed cavalry as Senarmont's 30 guns managed handily at Friedland.

Section 7 about headquarters units contains certain peculiarities, but the most glaring is giving a bonus to stacks fighting in the presence of Ney. Ney's conduct on that day indicates that any units he influenced were led to commit multiple idiocies. It would be better for the French to create a mistress counter and keep Ney in Charleroi with her.

The supply rule is illogical. The French infantrymen customarily carried fifty cartridges on their bodies. By the time these were used up their muskets were so fouled that they couldn't fire anyway. In a three day span the need for supply was minimal except for the artillery.

The advantage of slightly over-lapping a line is too great; forming front to flank was a standard

## GUESS WHO?

by Tom Wham



JUST ATE THE BISMARCK!



procedure. For a flank attack to have its dislocating effect it should deploy along a two mile line as did Davout's decisive maneuver at Wagram.

Pournelle is justly insistent that the ideal game needs to reward the skillful use of combined arms, but he overstates the A-H game's derelictions. In the A-H game infantry attacks ought always to be supported by cavalry. The difficulty is that most of the killing the attacker did in infantry engagements was the result of the artillery. One might perhaps subtract from the attacking effectiveness of units not supported by artillery and modify the zone of control rule to neutralize at least the frontal zone of control for

infantry units not supported by artillery.

After that we would have to come up with a new combat results table, after which we would pump in some other modifications. The game would become nothing but rules with no flexibility. Human ingenuity would be expunged. The winner would be he who best understood the rules and conformed; the excitement of the game would set the formaldehyde in your veins to boiling. Certainly the contrast between this complexity and probably the most profound of all the strategy games could not be greater. The Japanese game of Go has only one rule. Beyond that the mind is free.

As it is, Waterloo is a good game. There is a tension between the armies because each has strengths and weaknesses. It also has the "favor" of the real event. This is not only my opinion but also the view of my favorite opponent, the "Revolution and Napoleon" historian at Sacramento State College. A little flavor is all one should ask of a game. If we are "to hear the drums roll, feel the earth..." we should at least be willing as the losing Napoleon to spend five years exile on Catalina Island in penalty.

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## French Tactics in 1914

by Louis J. Jerkich

*French Tactics... is a followup on Jerkich's fine article in the previous issue (Vol. 8, No. 3) dealing with French Strategy in 1914. Last month, Jerkich told you what to do. This month he tells you how to do it...*

In 1914 the Germans have a superiority in the number and strength of combat units which, if used correctly, can break a deadlock and bring ruin to the French. The latter, however, can offset this German superiority by the use of various tactics.

**Terrain:** In defense, the most important consideration of the Allied Commander is how to make the most advantageous use of terrain. It is of practical value to defend on terrain which you can't be forced to leave, such as rough terrain, forests, rivers, and ridges. A fort, as long as it holds out, is valuable on any kind of terrain. Unless a square is vital to the French line and replacements are available, care should be taken not to leave units on clear terrain surrounded by any form of non-clear terrain. Units would thus have to lose two steps when attacked successfully by the Germans. For example, units in Belfort (with the forts destroyed) or on GG-25, are very vulnerable to loss.

In addition to these factors the French must secure their flanks and try to form as short and easily defendable a line as possible. In the event that the Germans take Liege or cross the Meuse into Belgium, the French will be able to form a good defensive line from the Antwerp forts to Brussels along the river, then across to the forest square, through Charleroi to AA-14, and then south to Givet. This line can be formed in two turns and should be held as long as possible, even taking a two-step loss on the square south of Brussels to prevent a German breakthrough.

The central portion of the Allied line, although short, is extremely important. A breakthrough here by the Germans would split the Allied line in two and could force both flanks to withdraw a considerable distance in order to form a new line. The defense of the center is best done along a straight line extending from Givet to the square northeast of Longwy. French forces cannot be forced from these border squares and their line would be both short and strong. This line also

allows the French to move units along the important railroad which parallels the Meuse. If the Germans haven't invaded Luxemburg at least one of the French-Luxemburg border squares should be held as long as possible to prevent easy lateral movement along the German line.

In the south there are many combinations of defensive lines possible... just don't let the Germans get around your flank.

**The 2-4-3 Divisions:** The French 2-4-3 divisions are very useful when used to relieve front-line units needing replacements. They are best used along portions of the line which are under heavy attack and good use of them as relief troops can completely frustrate a German assault, no matter how massive it may be.

**The Belgian Army:** In the event that the Germans first cross into Belgium and build up east of the Meuse, the Belgian Army should move forward to a line behind the Meuse between Liege and Namur. When the Germans finally cross the Meuse, they will be in a position to slow down the Germans until the French can form a defensive line.

**Allied Counteroffensives:** When the Allied Front is about to crack under German assaults what can the French player do? Retreat? Yes, if there is good defensive terrain behind himself and he has the ability to hold this second line. However, in certain places a retreat by the French can open up new victory points to the Germans.

Should he stand firm and pray that his line won't, indeed, be broken? Possibly, but this could lead to a German breakthrough which no second line could repair.

Should the Allies surrender? Never!!! As General Foch once said, "The will to conquer is the first condition of victory." (*Guns of August*, p. 49.)

The only alternative then is to do the most unexpected thing — counterattack! Counterattacks should not, however, be premature. There ought to be some goal in the player's mind when he attacks. This goal or objective can range through a gamut of reasons such as recapturing key cities or economic squares, re-establishing oneself on good defensive terrain, halting an enemy attack, or eliminating weak enemy forces.

These last two objectives are most likely to have the greatest effect in Belgium or northern France. Here, in the clear open terrain, it may be possible to not only push back a German advance but also, with judicious attacks, to isolate enemy units and destroy them.

There are two critical points to look for as a signal to launch a counterattack. One is to attack when it's least expected. There is a tendency for the offensive player to suddenly revert to the defensive when faced with an unexpected counterattack. He can be temporarily thrown off balance to the point of thinking defensively for a few turns. A sudden counterattack may thus give the defender a breather. The other point to look for is when many of the German "A" and "R" Corps have only two steps left. A counterattack then, even if it means taking a risk, could put a number of enemy units down to their last step. This will precipitate a German panic and withdrawal, enabling the French to regain ground and hopefully destroy a few enemy units. (The loss of even one "A" Corps hurts!)

For example, if the Germans are pressing the Allies hard on the Antwerp-Brussels-Charleroi-Givet line, an allied counterattack could leave a number of German units with only one step left and cause a German withdrawal. Pressing the attack, the French could hope to trap the Germans with their backs to the Meuse, leaving no opening for retreat. The tables would be turned, indeed!

The British and Belgian units are best used in counterattacks. Since these forces have little or no replacement rates, they are very vulnerable. In counterattacks they should be combined with French units, so that the French forces can take any losses, leaving the Belgian and British units intact. These units are easy victims when left alone to hold a square.

French Artillery is also good to use in counterattacks, as is cavalry. The latter can be used not only for cutting off the retreat of enemy units but also for holding a square from which a successful attack was made, so that the victors can advance without fear of being cut off.

While the gains from counterattacks can be lost again, the German player will fall far behind his timetable and the French will buy time for executing their own strategy.

When you win a game of 1914 you have a sense of accomplishment unequalled in any other game. So go out and accomplish something!

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# Decision Analysis for Wargamers

(First of Two Parts)

by Mathew S. Buynoski

*For the hard core wargamer whose "minor" is Applied Mathematics, Buynoski has just the thing to turn you on. Here is the first of two parts in a short series on decision analysis; boiled down from notes he took of a quarter-length graduate course and applying it to wargaming. So! Onward into modern optimization mathematics...*

Wargames are really a series of interrelated decisions of how to best apply one's resources against the enemy in the uncertain atmosphere of enemy actions and the die. Such resource allocation problems are the domain of the branch of applied mathematics known as decision analysis. In its fullest form, decision analysis draws from advanced probability and utility theories, uses masses of computer time, and is used to solve problems involving hundreds of millions of dollars worth of investment decisions.

We will be concerned here with the basic aspects of the discipline and apply them to wargaming. The mathematics will be kept as simple as possible and we will stress more the basic ideas than wizardly tricks from math books.

## The Basic Ideas

Like any discipline, this one is founded on a certain central idea. The primary one here is that decision analysis is nothing more than common sense, set down and codified. It seeks to take the decision process from hunches and unconscious calculations onto a piece of paper where we can apply logic to it. Much of what is in decision analysis actually occurs each time we make a decision, although we do not follow a strictly logical process in the subconscious.

The next basic tenet is that no matter how much you try with statistics, you can *not* remove the basic uncertainty from a situation. Many people fool themselves in this regard.

Basic tenet No. 3 is that a good outcome does not imply a good decision, nor does a good decision imply a good outcome. Now that sounds as if the practitioners in the field are leaving themselves a ready excuse, but what it really means is an extension of the previous tenet. That is, if we analyze a problem correctly and take account of all the possibilities, and still Fate decrees against us, we are not at fault. Decision analysis can no more remove uncertainty and the probability of bad outcomes any more than anything else; what it will do is guide us to the choice of alternatives which gives us the best chance of success.

Tenet No. 4 is that values can be placed on all the outcomes in terms of a single measure (like dollars, or combat factor). You may balk at that, many do, but with imagination it can be done — a difficult chore and good mental exercise, but solvable. We will need this ability in order to make choices between different outcomes.

Tenet No. 5 is that we believe that the axioms of probability theory and utility theory are valid. You can get some arguments on semiphilosophical grounds here; I will avoid all that by saying that it works in practice very well. No better model has been proposed.

## The Tools of the Trade

A decision analysis usually consists of four phases:

1. Deterministic
2. Probabilistic
3. Value of information
4. Decision

The first is outlining and modeling the basic structure of the problem: what are the alternatives, the possible outcomes, the values to us of the outcomes, the sequence of events, and so on. We must make every effort here to simplify the real situation in a model without removing the basic flavor of the problem.

The second phase is where our own experience and knowledge are mixed in; we must estimate to the best of our knowledge how likely each outcome is for each choice of action. This is where we play General Staff for ourselves.

The Information value phase is of small use in most wargames. It might have applicability in advanced, limited-information wargames, but not enough to merit any discussion here. It also requires more mathematics than I wish to go into; those interested will have to consult the reference.

The last phase is the decision itself.

Through this process, we will need four tools:

1. Modeling a complex situation
2. Value Assignment
3. Probability estimation
4. Risk averral assessment

*Modeling.* Our first task is to take a real situation and condense it until only the essentials are left. Things otherwise become bogged down in needless minutiae. For example, if we are considering how many of 100 available units to commit, we do not have to consider all 101 theoretically possible alternatives (0, 1, 2, ... 100). The structure of the problem will normally narrow things down into fewer alternatives. For instance, we might commit everything, none of it, conduct a feint (say 10 units), or try a minor, limited offensive (50). That may exhaust all the viable alternatives without quibbling over whether 49 is a better number than 50. You must do this kind of pruning as much as possible in order to make the problem manageable. However, oversimplification is to be avoided; the essential elements of the problem must not be lost. If they are, the analysis is worthless.

After modeling the alternatives, we must consider outcomes. Each significantly different outcome of a course of action must be listed, including those that are not too likely. The probability estimation will be done later, not now.

*Value Assignment.* When the outcomes are specified, we must place values on them in terms of a single measurement (like combat factor or victory points). One usual method is to ask yourself how much of your resources you would give up in order to achieve a certain outcome. Another one is to use some intrinsic value of the outcomes if there is such. In games with victory points, this is often a superior method. Let me emphasize that it is not always easy to reduce everything to value terms, but with a little thought on what an objective really gains you, it should be possible.

*Probability Estimation.* Now we come to the point where our military experience and judgement is called upon. Considering the forces, terrain, length of front, etc, etc, we must make our best estimates as to how likely each outcome is for each alternative. If their probabilities are very small, we may choose to drop some outcomes here. A caveat though, do not go "pruning" too drastically! You must also be as accurate as you can in your assessments, remembering there are no "right" and "wrong" answers here, only differences of opinion. Hopefully, you will come up with realistic estimates of the chances for success and failure; the validity of the whole process rests on it.

*Risk Averral Assessment.* Unless you are a rare animal known as the expected-value decision-maker, we need to go into personal risk preferences. There is a natural tendency in all of us to magnify the effect of bad outcomes, a trait called risk averral. It is not necessarily a bad habit; too much will sap initiative, but too little is just as bad as it leads to more frequent disasters.

If someone offered you a choice between being given X dollars or flipping a coin with \$100 for heads and \$0 for tails, how large would X have to be before you become indifferent between the two? If you answered \$50 (the expected value of the coin flip, or lottery) then you have no risk averral; if X is less than \$50, you prefer to avoid risk; if X is greater than \$50, you prefer to take risks. The amount of the difference between X and 50 is a measure of how much you avoid or prefer risk.

Such tests of a certain equivalent (X) versus a risk-containing lottery (coin flip and associated payoffs) are how one measures his utility curve. The lottery has a different value for each of us, instead of a rock-solid, measurable real value. When we evaluated outcomes earlier, it was in terms of real values: combat factors, victory points, or whatever. Now we have a way of weighting these real values in the face of uncertain lotteries, and it is the utility.

To codify your risk averral, you take a series of tests similar to the coin flip above. See Figure 1.



Each of the sideways V's with the dot at the notch represents a lottery, with the numbers at the ends being the rewards, and the numbers on the branches being the probabilities that that particular branch will be selected by Fate. The number to the left of the double-headed arrow is the certain equivalent, the amount which you would take instead of playing the lottery.

Starting out, set the utility of 100 value units (you may use another number, positive, and replace 100 by that number, if you desire) at 1, and the utility of zero value units to zero. That we can do this is assured by utility theory. There are now four (or more) lotteries to be done. Start out by asking yourself what X make you indifferent to the zero-one hundred lottery (1). Plot this value X versus a utility of 1/2, as on Figure 2. Now ask what amounts Y is equivalent to a zero-X lottery, (2), and plot that value versus a utility of 1/4. Do an X-100 lottery and plot the result, Z, versus a utility of 3/4. To interpolate downward, determine what negative value, W, makes a W-100 lottery have a worth of zero to you. Plot W versus a utility of minus 1. These six points should be sufficient to draw a curve, from which you can read off the utility on the vertical scale, of any number of value units on the horizontal scale. See Figure 2.

Further points can be computed by taking any two known points bracketing the desired point, setting up a lottery like (1), (2), or (3), and plotting the certain equivalent you think the lottery is worth versus a utility value equal to the average of the two utilities of the known points. To extend the range, use a lottery like (4), with one known point at the end of the range, and one inside the range. Then ask yourself what value makes you indifferent between a certain equivalent of the end-range point and a lottery of the inside-range point and the unknown point. The utility U of the new point is equal to:

$$U = 2(U_{ep} - \frac{1}{2}U_{ip})$$

where  $U_{ep}$  is the utility of the end-range point, and  $U_{ip}$  is the utility of the inside-range point.

Let it be noted that utility preferences (the curve in Fig. 2) can change with time. This one represents a "normal situation" curve. If you're desperate, things can change your preferences. That's human nature. The most common curve-shape is bulging slightly upward, which indicates some risk averral. If it sags in the middle, you fill inside straights. If it is a straight line, you are an expected-value decision-maker, totally indifferent to risk.

All our tools being in hand now, we would normally proceed to the information value phase of decision analysis. But since this is marginally useful to wargamers, we'll skip it and proceed to the final phase, the decision.

The alternatives and outcomes can be represented as a tree like Figure 3, where:

1. The box represents a decision point, and branches are alternatives.

2. The dots represent lotteries, and the branches from them represent outcomes. The numbers on these branches represent probabilities from the probability estimation phase. The numbers at the tips of the tree are the values of the outcomes in our measurement of combat factors or whatever.

3. The Roman numerals represent a numbering of alternatives - bookkeeping.

FIGURE I  
UTILITY MEASURE

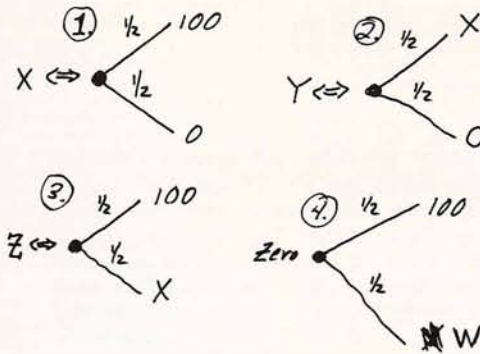


FIGURE 2  
UTILITY GRAPH

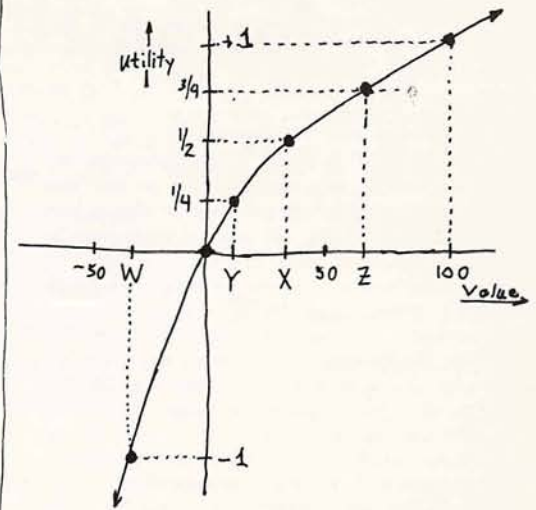


FIGURE 3  
SAMPLE DECISION TREE

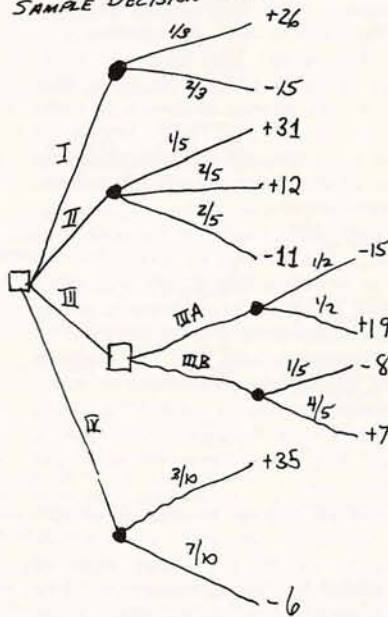
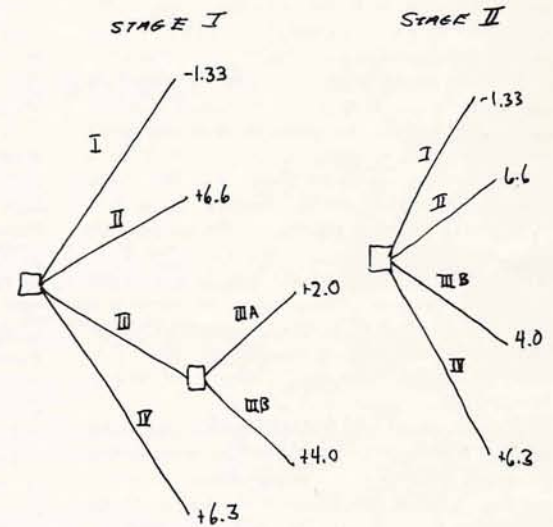


FIGURE 4  
REDUCTION OF TREE



First, we convert all the lotteries into utilities by looking up the utility of each value and replacing the value by the corresponding utility. Then we reduce each lottery we can, those with no further dots or boxes beyond, to single numbers by summing the products of the utility at the end of a branch times the probability on the branch. The numbers so obtained are placed where the dots were, see Figure 4, stage I. We then work backwards through the tree. At each box point (decision), when each alternative has a number at the end of it, choose the branch with the highest number; this represents the choice that gives us the best overall chances. See Figure 4, stage I and the second box point. This decision is made and the tree reduced to stage II. When a tree reaches stage II, and we pick the highest utility branch, all decisions are made and we are done.

Acknowledgement and Reference

All of the ideas in this article are gleaned from the notes of Dr. R.A. Howard's graduate course at Stanford University on decision analysis. For those further interested, an excellent place to look is Vol. 4 of *Systems Science and Cybernetics*, a journal of the I.E.E.E. This issue is entirely devoted to decision analysis.

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136 Brentwood  
San Francisco, California 94127

In the final installment, Part II, Author Buynoski renders an example of application of the above to a hypothetical battlefield situation. Space limitations preclude us from printing it in this issue - make sure you keep this issue handy for use with the Part II installment...



# Indispensable for an Historian

by J. E. Pournelle, Ph.D.

LUFTWAFFE is nearly indispensable for anyone who wants to understand the air war over Germany, design an air war game, or simply have a good time fighting the world's most complex air campaign over again. It's quite playable and both sides have a good chance if handled intelligently. Among them, Zocchi, Avalon Hill, and Vercammen have designed a winner. In particular, Zocchi has brought the enormous mass of book-keeping into some kind of control, although, like *Battle of Britain*, the game is better played with several persons per side; this is going to be inevitable when you get that many units on a board, each with different characteristics.

The game isn't perfect, of course; but the critiques I offer below should be read, keeping in mind the paragraph above. I like LUFTWAFFE and heartily recommend it to air war buffs.

The problem with the game is that it really doesn't allow any experiments with air war strategies. The players, particularly the Allied player, is stuck with the misconceptions of the time. This may produce historical realism, Avalon Hill's *forte*, but it's frustrating to have game after game build strategic mistakes into its rule structure. This is particularly true of games in which air warfare is either the principal or an important factor.

The greatest myth of World War II is that "strategic bombing" was effective. It wasn't. Neither the German attacks on Britain nor the U.S. attacks on German industry had much of an effect on the outcome of the war; in fact, it can be argued that air attacks often *increased* war production, and they certainly had an effect on German morale: Goebbles figured that U.S. attacks on civilian populations were worth several panzer divisions.

After Hamburg was ruthlessly destroyed, many workers who had formerly been in non-essential industries went to work in war plants; munitions and war materiel production in the area increased as a direct result of the raid. Furthermore, according to the *Strategic Bombing Survey* made by USAAF (United States Army Air Force) after the war, bombing of factories had nothing like the effect the AAF generals thought it had; buildings were knocked down, but the tools remained largely undamaged, while German recovery capabilities were much greater than we imagined. It is strange that the similar experiences of the English didn't tip us off; but we suffered from believing our own propaganda about German morale and the "inefficiency" of National Socialism.

As Zocchi's tables and the *Strategic Bombing Survey* show, German war production increased steadily from 1939 through 1944; so did ammunition, weapons, armor, artillery, and naval construction. Our "strategic bombing" was a costly failure, as well as a moral outrage to our own Christian heritage. With atomic bombs it may be possible, although morally outrageous to win wars by killing helpless civilians — atomic weapons can do it efficiently and in large numbers — but with WWII technology it just wasn't possible.

Finally, in 1944, the operations research people forced the USAAF and RAF Bomber Command to concentrate on worthwhile targets: transportation and oil. The effect was dramatic. Coal deliveries to factories in Bavaria fell by 50% before November. The interdicted Ruhr fields piled coal in larger and larger masses, while what coal that got out was subject to confiscation by the railroad to supply locomotive requirements.

The same was true of oil and gas; in June, 1944, oil became a high priority target, and before September aviation petrol had fallen from 175,000 tons/month to 5,000, while oil refinery output went from 316,000 tons/month in May to 17,000 in September.

The interdiction of transport and oil nearly crippled the Reich. All the countless tons of bombs rained down on civilians in cities had little effect. Yet, LUFTWAFFE makes victory contingent on blasting cities "with aircraft factories" or "destroying" such cities by hitting them with a single raid. The optional rules make more sense.

Of course, in the real world the Allies stubbornly held to city busting as a winning tactic until quite late in the day. Faulty intelligence coupled with over-enthusiastic reports of damage done to the enemy made the generals all too willing to listen to politicians who carried public favor with their accounts of "paying the Huns back in kind." The American people, after all, believe war to be so evil that anyone who forces us into it must be some sort of monster, not fit to live on the same earth with us; what did we care about German civilians. The fact that our President had deliberately maneuvered us into a war he was elected to keep us out of ("Again and again I say that not one American boy is going to die on foreign soil") wasn't generally known; at least, not then.

The worst of the tragedy was that about 35% of the U.S. war effort, and 60% of the British, was devoted to aircraft production, most of which was wasted in "strategic bombing." Had the wasted effort gone into ground armies, ships, and battlefield aircraft the war might well have ended at least a year sooner. In any event Europe would not have been reduced to post-war beggary.

Thus, Zocchi's game certainly reflects "realities" as seen by the strategists of the time. We *thought* we were winning by bombing cities, even if, as it turns out, we should have been better off to have left the aircraft at home, closed the factories, and turned the productive forces to something else.

The next fault of the game is in the bombing of bases. Again, I don't see quite what could have been done about it. If we break up the bomber counters into smaller units, we couldn't play the game; if we don't, attacks on bases make no sense because there simply aren't enough bombers to take out the bases in a wide area. Yet, the destruction of enemy air bases is not only allowable under the laws of war (as we accepted them prior to throwing them out for "strategic" bombing) but of great military value. The "roll-

up" attack, in which the first waves go in to blast near bases, next wave deeper bases, etc. until deep penetration has been achieved is an extremely valuable kind of attack, while systematic destruction of all of an enemy's air bases together with his means of supplying them, can achieve air supremacy. It's true that Europe of the time probably had too many bases for this to have succeeded: we don't know, since although the strategy was advocated by certain air generals it was never adopted. Incidentally, it is now definitely known that had the Luftwaffe continued this strategy in the Battle of Britain instead of abandoning it for the relatively useless city raids and "strategic" attacks on factories, England would have been knocked out of the war.

The Zocchi rules presently allow a base to be knocked out for the rest of the quarter if bombed; that's probably not enough, given that we can have only one raid per quarter. I'm not arguing that cratered runways can't be repaired in that time, but that if you are attempting this kind of air war you'll run the raids more frequently.

Air supremacy is defined as "being able to fly where you will, while the enemy is unable to fly at all." To get it, you have to kill his air force; and you can't do that in the air, at least not very profitably. You have to get it on the ground, either by destroying aircraft on bases, knocking out the bases, or denying him the fuel and other essentials required to operate his planes. Once you've done that, as the Israelis did to the Egyptians in the Six Day War, the rest is easy.

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In other words, my critique of LUFTWAFFE is concerned with the victory criteria and those rules which build the historical mistakes of WWII into the games; I wouldn't like for our future air strategists who may be playing LUFTWAFFE to make the same mistakes again. As for the rest of the game, it's excellent. I'm truly amazed at the work that has gone into the air combat rules, the board, target lists, aircraft capability simulations, and all the rest of it. The quality of the game equipment is also high, although I personally wish that economics didn't dictate that AH use the "bookcase" format; the order of battle charts have to be folded, there are more folds in the boards, and it's just harder to get everything back in the box without mixing it all up. And, to top it off, just before AH went to matchbox I went to the trouble of designing a whole shelf system to hold the older sized boxes!

For the real air war nuts, when you buy LUFTWAFFE get an extra set of counters and some cardboard to mark off into turn counters; that way you can keep track of the number of turns each unit has left in the air and not have to employ the artificial rules which LUFTWAFFE includes in order to make the game playable. The "turns to fly" problem gets particularly sticky when the German player is staging his aircraft to intercept a major raid, and a heavy cardboard (I made mine of plywood, but then I'm a REAL air war nut) status board along with an extra set of game pieces makes it all a lot easier.

LUFTWAFFE isn't perfect; but so much work has been done that it's indispensable for those who want to design air war in Europe games; and until the perfect game comes along sometime in early 1994, I recommend that you get and play LUFTWAFFE. You'll like it if you like air war.



Welcome to the first annual traditional Xmas gift-giving recommendations on wargaming literature.

It is quite possible that many of you have been unable to think of what to give your cousin, or Uncle Ned, or yourself for that matter. A subscription to one or more of the periodicals we are about to describe might be a wise solution. In alphabetical order, we'll begin with the AHIKS KOMMANDEUR, the official publication of the Avalon Hill International Kriegspiel Society. While basically a house-organ type, the society has much to offer. Especially since you must be a member to get anything worthwhile from its magazine.

We feel that membership alone is very worthwhile. It is one of the few such societies made up solely of mature individuals (we believe the 25 and older restriction has been lifted) who play historical simulation map games by mail. Established in 1966 by adults "who were tired of easy, immature, sporadic, and/or disappearing opponents," AhiKS exists to facilitate playing-by-mail and to minimize encounters with undesirable or unreliable opponents. The society has members scattered throughout the globe. Nonmembers may subscribe to the KOMMANDEUR at the rate of \$2/4 issues from Editor Bob Johnson, P.O.Box 134, Whippany, N.J. 07981. And as the case with many wargame groups, there is at least one sister publication, "AHIKS WEST" available from Ted Holcombe, Pacific Region Editor, 10012 Valley Blvd. Apt. 38, El Monte, Cal. 91731. AHIKS WEST is not intended for nonmember distribution but "special arrangements can be made with its editor."

Typical of the newsletter a small club distributes is BATTLE FLAG. Admittedly poor in physical quality, it does list source information for both historical data and wargame supplies (such as hex sheets, catalogs, miniatures, etc.) BATTLE FLAG typifies what a small, inexpensive magazine should be like. Try a single issue first. Write Golden Hegemony Wargaming Club, 406 Crockett Avenue, Philadelphia, Miss. 39350. No price given.

Will there be another DER NEUE ANGREIFER since its editor Mark Jumper is rumored to have turned-off of wargaming? a shame because the last issue we received was well edited. Its contributors listed impressive names, making it a worthwhile publication for the true sophisticate in wargaming. While it is the official publication of New Aggressor, it is far from being a house-organ. The May-June issue carried absolutely nothing of a "political" nature. It did, however, carry the false rumor that we are planning to discontinue Stalingrad. DER NEUE ANGREIFER is published bimonthly at 22 Williamsburg Road, St. Louis, Missouri 63141. Its printer, Oliver Wischmeyer happens to edit another magazine, EUROPE '44, which we have seen but don't happen to have review copies at present. We are only told that as a specialty magazine it is among the best. When you send in your 1-year subscription for DER NEUE ANGREIFER (\$2.50 w/3rd class, \$3.50 w/1st class mailing) also ask about EUROPE '44.

Now we come to one of the giants. The INTERNATIONAL WARGAMER is the 60-cent, monthly magazine of the IFW. Averaging 22 pages per issue, it is offset reproduced with photos. The top literary talent in the wargaming world contribute to the pages of a magazine that is quite broad in wargaming scope. Much space is devoted to miniatures and 3-D games. It also carries paid advertisements from professional people and retail shops. The IFW is one of several organizations sanctioned by Avalon Hill to participate in "Operation Contact," a referral program recently initiated. With members of the IFW virtually in every geographic region in the U.S., one of the services offered by the IFW is that of personal contact between a regional member and a novice seeking help in playing wargames. This is a "must get" for the serious aficionado. John P. Bobek is the editor. Subscription is \$6.00/year. But it may be more advantageous to become an IFW member for \$7.00/year and get the magazine plus all the literary supplements plus certain benefits derived from membership itself. For this, write to Lenard Lakofka, 1806 N. Richmond Street, Chicago, Ill. 60647.

PANZERFAUST is another one of those diamonds-in-the-literary-rough. Editor Donald Greenwood has that knack of selecting the "right" material. Until recently, it wasn't even a professionally printed magazine (it has just gone offset) yet continued to rate the highest kudos

# Infiltrators Report

from wargame fanatics. Its pages contain no club-position papers nor is it opinionated one way or the other. This could be good and bad; it seems many commercial magazines thrive on controversy. Apparently PANZERFAUST is so inherently good that it doesn't need controversy. Greenwood appears to insist on factual analysis in his magazine philosophy. We say, "try it - you'll li-i-ike it." Greenwood unfortunately takes a dilatory view of the financial end; issue No. 48 neglected to include its cost or mailing address. Try 124 Warren Street, Sayre, Pa. 18840 for complete details.

Probably the most prolific publisher is the SICL (Spartan International Competition League), on par with the IFW regarding size and membership. The SICL also participates in the "Operation Contact" program with Avalon Hill. This club engenders a fanaticism by its members, even down to its garb, unmatched by any other organization. It has its share of mavericks but not to the detriment of its overall purpose and quality of its major magazine, SPARTAN INTERNATIONAL MONTHLY. This is a professionally printed 16-page effort liberally sprinkled with photos, diagrams, and advertisements for wargame supplies. Its benefit is greater, however, to SICL members than nonmembers as a good portion contains organization news, mostly concerning tournaments played for cold cash plus a goodly number of trophies. A wargame aficionado would hardly be without several copies of SPARTAN INTERNATIONAL on hand even if he were not in total agreement with their "spartan" existence. Of course SICL publishes a variety of other newsletter-types which would be of little value unless you were definitely a member. Editor Daniel Hoffbauer and his staff have done a fine job with graphics presenting a magazine of import to members and nonmembers alike. Subscriptions run \$5.00/12 issues for members; \$7.00/12 issues for nonmembers of SICL. Single copies are \$1.25. Address is SPARTAN INTERNATIONAL, 4121 Long Beach Blvd. Long Beach, Cal. 90807.

The above completes our thumbnail analysis of the "semipro" magazines now available. If it boils down to subscribing to just one of the above, it would have to be a coin flip between the IFW's INTERNATIONAL WARGAMER and Spartan's SPARTAN INTERNATIONAL. The quality of printing in both is equal. And some of the same writers contribute to both, a phenomenon curious to the wargaming industry. In both magazines, columns are justified and liberally sprinkled with about the same ratio of graphics. The per-page cost of the IFW's is lower, but Sparta throws in "tear-away-battle-games," also a trend that seems to be catching on with several other publishers. So it's a toss up. We feel that the major points of advantage in deciding between either of these two is in the benefits offered by membership to the respective organizations.

Initiating the trend of more graphics and the "tear-aways" was the only real professional magazine on the commercial side, STRATEGY & TACTICS. It draws from the same literary sources as do those listed above - but only sparingly so. Its forte is historical research. Their efforts in this area are unimpeachable. Their graphics man, Redmund Simonsen, is premier in the field. His ability to graphically transcend the material given him by James F. Dunnigan, that most prolific game designer of them all, makes S&T an outstanding magazine. It is also somewhat outspoken in its editorial philosophy but this is the rule today rather than the exception - and certainly does not detract from all that it offers. And basically this is what it offers: orders of battles, research data on any battle no matter how obscure in history, game analyses, and of course a complete playable game in every issue. Such games include unmounted mapboards, die-cut counters and all necessary charts and rules. Many of these games are trial balloons for future publication in the more slick commercial form. S&T is published by Simulations Publications, 34 E. 23rd Street, New York City 10010. Its cost \$10.00/yr. \$3.00/issue.

WARGAMER'S NEWSLETTER, the longest continuing publication in the wargaming field is, unfortunately, a British publication almost exclusively devoted to warfare in miniature but does have American contributors, some of whom

happen to be AH fanatics. But if your cup of tea is miniatures, WARGAMERS NEWSLETTER is the bible. A full-year subscription costs \$5.50 and is published by Donald Featherstone, 69 Hill Lane, Southampton, Hampshire, England, SO1 5AD. Featherstone also writes books for commercial sale in the book trade. His entire line is available from Sports Shelf, P.O.Box 634, New Rochelle, New York. They include his ever-popular WAR GAMES, now in its fifth "impression," and NAVAL WARGAMES, in its third printing.

Also on the "must have" list if you are interested in authenticity in research is the W. H. Tatum IV and E. J. Hoffschmidt series published by We, Inc. (see Cover Story.) Their RISE & FALL OF THE GERMAN AIR FORCE might be just the thing for those of you who have been delighted with AH's Luftwaffe Game.

The WORLD WAR HISTORICAL ASSOCIATION, 212 West Main Street, Bennington, Vt. 05201 publishes a small but informative newsletter of special interest.

CONTEST NO. 45 WINNERS were: Brad Lacy, El Paso, Texas; Gregory Harrison, Allen Park, Michigan; Lansing W. Wong, San Francisco; Rodger A. Pudwill, Washburn, N. Dakota; Pfc. Robert W. Lewis, Kirkland AFB, N. Mexico; Steve Gossey, Woburn, Mass.; W.W. Wilfong Junior, New Orleans, La.; Richard D. Thurston, Spanaway, Washington; Dwight Kucera, N. Riverside, Illinois; and Kazimierz Rybak, Waterbury, Connecticut. Here's WHY they won:

SOLUTION TO CONTEST NO. 45 involved a bit of complex "leapfrogging" in order to obtain enough auto-victories so that at the end of the combat portion of the turn, Red units are adjacent to the cities (or captured them). The battle that springs everything, however, is the auto victory against the 124th Inf. brigade which is much too weak for effective para-screening. Once this is done, there but remains the tasks of capturing the city where the Blue 35th Div. is located, and isolating the other city held by Blue. The obvious lesson here, too often unappreciated by the novice, is to avoid the enemy's strength, and attack him only where he is weak. In that way, a tactically inferior position can yield very worthwhile results. The approximate winning solution is given below. Order of attacks and placement may vary without weakening the plan.

DEF.	ODDS	ATTACKER	ORDER
(14,15,16)	-	-	-
35	3-1	1,2,3,2P	4
3	} 1-6	126	5
120			
113	5-1		AV 3
(7,8,9)	-	-	-
121	-	-	-
124	5-1	4P,A	AV 1
124	5-1	1T,12	AV 2

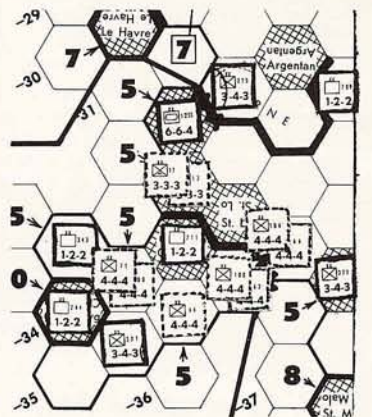
LITERARY CONGRATULATIONS are in order for Tom Hazlett's outstanding "Afrika Korps Thesis" article which ranked No. 1. in the

## Contest No. 46

Last Stand at St. Lo

This issue's contest finds us on the D-Day beachhead three weeks after the initial invasion. The Germans have attacked on their half of turn two which, besides putting you in their zones of control, has cut off control of your supplying beach squares. Your objective here is to design and execute a counter attack that will a) leave the most units on the Continent at the end of the turn, and b) will leave as many of them as possible in a supplied condition. Only the units in the diagram have any bearing in the contest. Ignore strategic air attacks.

Simply fill in the chart below; write in the unit designation for each unit attacking. If a unit is attacking more than one enemy unit write its number in each box of the appropriate units. Please be neat and legible. Contest Closes December 20th, 1971.



DIVISION	ATTACKED BY	ODDS
12SS		
275		
709		
711		
277		
343		
244		
331		

(Headline of this issue's "Best Article")

Name \_\_\_\_\_

Street Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_



last issue according to the reader poll. In fact it outpulled the second place winner, 1st Lt. Shelby Stanton's "Airborne Panzerblitz" by a 2 to 1 margin. Next in line were Louis Jerkich's "French Strategy - 1914," Tom Smiley's "Bologna - Anzio Mini-Game No. 4," and Dennis Milbert's "Luftwaffe - A Battle of Wits."

Collectors of memorabilia might very well flip if they ever took a trip to Ray Bunting's World War II Collector's Shop. It is a museum of sorts on the main route to Rehoboth Beach, Delaware. Bunting's marquee is a huge naval mine implanted on his front yard. It's free, and he has a large enough collection of guns, photos, uniforms, you-name-it-he's-got-it to make such a trip worthwhile even if you can't stand beach traffic. At least write for his fliers: RD No. 1, Box 125, Argo Corner, Del No. 14, South of Milford, Del.

PRIZE LIST in Spartan's \$600 tournament includes participants all the way down to 23rd place. Registration deadline for this PBM tourney is November 30, 1971. Open to members and non-members of SICL. Fees are \$500 - \$5.00 to members, \$10.00 to non-members. Write SICL, Russell Powell, 5820 John Avenue, Long Beach, Cal. . . .

HONORED AS THE CADET DIVISION PETTY OFFICER of 1971-72, Cadet Mike Mueller could be saying, "Most award recipients have to be content with a handshake from President Nixon - lucky me, I got a Jutland game instead."



H. Ralph Prager, long-time admirer of Avalon Hill games, beams on as Lt. Commander Howard Barch, U.S. Naval Sea Cadet Corps skipper, congratulates Cadet Mueller on his selection for the honor.

## Letters — Yes, We Get Letters

Gentlemen:

1st Lt. Stanton in the Sept. issue of the *General* came forward with the interesting idea of using the "Herman Goring" Division as it was originally planned to be used, as an airborne Armored Division. Lt. Stanton has shown all the industry and eagerness expected of an airborne trooper. And he has even exceeded the resourcefulness needed by the paratrooper. He has stuffed four battalions of tanks (2 Panther, 45 tons; 2 Tiger, 67 tons) and a good number of assault guns of about the same weight into planes with a carrying capacity of between 18 tons (Me 323) and 23 tons (Fw 200). These were the largest German planes used for anything during the war. The largest glider carried 20 tons (Me 321) while the standard plane and glider (Ju52-5 tons, glider-4 tons) were not only much smaller, but also in short supply. It is unlikely that even fighter dominance over the Eastern Front could have allowed the massive formation Lt. Stanton envisions to have been carried.

Massive it is. The regular Panzer Division of the period was operating with slightly over 100 tanks of all types. "Herman Goring" was supposed to have 100 Panthers alone. Regular Panzer Divisions were lucky to have a Tiger Company temporarily attached to it. "Herman Goring" has two battalions organically built in. Half the armored vehicles are the huge and underpowered Tigers, hardly the thing for a fast moving offensive formation deep behind enemy lines. Even the superb Panther is not what you would use for recon. It would seem the Lt. wants to use infantry and half-tracks for that. Why not drop some armored cars? Perhaps the SdKf 234 (8 tons, 75 mm gun), or the SdKf 231 (8 tons, 20 mm gun, but faster)?

The Division is unrealistic in other ways. The amount of Smg is sufficient to send Al Capone into ecstasy, while the Rifle sections couldn't keep the crows out of the corn. The mobility is weak: counting everything that rolls under its own power there are about 248 vehicles. There are about 240 or so counters that would have to be pulled or carried. This does not leave in the way of supplies or wounded that could be taken along in the mighty dashes that would make the risk of this valuable Division worthwhile.

While a Situation 13 need not be totally historically accurate we feel that Lt. Stanton's situation is wildly improbable, technically impossible and operationally impotent.

As an alternative we would like to suggest a modified "Herman Goring" Division. Lighter and more mobile it is all air transportable, yet is still a full blooded Panzer Division.

Panzer Regiment — 3 Battalions of PzKw IV (approx. 20 tanks each) 40 tanks each, which works out to 24 counters for all tanks in the Regiment. 2 Wirblewind counters, a Cp. 1 Engineer unit and Two half-tracks complete the Regiment.

Panzer-Grenadier Regiment — Two Battalions, each of which consists of 10 Rifle, 10 Smg, 2 81mm Mortar, 1 120mm mortar and 23 half-tracks (approx. 10 tons). For the Regiment add a Cp and another half-track.

Two Infantry regiments each of two Battalions. Each Battalion having 10 Rifle, 10 Smg, 1 Engineer and 2 81mm mortar units. To be carried on 23 Trucks. For the Regimental Staff add a Cp and truck.

Artillery Regiment — 4 75mm At, 2 105mm Wespe (12 tons), 6 120mm mortars, 1 Rifle, 1 Smg, 1 Cp3 trucks, 10 half-tracks.

Flak Regiment — 4 88mm At (5½ tons), 4

Wirblewind, 4 quad 20mm, 4 20mm, 1 Cp and 13 half-tracks.

Anti-tank Battalion — 4 Hertzler (75mm gun, 12 tons) 1 88mm At, 1 Rifle, 1 Smg and 3 half-tracks.

Anti-tank Battalion — 4 Hertzler (75mm gun, 12 tons) 1 88mm At, 1 Rifle, 1 Smg and 3 half-tracks.

Rece Battalion: 4 20mm armored cars (8 tons), 4 75mm armored cars, 2 Rifle, 2 half-tracks.

Divisional Headquarters — 1 Cp, 3 Engineers, 1 Rifle, 2 trucks, 3 half-tracks.

This force is air transportable if the Germans use the limits of their technology. A balanced combat group can be dropped in the first few waves strong enough to hold the needed airstrips for later waves and supplies.

The Nebelwerfer were not included as it was felt that they were not accurate enough for such an operation, where to be effective they would have to burn up more trainloads of ammo than it would be easy to fly into an airhead. As to the order the Division lands in, how task groups would be formed, and the missions it would be likely to get we are open to suggestions.

David Huss  
Lawrence Huss (Spec 4, Hon Dis)  
200 Spook Rock Road  
Suffern, New York 10901

Dear Sirs:

I would like to see a return to the Opponents Wanted section without the form letter approach, if needed reduce the amount of words to 25. The creativity of the subscribers is great and helps develop interest.

I would like to see more articles on game variants, especially those for some of the open ended games like Tactics II, Blitzkrieg and Panzerblitz.

I think it would be interesting to see some figures on game popularity. Things like your all-time best seller, loser, consistent good seller, flash in the pan, most difficult, easiest and your staff's preferences in these games and others.

Steve Spoulos

AH NOTE: We cannot divulge too precise data on best sellers for the obvious competitive reasons. But you might be interested in knowing what the criterion is for determining whether or not a game will be a winner. A new game will always sell well during its first three years. But what will it do in ensuing years? If a game's sales remain steady, or even increase from that 4th year on then you may count on it staying in the line. Games such as Gettysburg, Football Strategy, and Blitzkrieg have done just that. Most consistent best seller seems to be Blitzkrieg. . . .

Dear Sir,

I was very happy to receive the battlefield version of the original Gettysburg in the Auction of Collector's Items.

But, there is another side to the story, too, which might be of interest (particularly to Mr. Wagner who paid \$35 for a Civil War game). In California, at least around here, we have a popular weekend diversion called swap meets, which are little more than monstrous garage sales. They are held in parking lots, drive-in movies and other large open spaces and generally have several hundred sellers and thousands of buyers. Most of the stuff that is being sold is junk, but every now and then, something worthwhile can be had—like a Tactics II game which I bought for 25 cents and like a Civil War game (complete and almost unused) which I bought for (this is not a typo) 10 cents.

Jim Reilly  
200 West Midway Drive  
Lot 134  
Anaheim, Ca. 92805

AH NOTE: Already completely out of stock is Tactics II, LeMans, and Bismarck. These cannot be ordered from us — there simply isn't a copy around. Of course, many stores may still have some left in their inventory. While we have not made definite plans to this effect, and a resurgence in sales occasionally saves a title marked for demise, games such as Anzio, Guadalcanal, Jutland, C&O/B&O are scheduled for phase out. . . .

25¢ NOV-DEC 1971 25¢

**Discount Coupon**

Each coupon is worth 25 cents. However, no less than 4 coupons can be used in any one purchase. Orders received accompanied by three coupons or less will be returned unfilled. Any number above 4 may be used in any single purchase. No photostats please. . . .

25¢ GOOD TOWARD THE PURCHASE OF ALL PRODUCTS 25¢

## Opponents Wanted

A \_\_\_\_\_ CITY \_\_\_\_\_  
STATE \_\_\_\_\_

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 below not applicable.
- 3) Insert copy where required on lines provided.
- 4) Print your name and address where indicated.

We cannot list specific items 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  
(LIST GAMES) \_\_\_\_\_  
members for \_\_\_\_\_  
(LIST CLUB) \_\_\_\_\_

\_\_\_\_\_. Will trade or sell games. Please reply to:

NAME (in all caps) \_\_\_\_\_

STREET \_\_\_\_\_ PHONE \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

All Ads must be on a special printed form; those received that are not will not be accepted.

Don't expect the postal people to forward The General. YOU will have to notify our subscription department each time you move. Simply cut out your address label and attach it to this form. We cannot be responsible for issues skipped because of an address change. Please notify us one month prior to change of address date.

ATTACH LABEL HERE, OR FILL OUT BELOW

Name \_\_\_\_\_

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FORMER City \_\_\_\_\_ State \_\_\_\_\_

NEW Address \_\_\_\_\_

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# A Panacea for Blitzkrieg?

by Steve Ambler

The problem which has been plaguing designers and players of AH type games from time immemorial has been the creation of an accurate and playable system for armoured warfare on the division and corps level. Minor hang-ups attendant to this problem include enabling a player to exploit a breakthrough or pursue his retreating enemy, trying to create a proper role for armour in this type of exploitation and pursuit, and finding a suitable solution to automatic victory, to name only a very few. The trend at present in game design is towards seeking solutions to problems such as these by concentrating on their main aspects and finding unique concepts to deal with them.

And as far as new concepts in relation to simulation of armoured conflict go, there have been many. The one that is very much in vogue at the moment involves a double movement impulse for mechanised units which allows them an additional full movement phase after combat takes place. This system is present in such Strategy & Tactics/Simulations Publications games as Barbarossa, Battle of Moscow, and Strategy I, and will be found in France 1940, a future AH game; it allows exploitation of a hole in the defender's lines and forces employment of reserves and defense in depth to prevent these possibilities. Variations on the automatic victory theme have been presented in the General (see vol. 6 nos. 3&4), as has been the introduction of pursuit into Afrika Korps (see "Simulating the Art of War" by Professor Pournelle in March-April '71), and the possibility of second combat in Stalingrad (see the article by Daniel Krone-myer in July-August '71).

All these concepts have some degree of validity in dealing with their problems, and indeed any new twist is now considered valid in game design if the result is a game that presents players with the major puzzles that forced the original commanders and offers the same techniques as were available to the original commanders in trying to evolve their own particular ideas as to the resolution of these problems in a particular situation or simulation. In other words, the goal is now the recreation of the proper "feel" of a particular situation. I feel that this step is a major advance from the early brand of AH games in which neither the feel nor the details (which regiment was where) of a particular situation were adequately simulated, and the techniques of games such as 1914 and Anzio, in which a mass of detail failed to make up for a fundamental lack of the recreation of the salient problems of the particular campaign.

Below is offered my own personal solution to the problem of mechanized warfare. It is, I feel, superior to many other versions I have seen. I have tried to simulate all or most of the major aspects of this type of warfare that I have mentioned, and have probably done some aspects better than others. And, I have applied my ideas to (what else?) Blitzkrieg. I hope those of you who are sick of all Blitzkrieg variants will bear with me; I feel my solutions have applications for simulations in general, and after all, Blitzkrieg is

the perfect game to use as a medium for exploring new possibilities.

## Multi-Movement Multi-Combat System

1. Armoured units now have a m.f. of 10!, artillery 6, and all forms of infantry 5.

2. Units must expend an extra m.f. to enter or leave the z.o.c. of an enemy unit, and an additional m.f. to engage a unit in combat; a unit may not move into an enemy z.o.c. unless it also has the extra m.f. required to attack that unit. Units starting movement in an enemy z.o.c. may move directly into another z.o.c. by paying both leaving and entry costs.

3. When more than one attacking unit participates in an attack against enemy forces, each unit is considered to have spent as many m.f.'s in "getting there" as the slowest unit to arrive. This is for purposes of movement after combat as described below.

4. Any units which are not participating in combat are now flipped upside down and may participate in no further action of any kind during the turn.

5. Attacks are now resolved as normal, except that if a retreat is called for, the loser retreats  $\frac{1}{2}$  of the c.f.'s involved and the winner  $\frac{1}{2}$  (loser retreats the odd c.f.). The winner retreats his  $\frac{1}{2}$  first. Also, ignore all advances for the attacker.

6. After all attacks are resolved, the attacker flips over all units that have expended their total movement allowances. They may find themselves in enemy z.'s o.c., but they are not required to attack again; ignore these units for all purposes except stacking.

7. Any units which remain right side up may move and attack again, using the same process. Units which start their new movement phase in enemy z.'s o.c. and have at least 1 m.f. remaining must attack again or move out of all enemy z.'s o.c.

8. This process may be repeated indefinitely as long as m.f.'s last; at the end of the turn flip all units upright once again.

9. There is no automatic victory as such, but units which attack at odds of 7-1 or greater do not have to expend the extra m.f. required to attack the unit.

10. Using this movement/combat system, all parachute drops, sea movement, air transport, invasions, etc., must take place in the first movement phase.

11. An exception to 10, above is that all forms of air activity may take place during any of the movement phases. However, all units may still only fly one mission per turn; after returning to base they are flipped upside down. This applies to defending fighters as well.

12. Using this system, a unit must expend an extra m.f. to move next to a minor country city and an extra m.f. to attack. However, these "z.'s o.c." around cities are only "semi-active" and a unit is not obligated to attack the city if it is next to it, and may even continue to move around the city by expending the extra m.f. for each square next to the city that it enters.

13. Land units may now stack no more than 3

divisions high. For these purposes consider all brigades with a c.f. of 1 plus all ranger battalions as  $\frac{1}{4}$  division, and all brigades with a c.f. of 2 as  $\frac{1}{2}$  division. Stacking rules remain the same for aircraft units.

## Comments, Or-Why The Rules Is As They Am

1. The figures may be high or low, but they were adopted to give armoured units the probable chance of engaging in 3 attacks per turn, artillery the possibility of 2 per turn, and infantry the likelihood of only 1 attack a turn, unless the attacks are a result of the kind of attritional warfare involved in rolling a series of exchanges on the CRT, in which case infantry could conceivably attack as many as 5 times per turn.

2. Again, no great long technical explanations. Someone with the data readily available may want to correct.

3. Purists will argue that the fraction of the turn required by the slowest unit to get there should be considered, and all I can ask is that you assume that the infantry units in the game can be driven into making long marches at night to get to the battle in time.

4. This prevents the absurdities pointed out in the automatic victory rulings of AH from showing up here. A unit cannot now exploit a breakthrough that has not even occurred yet.

5. An enemy that is retreating is not always retreating in perfect order, and the victor should have some opportunity to apply pressure to enemy units as he pursues them and "herd" them to where he wants them to go. This rule also applies added pressure on the defender in that he must retreat what units he can with great care so as to prepare for his enemy's exploitation of victory. One also has to position reserves behind a line to prevent total collapse. True, this is employment of reserves in anticipation of an attack rather than as a reaction, but it's the best I've been able to do.

9. There should be some reward for attacking a position with overwhelming strength.

11. This adds increased variable and interest in the area of employment of air strength in a blitz warfare situation. Both players have to budget their use of air power very carefully.

12. This is an attempt to retain the first turn balance of Blitzkrieg because of the increased movement factors now involved. Otherwise, a player could practically capture his opponent's capital on the first turn by land.

13. The ability to create a more potent armoured striking force is now present.

## Conclusion

There you have it, and I hope I have impressed a few of you and not totally turned off anybody, because I think the system is a good one. The job is a little patchwork in some places, mostly because of the difficulties of transposing one's own ideas and movement factors onto someone else's unit counters, mapboard, and terrain features. I only hope that some brilliant designer with far more resources, knowledge, and experience than are available to me will use the system as an integral and cohesive part of some new game that will come close to being an accurate and playable simulation of a conflict between mechanised armies. Forward in the great search for the Perfect Wargame, fellow gamers!!!

Steve Ambler  
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