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★ The AVALON HILL
GENERAL

R. Mac Gowan

Squad Leader

Avalon Hill Philosophy Part 65

Contrary to what you may think, we do read all those letters & cards you keep sending in. Although they can't all be answered they do influence us . . . probably far more so than their numbers should. Granted, a good many of them invoke fits of uncontrollable laughter and regularly fill our round files before pick-up day. However, they do all get read by at least 1 staff member, and as such constitute a sizable portion of my working day. The more interesting ones get rewarded by being pigeon-holed in the in-box of one designer or the other for a second read-through and possible reply. And of course there is the occasional gem which catches me in a receptive mood and ends up being the catalyst which starts us rolling on a new project. The Elite Club, the AREA rating system, ORIGINS, magnetic games, unit counter trays, Wargamer's Guidebooks, & countless games & improvements to the *GENERAL* all had their humble beginnings in the form of a letter from an Avalon Hill customer. As such we tend to place great store in reading our "nut mail" and anxiously await the kudos or brickbats which may follow the release of a new product. These letters are our first indication of how good or bad a job we've done on a new release and the collective sigh of relief when the first batch comes in with more praise than anger is usually the main topic for a week's lunchtime discussions. I won't even mention the ridiculous lengths I must go through to keep the latest hobby 'zines from being pirated off my desk before I've had a chance to catch the reviews. The main thing is that we *do* care a great deal about how you perceive us and our products . . . & allow that to influence us far more than you should in a business sense. The occasional game buyer who comprises the majority of our business would probably be better served with simpler games, but invariably gets the shaft as we listen to the "hobby" instead.

Unfortunately for top management, we tend to listen with our hearts as opposed to our checkbooks. The seven R & D people who comprise the AH design staff have all grown up as part of the hobby—gamers first, and employees much later & only through some twist of fate, (usually having something to do with unemployment). We don't leave games at the office—they are our hobby and 40 hours at work is often followed by 30 more at play. Even Tom Shaw, the titular head of the design team, & the only one amongst us who can lay claim to never having been *in* the hobby by virtue of his role in *starting* it so long ago, is probably the most fierce of competitors across a gameboard of his choosing.

Fortunately for *us*, top management has no such limitations, and runs the company according to sound business principles; saving us from ourselves. They're the people who decide on price hikes, design budgets, and overall company policy. Fortunately for *them*, they have no such illusions about their ability to judge games or gamers, and leave that aspect of the operation to us. Ah, the perfect marriage, . . . a *game* company run by *gamers* within the limits imposed on them by businessmen.

But we're getting too far afield. Back to correspondence. Not all of it is praiseworthy. We're the first to admit we can't be all things to

all people, so we have to settle for pleasing most of the people most of the time. This still leaves a lot of people unhappy in one form or another. One such longtime customer is James Mueller, whose letter which follows will provide us with the vehicle for this month's philosophy.

Dear Mr. Greenwood,

This letter will, I hope, be a well thought out statement of my feelings and opinions. That is, I hope you do not consider it simply a list of "gripes" by a disgruntled wargamer.

While I will voice no complaints against *The General*, we are not supplied with any specific address for "the company," and, as *The General* is the organ of communication between the wargamers and the management, it is perhaps fitting that I send this letter to you.

Having started as a wargamer in 1961, and staying exclusively with Avalon Hill, I somehow get the opinion I have been "passed by" by the company in its ever-expanding role in the wargaming community.

Being a confirmed capitalist, I can understand, and even applaud, Avalon Hill's expansion and acquisition policy. Some of my PBM opponents and I have, however, discussed over the past few months what we feel is the neglect of the "hard core" wargamers in the name of progress.

I do not fault you for your increase in prices for games, parts or services. I need only compare this month's food bill with last month's, or last year's, in order to see the reason for the increase.

After many years (and much hard work, I'm sure) of maintaining a reputation for excellence and attention to detail, Avalon Hill seems to be getting a different sort of reputation lately. Example: When I recently told one of my PBM opponents (whose opinions I value) that I had ordered *Gettysburg 77*, he told me he planned to wait until next year, when the "revised" rules would be published. The meaning is clear—some of your buyers feel Avalon Hill doesn't do it right the first time any more.

On the subject of rules, I'm sure I'm not alone in thanking you for the new *D-Day* rules. Without changing the board or the counters, and without forcing me to purchase a "new" game, you have increased my enjoyment of an old classic.

Could we, who have been playing the "Classics" for years, hope for a *real* revision of the *Afrika Korps* rules? While I will limit my comments to *AK*, certainly some of them pertain to *Stalingrad, Bulge, Waterloo,* and other games.

The last "revision" was the addition of an appendix which did little to remove some of the real problems in the rules.

I am not an advocate of one set of rules for all games. Part of the fun in playing six or eight of the classics is trying to remember the
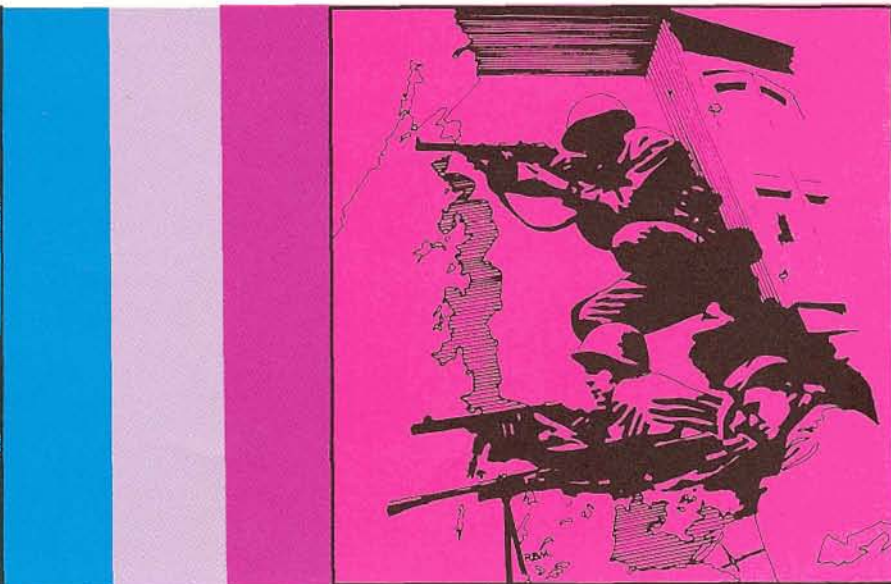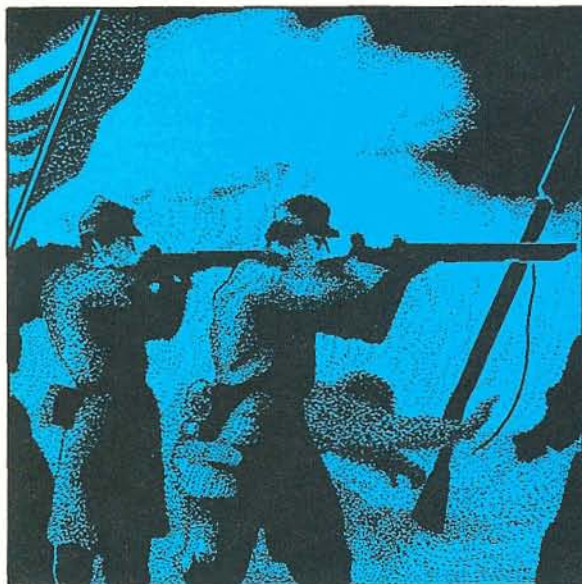
Squad Leader
HISTORICAL COMMENTARY:
"THE EVOLUTION OF SMALL UNIT TACTICS" By John Hill

The tactical concept that the main element of infantry combat was the small ten man group of soldiers, did not suddenly appear in WWII. Rather, it evolved slowly all the way up from the beginning of the gunpowder era. As weaponry improved, the destructive potential of small groups became greater, and it is very difficult to say "when" infantry tacticians began to forsake the concept of massed infantry in favor of "small grouped" infantry, but it started soon after Napoleon.

In the Napoleonic era, the classic use for the infantry was in ever larger "attack columns" which was, in essence, a solid battering ram of bodies. When the opponent had been properly prepared by artillery and maneuver, this battering block was generally successful. But this was the last golden era of the massed shock infantry attack. The British, by use of reverse slope and disciplined volley, made these attack columns a very dangerous proposition. Nevertheless, in the writings of this era, and even before, we do find references to the possibility of what could be done by small groups attacking on their own. However, these tactics were still regarded as an "if all else fails" type of thing. As a matter of fact, the whole tactical doctrine was indeed referred to as the "forlorn hope." But the "hope" was to grow.

After the Napoleonic Wars, Baron De Jomini wrote an extensive technical study of combat in 1838. He called it the "Art of War." By drawing on many battles, he came to the conclusion that the best way to attack would be; not in the massive columns, nor in extended line, as others would say, but in a loose front of "little columns." In other writings the words "attack group" also crop up. Though the manner of war was not changed by these thoughts, it did show where a trend could be starting.

The nature of the combat in the American Civil War was defined by the greatly increased firepower of the rifle-musket with its elongated mini-ball.

With it, devastating fire could be thrown out in excess of 300 yards with relative ease. As the troops became more proficient and as repeating rifles became more common, the war evolved into a trench type fighting very similar to the Somme of 1915. At Fort Stedman, in the Petersburg front, the Confederates used a style of attack that would become quite common in the next century. The infantry was grouped into three compact groups under one "attack leader." These groups moved out quickly and without fanfare in the attempt to gain maximum advantage of terrain and surprise. They used no formation as such, but would rely on the individual courage and initiative of their NCOs and officers, right there, leading the advance. Each group had its own engineering tools to break through the abatis. And it worked. The heavily entrenched fort was taken with a minimum of casualties. Quickly the attacking Confederates attempted to bring up "support weapons" and set up "fire bases" with their 12 pound cannons. All in all, it was a very modern attack. And the Union reaction was equally modern, a quick, instant counterattack by reserve echelons that cut-off and isolated the Confederate attack groups that had penetrated their lines. There were other examples, in other wars, and more and more the principle of the small group began to grow.

Then came World War I, and for the first three years, the small group theory was almost totally forgotten. Attacks were made in large waves, one after another, in an attempt to literally smother the enemy machine guns and defending infantry. The British attacks in Flanders were primarily linear with lines following upon advancing lines. The German response was much more advanced. Their "typical" defense was not simply an opposing fire line, but rather a series of interconnected strong points. Each "point" might only have the infantry equivalent of a platoon or even a squad, but there

would be a "nest" of two or more machine guns that would set-up a murderous cross fire. In such a defense the actual connecting trench might only have what would be called a "skirmish squad" that acted as a net to capture what few survivors stumbled through the cross fires. Here, the Germans were making battle with a small determined "combat group" of soldiers based on the presence of concentrated automatic weapons fire. It worked well in a defensive environment, and it was only natural that the Germans would adapt the whole concept to an offensive scenario.

It is difficult to say exactly who was responsible for the evolution of the now famous German "strosstruppen" tactics that evolved in this period. Seeing the success of the small group concept in the defense, General Von Hutier, of the German Eighteenth Army began to organize these concepts into a more formal doctrine. Also the German artillery expert Colonel Bruchnuller contributed a new "philosophy" in terms of the probable and desirable effects on various weaponry. Both of these men came to the conclusion that given the high state of the defensive art and the extensive entrenchments, it was extremely difficult to kill a defender regardless of the amount of weaponry and high explosive used. However, it was possible to demoralize him and the most likely method of doing this was to concentrate on creating an environment of doubt and confusion in the enemy rear areas.

For the artillery viewpoint, it meant that "communication" targets, such as headquarters, reserve staging areas and the like became more likely targets for pounding than did the front lines. While, in the front itself, the artillery would be a mixture of high explosive, gas, and smoke. The overall effect was to create a sense of confusion: Also, while it would be intense, it would be short. In some instances, it was advocated that the front line should be shelled for only a total of five minutes

duration before the infantry went in. It was argued that longer than five minutes gave the defending infantry time to gather their wits.

And then came the infantry. Rather than the line waves used by General Grant at Cold Harbor *AND* General Haig at the Somme: the soldiers came out in small groups, moving quickly through the gullies and quirks of "no-man's land." These were the "strosstruppen" or "storm troopers." They were highly motivated and led by battle experienced officers and NCOs. Their objective was not necessarily to "take out" the defensive strong points but to probe aggressively, taking maximum advantage of the temporary confusion the unorthodox bombardment had produced. They sought weak points and then infiltrated through to set-up their own strongpoints deep in the enemy rear. Such a "breakthrough" even by small groups created a definite feeling of doubt and worry to the enemy defenders still far forward in their impregnable machine gun nests. And it was self-generating; the more these little groups probed, the more "weakness" they found, and then the more infiltration they did; and this created even more "little weakness" which meant even more troops leaked through. And soon, like a great mansion eroded by termites, the whole defense simply collapsed.

This technique sent the Russians streaming in panic at Riga, and at Caporetto ten miles of prepared defenses were gobbled up in one day. The small, highly motivated and well-armed groups of infantry were becoming particularly vicious termites. And when the Germans unleashed this tactic in March of 1918, they came embarrassingly close to ending the war in a single knock-out blow.

However, the Allies had developed new ideas of their own. Their answer to the "trench problem" was not one of finesse as was the new German infantry tactic, but a mechanical solution; the tank. In many respects, it was simply a "better hammer" rather than an adroit rapier. The point was that it worked so well, after the initial hassles, that the Western allies stopped developing newer and better small unit tactics and concentrated on perfecting their "better hammer." In November 1918, it ended. And both sides retired to think about the lessons of the Great War.

Between the wars, much thought was given to tactics by both sides. And since the tank was the "newest" development, it received the lion's share of the thinking. Liddel Hart, Fuller, De Gaulle, and Guderian all contributed to the dialogue on the "new" war and it was during this period that the doctrine of the mechanized blitzkrieg would take root in German thought. It was during this period that Erwin Rommel, the "tank genius of the desert" wrote an amazingly cogent study of small units of squads, companies, and battalions. It was titled; *"INFANTRY ATTACKS"* and concerned itself with actual case studies of infantry combat in the First World War. So, despite the preoccupation with armor, the Germans were still quite aware of what could be accomplished with the Queen of battle—the infantry.

In studying WWI the Germans made the rather obvious observation that what made the infantry so devastating was the machine gun, but yet their tactic of storm troopers infiltrating their way through the enemy defenses precluded the dragging about of the "typical" WWI machine gun, since these were usually bulky water-cooled contraptions, that, although effective, were rather unwieldy. What was needed was a light machine gun that could be easily carried and operated by two, or even one man. In this respect the Allies "helped" the Germans. One of the provisions of the odious Treaty of Versailles was the clause that forbade the Germans from owning or developing any large number of "sustained fire

weapons," which basically meant water-cooled machine guns. They intended to force the Germans to use only air-cooled machine guns, which could not maintain a good rate of fire due to barrel over-heating. Hence, the German infantry would be permanently handicapped. Wrong.

What actually happened was that the Germans concentrated on a family of machine guns that utilized the option of "quick change" barrels to get around the over-heating problem. This dove-tailed nicely with the Germans' already declared intent to "lighten" the machine gun. And by 1939, the German infantry had the start of both quality and quantity in light machine guns. When coupled with their already proven *strosstruppen* tactics, their infantry was more than a match for those they would face in the opening stages of WWII.

In the opening battles, however it was the German armored formations that stole the lime-light. The Western allies were so befuddled by this new "lightning" form of mechanized war that they did not realize that their infantry had also become outclassed. However, the lesson would sink home in 1942 at Dieppe.

On the coast of France, at the town of Dieppe, on August 18th, 1942, the cream of the British infantry; their Canadians and commandos made a large scale raid to "test" the quality of German defenses and infantry in France. The "test" was an eye-opener. For the first time, the Western allies really saw the effect of the vast number of German light machine guns. Their troops were, with small exceptions, cut down by numerically inferior, but better deployed and equipped German squads. In the words of one Canadian, "We went into intense, accurate light machine gun fire." It was a true disaster. But it did have merit. In no small way was the lesson of Dieppe lost on the British. By the time they returned to France in 1944 they may have been the best drilled and practiced of the Western allies in infantry tactics.

Throughout WWII, the tactics did evolve, and did change, and often observations made in 1940 were irrelevant by 1944. But the essence of change was still usually based on a coherent theory that merely changed its "application." It was mentioned that the Germans concentrated in their theory on the small group and how to maximize its effectiveness. Let us now study some typical applications of this theory.

First of all, the basic concepts behind the German training were very much different than the others. In most of the pre-WWII training programs of the other nations, a tactical problem would be presented by the training officer who would answer any questions about it and then dismiss the class for about an hour so the cadets might reflect upon the correct answer when they were recalled. In the German infantry classes, the same problem might be presented, BUT each of the students were expected to have a "workable" answer *within two minutes.* Maybe two or three of the fledglings would be called upon to present their solution. The instructor would listen, then pick one cadet as *"gruppenfuher"* and have the class act out the proposed tactics *immediately.* Criticism was harsh and freely made both by the instructor and the cadet's peers. However, one element was seldom criticized. A student was almost never chastised for the exhibition of *elan.* Furthermore, *quick* decisions, even if wrong, were constantly encouraged.

Meanwhile, in the "Sandhurst" method, after the hour of pondering, the exercise would be discussed and maybe even acted out. But, unlike the Germans, the emphasis was completely different. There, recklessness was discouraged and a constant stress was made on the methodical conservation of resources as the objective is logically and correctly deduced. Following the evolution of the exercise,

the instructor then would discuss it and further amplify the principles of method, conservation or coordination. And after its completion, there would be a leisurely rest period. One final point may be worth mentioning. Since the Germans forced their exercise through with great immediacy and speed, while the rest paced it through, the German trainees would probably be able to study two or three tactical problems in the same time span it took the others to analyze but one.

Over in Russia, things were somewhat simplified. Tactics were basically of two types; you *either attacked* or you *defended.* If you were defending, you simply *stayed* where your officer put you until the enemy was defeated, your officer ordered you elsewhere, or you were dead. On the attack, you charged, closed with the enemy, and killed him. Or you died trying. There was only one accepted excuse for failure, your death. Needless to say, this system does indeed explain to a large extent why the Russians had the highest casualty rate of any of the European participants.

So, in summation, we might say that in regards to initiative, the Germans *encouraged* it, the West *forgot* it and the Russians *condemned* it.

One of the more illustrative of the German methods was the "attack technique" in regards to an obstacle on the line of attack. This obstacle could be assumed to be an enemy defense, possibly dug-in and perhaps even with minefields and artillery support. But, despite the outward formidableness of the obstacle, a battalion was expected to be able to mount an attack, in complete coordination with the parent regiment, in no longer than thirty minutes from the time when the obstacle was first discovered. The principles for the battalion commander would be the same as those that would be used by his subordinates in the company and platoon level. The first step was to win the *firefight (feuerkampf)* by quickly increasing the fire density on a particular section of the contact frontage. The point here was to establish a fire superiority on both a specific area and to a dictated depth. The actual evolution of this often followed a three phase scenario.

The first phase was called *"Niederhalten"* or "nailing down." In this phase, the foremost troops would stop movement and begin laying down an intensive fire in an attempt to stop all movement of the enemy. If artillery support was available, it would be used now. The intent was to make the enemy seek cover in his entrenchments, so that the individual squad leaders could make unhindered their basic terrain reconnaissances.

The next phase was called *"Blinden,"* in which newly brought up troops would join the first ones to increase the fire to the point where the enemy defenses would be "blinded" to the now initiated movement of small groups attempting to penetrate the enemy position.

The last phase would take place after successful infiltration had been made into the soft spots of the enemy defense. This was the *"niederkampfen,"* in which the enemy would be "beaten down" by flanking and rearward fire from the infiltrated units in addition to the previous units which still maintained an intense fire from the front. At this point, it was hoped that the defenders, demoralized by fire from all directions, would begin to "break" and cease to function as an organized body. If that happened, it was all downhill and the position would quickly crumble.

Throughout this "phasing," the Germans stressed a number of "points" they wished their commanders to always keep in mind. The attack would be confined to a narrow frontage. For a battalion, this would be under 1000 yards and hopefully about 600 yards. The attacking commander *must* concentrate *all* his firepower on the

objective to his front and disregard the flanks. It was assumed that the regimental people would protect his flanks while his battalion did its job.

In essence, it was the age old concept of FIRE and MOVEMENT. But the Germans placed more emphasis on the "do it now!" idea than did their Western counterparts. However, in all honesty, this method did have considerable drawbacks. With its emphasis on quick decisions, there was room for misunderstanding and as the war went on, the Germans had to mix well-trained and experienced officers with replacements who were not so well trained; resulting in misunderstandings that became more common and more costly. Secondly, it was risky. In the confusion which their tactics forced on the enemy, often they would become victims to their own smoke and chaos of battle with the result that independently advancing infiltration groups fired on one another or would be pinned down by their own supporting fires. But the Germans argued that despite these unpleasant side effects, their system, in the long run, yielded fewer casualties than the more deliberate methods of the Western allies, which minimized misunderstanding but maximized time. The Germans claimed that every minute a defender was allowed, was another minute he grew stronger. And yet, before we conclude that the Germans were necessarily better, we must remember that their arms suffered many a decisive set-back, but ironically, it was usually when they ignored their own advice and gave the enemy extra time to strengthen his defense.

At this point in our discussion of infantry tactics, let's turn our attention to how Russia evolved her infantry in the same time span. It already has been noted that the Russian system was short on initiative and high on obedience. Nevertheless, there were other salient points that made them different.

First of all, while the German infantry leaders were constantly reminding their people to concentrate their fire on a narrow front, the Russian instructors were doing just the opposite. Their 1941-42 tactical doctrine was to attack on as *broad* a front as possible with the hope that somewhere, due to mass and the "odds" somebody would break-through and cause discomfiture to the enemy, *and* since the infantry's objective is to close with and kill the enemy, it really *does not matter* "where" the breakthrough actually occurs, as long as *it does occur*. This was a complete contradiction to the Germanic thinking, which was very specific as to *where* they wanted things to happen.

As an example of a Russian situation, consider: The commander of a three battalion rifle regiment normally would prepare for the attack by deploying in two waves, accompanying the second wave himself. Close artillery support would be most likely given in the form of SP Guns that would accompany the 2nd echelon rather than using indirect called artillery. In a word, it was simple. After everything was "staged" the attack would begin. This was often started by the first wave crawling up as close to the German positions as possible during the night before the attack. This *"creeping"* phase would continue until a pre-set time, or the Germans discovery of them, or when some superior got impatient. At this point, the "assault" phase would begin. The regimental commander, with the second wave, often "ordered" the final charge by having *his* echelon "fire into the air" which would alert the first "creeping wave" that the assault was now to begin.

At that signal, there would be rampant cheering and shouting to make sure everybody knew "this was it" and then the first wave would jump to their feet and make a mad charge for the German machine guns, firing and yelling as they went. Simultaneously, the second wave, with the regimen-

tal commander, would join in with their mad rush, hoping to reinforce any "success" of the first wave. Since the SP guns would be with this second wave, they would be available to "blast" any resistance the first wave uncovered. If tanks were available, infantry would often ride on them to increase the velocity of the assault and enable their soldiers to "close with the enemy." The Russians, once the attack did begin, were violent in its execution and cherished the time factor as much as Germans. Their opponents often commented that the Russian infantry was "slow *to think* of the attack, *quick to do it,* and *slow* to stop it."

While the above method was very expensive in terms of lives, the Russians defended its results claiming that it was "most demoralizing" to their enemy. It was indeed very disheartening to the Germans to see the complete willingness of their enemy to attack in an endless array of people despite casualties. And since one of the best ways to defeat an enemy is to demoralize him, the attack method is thereby, a success, according to the Russian viewpoint. In all fairness, it should be noted that the "Russian" system was ideally suited both to the nature of their culture, and the numbers needed. Had they opted for a more sophisticated training system, they probably would never have had the time to totally re-build their army from the severe beating it took in 1941.

But rebuild they did, and like any soldiers that survive, they learned. One weakness of the Germans in the earlier stages of the war was their failure to perfect principles of urban warfare. The reason was fairly obvious. Up to the war and throughout its early stages, there was very little city fighting. The German victories were made by quick decisive actions generated by "going around" cities and bypassing them. Hence, little effort was made to study this particular problem. Not that the Russians, or British, or Americans did, but once it became obvious that there would be heavy urban fighting, no one side really "had the jump" on the other. In late 1942, everybody started from scratch on this problem. And in the streets, the Russians were the equal of anybody.

In urban fighting, the actual "combat range" is much less than in open country. Out in the steppes, it was quite common for the infantry, particularly the machine gun sections, to open the engagement at about 1000 yards depending on visibility; and as the combatants closed, the fighting usually settled in at about 200 to 400 yards for a firefight. At this range, the Germans with their better weapons were at a definite advantage. But in a city where the combat range was very often "across the street" the Russian weapons were equal. In the streets, the main weapons became the submachine gun and the grenade. In contrast to the echelon waves used by the Russians in the country, their urban attacks were based more on an "attack group" of up to sixty men that would literally blitz one single building from all directions, and the Russians became adept at turning any defensive building into a fortress. And when they weren't fortifying, or "blitzing" they would be constantly moving about: filtering through back alleys, crawling through sewers and darting along rooftops. It was a new "citified" concept of Fire and Maneuver. In the early stages of the heavy fighting around Stalingrad, the Germans used to "blundering Russians" were very much punished by the cunning that these same Russians displayed in the city. At the outset, it was the Germans who found their infantry tactics, for the first time in the war, inferior to the enemy. The initial German reaction was to quickly bring in more and more of their best equipped and trained small units. These were the Pioneers (Assault Engineers) who treated each building as a bunker and went about reducing it with heavy infantry weapons and

sophisticated equipment such as demolition charges and flamethrowers. It did work, but in the attrition process, the Germans were forced to "trade-off" their best specialists against the regular Russian peasant soldiers. And that was an expensive trade.

But the commitment of these elite formations bought the time needed for the regular line units to learn the "urban trade." And by late 1943, the Germans were as adept at urban fighting as their Russian opponent. The Gemans began fighting like the Russians with *fire groups* against individual buildings, but they also attempted to set up "killing zones" along the streets that paralleled the "target building." Here, their superb medium and heavy machine guns were ideal. The theory was that the battle-point would be isolated by preventing any reinforcements from reaching the position. By setting up machine gun fire lanes, they hoped to put a break on the constant Russian "flittering about." It was a good tactic, and many a Russian squad was cut down by accurate fire from a hidden position far down the street. The Russians then countered by using sewer movement to an even greater degree, and setting up many and devious ways for getting from one building to another. And so the Russians and Germans taught each other, and in the West, the Germans imparted their hard-earned urban techniques to the Western allies with a vengeance.

By the end of 1943, the Western allies had taken to heart much of the earlier lessons the Germans had shown them. Dieppe, as mentioned, illustrated the immense value of the light machine gun, and the British had countered by doubling and sometimes tripling the issuance of their LMG, the Bren Gun. Also, Allied training was much more realistic and became modeled along the German lines. And then in January of 1944, at the town of Cassino, in Italy, the "new" Allied infantry tactics were tested against the Stalingrad educated Germans and once more they had to play "catch-up." Once again, their small unit tactics were outmoded.

In many respects, the experience was similar to the Germans' dilemma at Stalingrad. But they reacted differently to the problem. The Germans correctly saw that it was an infantry problem and attempted to solve it with infantry means. And that was, bring in better infantry in terms of their assault engineers. The Americans and the British reacted with brute force and attempted to erase the offending obstacle with air and artillery bombardments. Even the monastery was literally blown off the top of the mountain. But still their infantry squads could not advance and they saw that a destroyed and rubbled city is just as good, maybe even better, from a defender's viewpoint, as an intact one. So, they too learned how to form Fire Groups and cover the streets with fire and they too learned the high price of urban warfare extolled in men.

At this point, we might stop and compare how the British and the Americans differed in the applications of the lessons the Germans were showing them. First, let us look at the British. The concept of British small unit tactics went through a number of shocks, as we already mentioned, such as Dunkirk, Dieppe, and Cassino where even their crack New Zealand troops were one-upped by the street-wise Germans. But the British by then, were used to change and adaptation. Their approach to the small unit problem was basically that there are certain tactical dilemmas and each one of these has a corresponding correct solution. Therefore, to solve a tactical problem, one *first* had to identify it, *select* the correct solution, and then properly *implement* that solution. The first two parts were fairly easy compared to the last, the implementation. And to perfect that implementation the British evolved a series of DRILLS that would be the same army-

wide and would give predictable results both in time and effect. They felt that with the vastly different array of forces in the British army, it was important that they all have a universality of tactics so an infantry leader could easily be moved to a new company and still have the same predictable results.

This may have seemed like a backward step compared to the German emphasis on tactical creativity, but it was well suited to Britain's complex army structure and blended well with their cultural trait of neatness; which is very well expressed by Montgomery's desire for a tidy battlefield. Each DRILL was very well thought out and when properly employed would give a successful conclusion in a good majority of the instances. There were DRILLS for everything, attack and defense, over farms, in cities, with and without armor, and with and without artillery. They were quite specific. The whole concept hinged on the theory that the prospects for success and survival would be greatest if *all* members of a small unit or section thoroughly understood what their job was, how they were going to do it and what everybody else was doing as well. An example of the detail these went into was the drill for moving in file with a squad of eight down a road. The file would be as follows, with each man's duty as listed:

MAN 1 . . .Squad Leader, leads patrol
MAN 2 . . .Watches Right
MAN 3 . . .Watches Left
MAN 4 . . .Watches Front, for Squad Leader
Signals
MAN 5 . . .Watches Right
MAN 6 . . .Watches Squad Leader and MAN
4 for signals
MAN 7 . . .Watches Left
MAN 8 . . .Watches Rear

Hence, if you were MAN 3 in a patrol file in the British army in 1944, your job was to *watch left* whether you were in Normandy, Italy or Burma. This British approach lacked glamor and was somewhat unflattering in regards to the initiative concept, BUT it produced results and by 1944-45 the British were able to stand toe to toe with the Germans and give as good as they got in any situation.

There was a famous saying about the Americans from none other than Rommel himself, who said "no one is more incompetent in battle than an American, at first, but no one learns faster." The evolution of small unit tactics in the American army was probably the least systematic of any participant in the War. The philosophy was, almost: "Try anything; try something; it might work." From nothing, in terms of size, in 1940, the American army in Europe, by 1945, had blossomed into almost 100 divisions. This created a need for mass produced training and quick smatterings of tactical doctrine. At first, it might seem that the British DRILL method would've been ideal for such a problem. But it probably wouldn't have worked for the basic reason that the American soldier differed very much from his British ally.

As a soldier, the American is an amateur and always will be. He is often an exceptionally talented amateur, but he is not, and has no desire to be, a professional. To the American, the concept of fighting is not that of a soldier's profession, but is rather a dirty job that has to be gotten on with. A comment made in the Civil War was that Grant's Army looked like a band of day laborers. It was more true than realized, because in philosophy and tactics the American soldier is a day laborer. He is a confirmed skeptic, a diehard opportunist, and a dedicated scavenger. His squad and platoon leader is more like a shop foreman than a captain of men. So, had the American military attempted to instill

dogmatically practiced DRILLS, the soldiers would've treated it as so much worthless "Mickey Mouse."

But, if all these were weak points, he had a number of amazingly good strong points. Left by himself, he often could be amazingly ingenious in devising tactical tricks that often rivaled the best their German enemies could think of. He loved gadgets and things mechanical and given a few moments, probably could make any device work, after a fashion. He had little respect for rank, and despite orders, he had a tendency to do things his own way. When he blundered, it usually was *extreme,* resulting in punishing casualties, but when he was right, he probably was better than any of his contemporaries.

The American military stumbled onto this and attempted to capitalize on his innate desire to try it "his" way and published field manuals on a never-ending series of subjects, not as Drill Manuals, but as guidelines for the soldiers to base their tactics on. Throughout the war there was a constant stream of updates and quickie pamphlets on tricks of the trade. The whole thrust was that you will win if your "trick" is better than the Germans' trick. The American soldier was bombasted with a never-ending series of these publications and he usually glanced at most of them. The hope was that by constantly exposing the soldiers to good tactics, perhaps some would rub off.

All this might have made the American squads more buffoons than soldiers, if it were not for the fact that their weapons, per squad, were the best of any of the armies. The basic American squad with no extras, could out firepower anyone else. Their M-1 was definitely the best infantry rifle in the war, in overall usefulness and durability, and the BAR, while not a light machine gun, could often substitute effectively for it. Hence, the American army, despite the demonstrated effectiveness of the German Light Machine guns, never really produced or issued one. They felt it was more important that the squad have devastating firepower without adding anything extra. In essence, the only way a German squad *could* stand up to the American was *with* the addition of a light machine gun. This was brought to light in a small infantry battle between two opposing infantry platoons on Djebel Tahent in the closing days of the Tunisian campaign. The American and German platoons squared off against each other behind two opposite stone walls and simply fired until the German platoon was wiped out by the firepower of the American infantrymen. It had not been a contest.
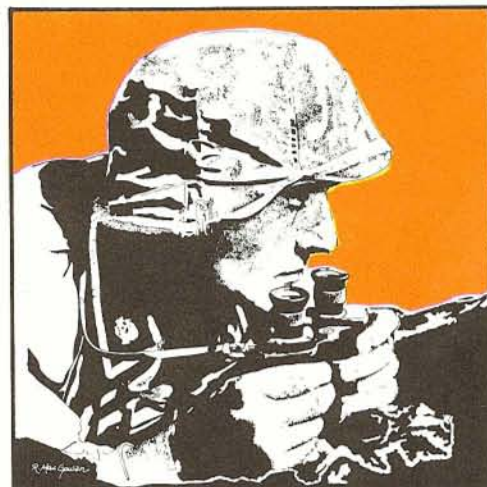
There was a catch however. While the American soldier could dish it out, he was not very good at taking it. In general, he would break under fire before either the German or the British. He was always quick to take cover. In many ways, he always felt that being fired *on* was not really part of the job, and he would do his best to avoid that. On the other hand, though he might duck and run quicker than the others, he had a strong stubbornness that caused him to usually rally and come back to try again before another soldier would. It almost might be summed up as: Quick to run, but quick to rally. Hence the American squad was deadly and brittle, but properly used with a good imaginative leader and a little bit of luck, it may have been the most formidable squad in 1944-45 Europe.

As we noted, the American squads did not have a light machine gun, preferring to make up the deficiency with better organic firepower. And in some respects, they did. However, this was not to say that the Americans were without support weapons. Quite the contrary, in reality when the Americans added support weapons, it was of a quantity that bedazzled all the other participants. The Americans, figuring that "bigger" is "better,"

felt that if you needed MG support, it should be as big and beefy as possible. Hence, they issued their superb .50 cal machine guns almost like popcorn. And in fire effectiveness, it was a machine gun without equal. It is still perhaps the most devastating infantry machine gun on the field, and the design has not really changed all that much. The penultimate development of this deadly weapon was the M16, a quad-fifty halftrack which carried the descriptive name of "chopper." The final point of this was the liberal availability of these weapons, even to the point that it was not rare to see them mounted on trucks.

Which brings us to a final point on the Americans. And that was the total number of vehicles they had available. No army could approach them. The American *infantry* formations usually had more vehicles than the most mechanized Panzer Grenadiers. When they went to battle, it was on such an assortment of trucks, jeeps, halftracks, scout cars, and whatevers, that *nobody* walked. In the Ardennes Offensive, the Germans were astounded by the flippancy with which Americans abandoned vehicles. As a matter of fact, one German officer, in all seriousness, felt that the American Army had as many trucks as they did combat infantrymen. His statement was an exaggeration, but not excessively so.
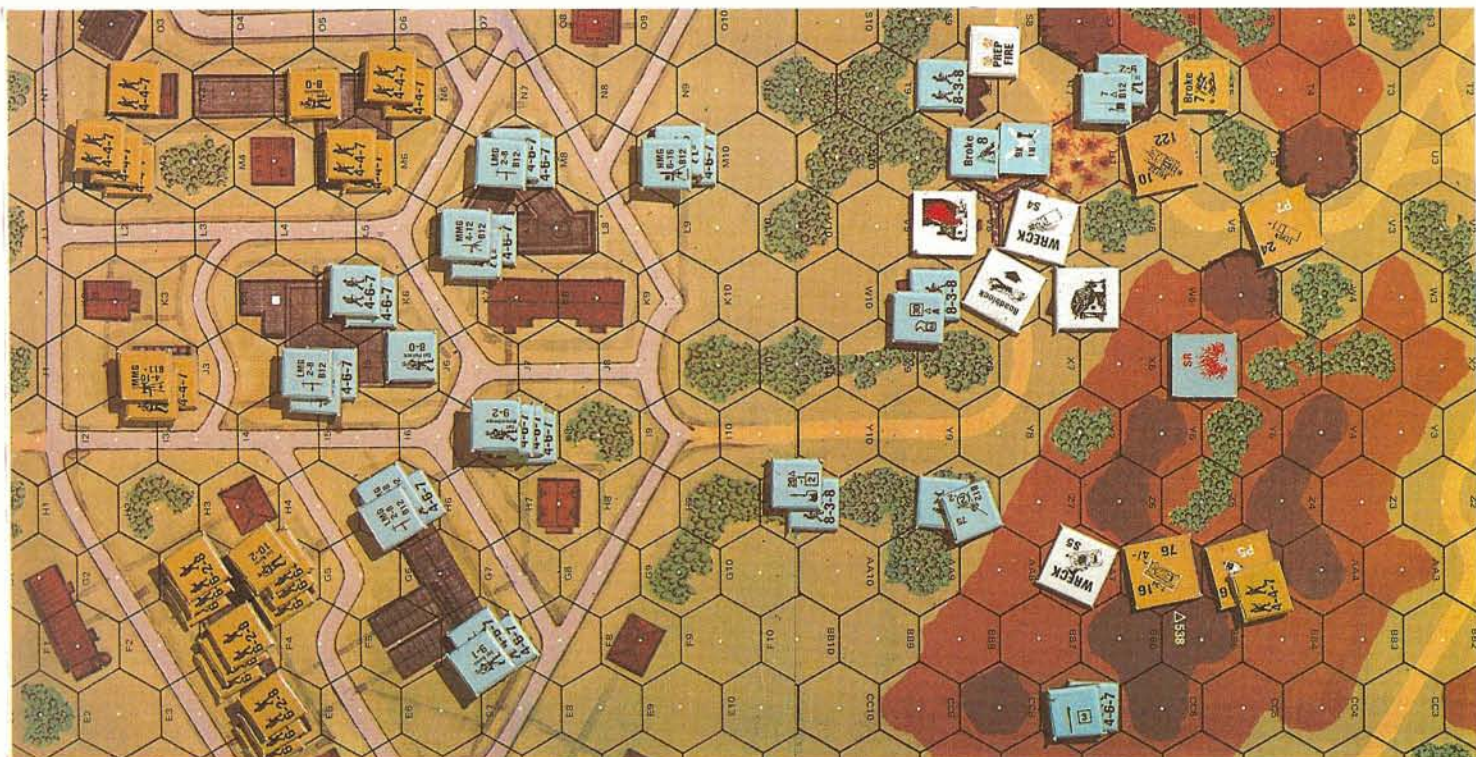
And so, by the end of the war, all the nations had evolved their own infantry tactics to achieve roughly the same net result. Each nation's final infantry book of operations reflected both their national cultural backgrounds, and the tricks of the trade that they had picked up from their gallant opponents and their own dedicated *SQUAD LEADERS.*

SQUAD LEADER FIRST IMPRESSIONS

AN INTRODUCTION TO SQUAD LEADER   By Bob Medrow

Bob Medrow headed one of no less than 24 playtest groups around the nation which labored with the by mail playtest of SQUAD LEADER. That is not all that outstanding. His playtesting was . . . so much so that he was awarded the heretofore unheard of Loyal Order of the Boog Powell MVP with hexagon clusters. We also gave him a lifetime subscription to The GENERAL and a case of games for saving our bacon. Among his contributions were a complete revamping of the sewer and MG LOS and penentration rules and about 200 pertinent questions which led to the undoing of more than a few ambiguities. Under the circumstances we thought it wise to ask him back to playtest the expansion kits.

The origin of this article goes back over six months to a letter sent to both John Hill and Don Greenwood, respectively, the designer and the developer of *SQUAD LEADER* (SL hereafter). This letter was part of my playtest activity and was intended to make these gentlemen aware of how *SL* was being played hereabouts. Here the first priority had been given to debugging the rules. With those efforts having been completed, it was time to report on play balance in the scenarios.

Since this was my first effort at playtesting, I had spent some time trying to work out how to go about reporting the results. Obviously, there must be something besides a box score telling how frequently a particular side won. In wargames, which side wins is, in all but the most grossly unbalanced of games, a function of how the sides are played and, sometimes, of luck. *SL's* scenarios are no exception. Thus, it seemed necessary to write something rather general about the local perception of the basic game system. For reasons developed later, what constitutes an intelligent course of action in *SL* is sometimes hard to see. As a result the letter began with a few pages describing what the local players

had found to be important about the game system itself; only then were the specific scenarios considered.

This article follows that same general outline. First, there's a rather extensive look at some basic aspects of the game, beginning with a look at the Infantry Fire Table (*IFT*). The emphasis here is on the interaction between squads and the fire directed at them, and several of the many factors that modify the outcomes. The type of result most commonly found in the IFT, coupled with the fact that dice roll modifiers (*DRMs*) are used in the game to reflect several facets of the simulation, make some aspects of fire attacks rather obscure.

Inescapably, and unfortunately for some, this means a discussion of probabilities. Lest any should really become concerned, however, there are no formulas. Articles with lots of numbers don't always go over well, and I think that's unfortunate. Intelligent play of wargames requires an appreciation of what's likely to happen. The numbers in this article will not tell you how to play *SL* in each and every set of circumstances. Rather, they are intended to give you a fairly broad feel for what can happen. Probabilities, when they appear in the text or in a figure, are expressed in percentages, which seems to be the most satisfactory form. As an example, if something has a probability of 10%, it will happen, on the average, once every 10 times. Anything with a probability of 100% happens all of the time. The sum of the probabilities of all possible events must always total 100%.

Of the many weapons represented in the game, only two have been included in this first section: machineguns and off-board artillery. One of the aspects of the game that simplifies play is the use of the IFT by a number of weapons. While some of the weapons have fascinating peculiarities, the two considered probably have, overall, more decisive influence upon the course of play than do the others.

At the risk of disappointing the armor buffs out there, AFVs are not considered in the general section of this article. Make no mistake about it, a great deal needs to be said about them. However, it seems more meaningful to delay coverage until the second major section of the article, in which the first 3 scenerios are considered. The specific context of the third scenerio provides a very handy way in which to point out both the strengths and the weaknesses of armor in *SL*. In *SL*, infantry will always have some claim to being queen of the battlefield, and one needs to be able to appreciate the interaction between the foot soldier and the iron beast. A look at how the introduction of armor changes things in the third scenario should, I hope, be useful in showing this interaction.

There'll be some sidetrips along the way. The game considered here is not the same as the one I first saw back in April, 1977. Changes were made for various reasons and, if you're at all like most of the gamers I know, you have some interest in how a wargame comes to be what it is. Also, for what they may be worth, there will be some comments about what I would expect to see represented in a game concerning WWII combat at this level. Finally, I hope to include enough information so that those of you who might not be familiar with the game will be able to follow most of what's going on.

BASIC PLAY OF THE GAME

The basic pieces of *SL* are the squad and the leader, examples of which are shown in Fig. 1. Firepower and Range are conventional enough quantities to see on cardboard warriors, but Morale and Leadership are something else. Each quantifies an essential aspect of the people represented. The first is a measure of the probability that the unit will withstand the stresses of combat while the second tells the extent to which a leader is capable of

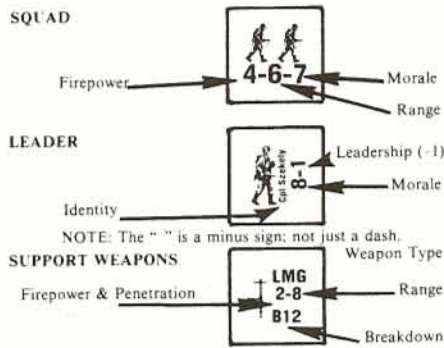helping the squad(s) stacked with him carry out certain activities.

Figure 1

The IFT

The action of the game will center around the Infantry Fire Table shown in Fig. 2, and good play requires an understanding of it. As with all two dice, sum-of-spots tables, the probabilities of the different outcomes are sometimes hard to visualize. The chance of rolling a 2 is 1 in 36, the chance of rolling a 3 is 2 in 36, and so on, up to 6 chances in 36 to roll a 7. After that the chances start falling again; 8 comes up only 5 times in 36, while a roll of 12 is as likely as a roll of 2. This general difficulty is compounded by the extensive use of DRMs in the game. The Terrain Effects Modifier Table lists 7 terrain connected situations that modify the dice roll (from –2 for infantry moving in open ground to +3 for units in stone buildings) and 3 that do not. There is also "temporary terrain" in the form of smoke counters for which the positive modifier is equal to the roll of 1 die. Interestingly enough, if a second group fires through or into the smoke-filled hex it rolls again. And then there are the leaders. Most (but not all) of the infantry weapons fired from a hex can have this effect modified by the leadership value of a leader present. Except for one true fumble-finger in the counter mix, these values range from 0 to –3. To look at 2 extreme cases, fire directed at a moving-in-the-open squad by a 10-3 leader would be subject to a net die roll modifier of –5; an unlucky shot through a smoke hex at a unit in a stone building could net a +9.

Considering the number of effects, many of them influenced by player decisions, built into the IFT, I think the case for some study of it is well founded. Unfortunately, the actual results contained in the Table add an additional degree of

Figure 2

complexity. KIA is easy enough. It means the elimination of all squads and leaders in the target hex. Depending upon the *source* of the fire, a KIA can cause destruction of support weapons and structures as well. The other results are the troublesome ones. An M means that all units undergo a morale check. Failure of a unit to roll its morale value or less with two dice causes the unit to Break. A number result on the IFT requires a morale check with the added penalty that the number rolled plus the number result in the IFT must be less than or equal to the morale value. (For those of you unfamiliar with the game, a broken unit is worthless until it recovers, an event requiring a leader and by no means certain even then. A broken unit receiving a second broken result is eliminated.)

Thus, for a single unit it all boils down to this: after being fired at the unit is gone (G), broken (B), or okay (O); there are but three possible results. Put two identical squads in the same hex and the number of distinguishable results from one fire attack goes up to four: both gone, both broken, both okay, and one okay and one broken. Two fire attacks in the same turn add two additional possible results: one gone and one broken, and one gone and one okay.

The mention of two fires brings us to the last of the factors which complicates a look at the IFT. There are games in which all attacks against a single target must be added together, and there are games in which each attack must be treated separately. *SL* differs from these in that, within certain limits, one may or may not combine fires as he sees fit. Adjacent units have a choice; units stacked together, if they fire at the same target, do not; and non-adjacent units do not. In this way the designer, as he has done elsewhere, has left in the players' hands an interesting decision. Concentration of units allows attacks at higher strengths than would otherwise be possible, but concentration frequently leads to increased vulnerability as well. Of course, there's also the question of whether concentration of fire is more desirable than separate, smaller fires.

Before looking at some (hopefully) useful specific results, one other point needs mentioning. The maximum infantry stacking allowed is three squads and one leader. In situations requiring morale checks any leader checks first. Failure of a leader to pass his check causes all squads present to undergo an additional check. This means that, for a stack consisting of three identical squads and a leader, the number of possible results when that stack is fired at twice reaches the surprising total of 30. In case you're wondering, that's an honest 30. If

we're considering an outcome that involves just one broken squad, no distinction is made between the case in which it's the topmost squad that breaks and the one in which it's the bottom one that fails. The sometimes rather large number of possible outcomes makes it difficult to develop a "feel" for the game by just playing it. I can, in fact, recall at least two instances from the playtesting days in which a player, based upon his experience, reached the wrong conclusion as to the best tactics in a particular situation.

Figures 3 through 6 present a small sampling of the huge number of situations one could explore given sufficient time and energy. Only the first of these gives a reasonably complete picture of the particular aspect of the IFT being considered. It is felt, however, that the other results are representative.

Figure 3 shows the probability of a KIA result as a function of the weight of fire and the net DRM. This particular result is independent of the characteristics of the units occupying the hex, thereby allowing us a reasonably complete picture of what can happen. The range of DRMs was selected on the basis of game experience. A –4 modifier is not the most extreme one possible, but it is the most negative one you're likely to encounter with any frequency. A similar argument applies to the other limit, +3. Overall, this figure demonstrates very effectively the positive impact of good leaders upon the game when they are used to enhance the effect of friendly fire. To make sure that we all know what the numbers in these figures mean, a fire with a strength of 24 will produce a KIA result 42% of the time if the net DRM is –1. We shall need to refer back to this figure later on in connection with the study of some other aspects of the game.

Once we go beyond the KIA result only a very limited selection of results can be considered. Fig. 4 shows the probabilities that individual squads will survive, alive and unbroken, the particular fire attacks shown. The three morale values considered, 6, 7, and 8, cover all of the squads in the game. As an example, a leaderless fire attack with a strength of 8 directed against a single morale level 7 squad in a stone building will have absolutely no effect 85% of the time. The fire strength values shown include most of the values you would need in order to construct an expanded table covering all attacks from 4 through 36, inclusive. This fact is the result of the specifics of the IFT entries. If you look carefully, you'll see that, for example, an attack at 6 with a DRM of –1 is the same as an attack at 4 with a DRM of –2. Similar relations exist between the 12 and 16 columns and among the last four columns.

There are some interesting things in this figure. The numbers themselves do give us some practical insight into what we can expect from fire attacks. Further, a study of them does help us gain some insight into the game that we can carry away and make use of without having to grope through a maze of tables before making a decision in a game. The previous paragraph referred to an exact relationship between the outcomes in certain adjacent columns. A look at Fig. 4 shows that this relationship is approximately true for all of the columns. As an example of what is meant, consider an attack of strength 16 and a DRM of +2. The results are almost the same as those for an attack of strength 8 with a DRM of 0, or an attack of strength 4 with a DRM of –2. The 8 column is two to the left of the 16 column, while the 4 column is four to the left of it. Thus, all the way across the IFT, moving an additional column to the right has about the same effect as staying where you are and reducing the dice roll by one. This observation should give you an additional clue as to the effective use of leaders.

DICE	1/20	2/30	4/40	6/50	8/70	12/80	16/100	20/120	24	30/150	36+
1	KIA	KIA	KIA	KIA	KIA	KIA	KIA	KIA	KIA	KIA	KIA
2	1	KIA	KIA	KIA	KIA	KIA	KIA	KIA	KIA	KIA	KIA
3	1	1	2	KIA	KIA	KIA	KIA	KIA	KIA	KIA	KIA
4	M	1	1	2	2	3	KIA	KIA	KIA	KIA	KIA
5	—	M	1	1	2	2	3	4	KIA	KIA	KIA
6	—	—	M	1	1	2	2	3	4	KIA	KIA
7	—	—	—	M	1	1	2	2	3	4	KIA
8	—	—	—	—	M	1	1	2	2	3	4
9	—	—	—	—	—	M	1	1	2	2	3
10	—	—	—	—	—	—	M	1	1	2	2
11	—	—	—	—	—	—	—	M	1	1	2
12	—	—	—	—	—	—	—	—	M	1	1
13	—	—	—	—	—	—	—	—	—	M	1
14	—	—	—	—	—	—	—	—	—	—	M
15	—	—	—	—	—	—	—	—	—	—	—

INFANTRY FIRE TABLE 10.3

FIREPOWER FACTOR MODIFIERS:

POINT BLANK FIRE:	into adjacent hex	2X
LONG RANGE FIRER:	Up to double normal range	½X
MOVING FIRER:	moved & fired in same player turn	½X
AREA FIRE:	target is concealed	½X

The second set of observations concerns the differences among the squads. In general, the differences between the squads in complete survivability go up as the weight of fire goes up and/or the degree of protective cover goes down. Overall, squads with a morale level of 7 lie closer to the level 6 squads than they do to the level 8 ones. Before moving on to look at the effects of being in a hex with a leader, there is one last rule-of-thumb to be extracted from Fig. 4: a decrease of one in the morale level has about the same effect as adding an additional –1 DRM to fire attacks. This is a particularly useful thing to keep in mind when you move into Game Set III and encounter the morale level 6 American infantry squads. From the point of view of survival, its about the same as still having the Russians; but giving the German player an extra –1 on each die roll. And that's a big effect.

Having covered several things concerning individual squads, this seems to be a good place to consider what happens when you start stacking. Again, because of the structure of the IFT, this increases the number of things one could look at. I think that the most interesting study is to consider what happens when our various squads are stacked with the leaders available in the game. Fig. 5 contains results for just one attack, that at a strength of 8. Some additional calculations were made and showed nothing qualitatively different that would be worth the considerable effort and space necessary to include them here.

The first thing to keep before you concerning leaders is that any units stacked with them are subjected to an increased risk of elimination. This, of course, comes from the fact that any morale check combat result could break the leader and cause the squad to take two morale checks as the result of a single attack. How much additional hazard is involved you can see for yourself by comparing the G (for Gone, remember) values in Fig. 5 with the KIA values in Fig. 3. Overall survivability is a different matter, however. As leader quality increases so, too, does the chance that the squad will survive. For some particular leader the chance of survival is essentially the same as it would be if the squad were alone. For all of the cases shown in Fig. 5 this "neutral leader" is the 8-1. A series of spot checks for other cases showed the same result.

The discussion of the results in Fig. 5, coupled with what has gone before, provides us with an example of what ultimately turns out to be a fairly common aspect of *SL*: the possibility of greater gain purchased at the price of a possibility of greater loss. It is just this sort of intricate challenge that appeals to many wargamers. Previous figures have shown us the increased potential for doing harm to the enemy that comes from modifying the dice roll with a negative DRM. The last one shows us the dangers involved in getting the leaders up front.

One of the many fine points that helps to decide the winner is the correct use of the different leaders. The obvious lesson here is to keep the 7-0 and 8-0 leaders out of the line of fire and use them for what they can still do: allow a broken unit to try to rally and speed squads on their way with the leader movement bonus. The use of the other leaders is very much a matter of judgment, but playing *SL* and watching others play it has led me to believe that most players have a tendency to use the better leaders aggressively too much of the time. Unless rallied, a broken unit is little better than a dead one. (And that leads us to the discovery of yet another juggling problem involving the weighing of risk and gain.) Experience suggests that decisions about leader employment are among the most difficult in the game. You should not become entranced by any ONE of their several possible uses.

Fire Attack Strength

DRM	1	2, 4	6, 8, 12	16, 20	24	30	36
-4	28	42	58	72	83	92	97
-3	17	28	42	58	72	83	92
-2	8	17	28	42	58	72	83
-1	3	8	17	28	42	58	72
0	0	3	8	17	28	42	58
1	0	0	3	8	17	28	42
2	0	0	0	3	8	17	28
3	0	0	0	0	3	8	17

Fig. 3 The probability that a KIA result will be rolled.

Fire Attack Strength		4			8			16			24	
Squad Morale		6	7	8	6	7	8	6	7	8	6	7	8
D	-4	22	28	36	9	14	21	4	7	10	1	2	4
R	-3	32	40	48	16	23	31	7	11	17	2	5	8
M	-2	44	52	60	24	32	42	11	17	25	4	8	13
	-1	57	64	72	34	43	53	17	25	35	7	13	20
	0	70	76	82	45	54	64	25	34	45	11	18	27
	+1	81	85	90	58	66	74	35	44	55	17	26	37
	+2	89	92	94	71	77	83	46	55	65	25	35	46
	+3	95	96	97	81	85	90	58	66	75	35	45	56

Fig. 4 The probability that various squads will survive, alive and unbroken, some typical fire attacks.

Squad morale	6		7		8	
Leader	G	O	G	O	G	O
7-0	46	18	39	26	33	36
8-0	42	20	36	28	32	37
8-1	42	24	36	33	32	42
9-1	37	27	34	36	31	45
9-2	37	33	34	42	31	50
10-2	34	36	31	45	30	53
10-3	34	44	31	45	30	58

(a) Fire strength 8, DRM = -2

Squad morale	6		7		8	
Leader	G	O	G	O	G	O
7-0	25	40	18	48	13	58
8-0	21	41	16	50	12	60
8-1	21	46	16	55	12	65
9-1	17	49	13	58	11	67
9-2	17	56	13	64	11	72
10-2	13	59	11	67	10	75
10-3	13	66	11	67	10	80

(b) Fire strength 8, DRM = 0

Squad morale	6		7		8	
Leader	G	O	G	O	G	O
7-0	10	67	6	73	3	79
8-0	7	68	4	74	2	81
8-1	7	72	4	78	2	84
9-1	5	74	3	80	1	85
9-2	5	78	3	84	1	89
10-2	3	80	2	86	1	91
10-3	3	85	2	86	1	93

(c) Fire strength 8, DRM = +2

Fig. 5 The probability that a single squad will be gone (G) or okay (O) when stacked with different leaders and fired at as indicated.

One of the most difficult questions to answer is the subject of the last set of numbers connected with the IFT. The values in Fig. 6, coupled with certain of those in Figs. 3 and 4, should give us some insight into the problem of how to arrange our fire attacks in order to obtain the maximum possible effect. The information given lets us compare the results of two attacks with a strength of 4 each versus those of one attack at a strength 8. In Fig. 6 the column showing the results of the first of these two attacks is headed (4)×2. For the sake of compactness let us call the second attack an (8)×1, the results of which are in Figs. 3 and 4. The other comparisons possible are among (4)×4, (8)×2 and (16)×1. Although not included, enough cases for the (6)×2 and (12)×1 were also considered to allow reference to be made to them.

Strength	(4)x2		(4)x4		(8)x2	
DRM	G	O	G	O	G	O
-4	80	5	98	0	93	1
-3	64	10	94	1	84	2
-2	46	19	83	4	71	6
-1	28	32	64	11	55	12
0	13	50	25	35	37	21
+1	4	66	16	43	21	33
+2	1	79	6	63	8	50
+3	0	90	2	81	4	66

(a) Squad morale level of 6.

Strength	(4)x2		(4)x4		(8)x2	
DRM	G	O	G	O	G	O
-4	75	8	97	1	90	2
-3	58	16	89	2	79	5
-2	41	27	75	7	64	10
-1	24	41	54	17	47	18
0	10	58	29	34	30	29
+1	2	73	11	53	15	43
+2	1	84	4	71	5	59
+3	0	92	1	85	2	73

(b) Squad morale level of 7.

Strength	(4)x2		(4)x4		(8)x2	
DRM	G	O	G	O	G	O
-4	71	13	94	2	87	4
-3	54	23	84	5	74	10
-2	36	36	67	13	57	17
-1	20	51	44	27	40	28
0	8	67	21	45	24	41
+1	1	80	6	64	11	55
+2	0	89	2	79	3	69
+3	0	95	0	90	1	80

(c) Squad morale level of 8.

Fig. 6 The probability that individual squads will be gone (G) or okay (O) when subjected to various repeated fires.

Figure 7

As mentioned previously, the option to combine attacks or not exists only when the firing units in question are adjacent to one another. Since Fig. 6 shows us cases in which one option or the other yields an advantage, this adjacent placement of squads is an extremely powerful one, particularly if the enemy has little or no artillery capability. In all cases (including the (6)×2 versus (12)×1 one), the more separate attacks the better, so long as we're considering attacks with a DRM of –2. Because there will seldom be sufficient leaders to stack with thinly spread squads, –2 is about the only negative DRM one gets. The results, however, can be devastating against an enemy who must advance across open ground.

What the most desirable attack is when we look at the more common modifiers of 0 through +3

depends upon the goal of the attack. Generally, one's better off with two separate attacks rather than one combined one if the aim is elimination of the target. If, however, one's satisfied with either eliminating or breaking the enemy, the situation is not quite so clear cut. In this case we see some advantage to combining fires at high DRMs. Particularly when your aim is the modest one of either breaking or destroying the enemy, one very important consideration is that the standard rules do not require a player to designate all of his fires before resolving any of them. Thus, if the first of two or more possible shots accomplishes all that you need, the remaining units can be used for other purposes.
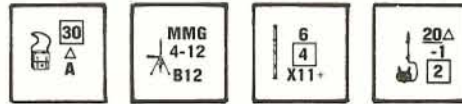
A Bit on Weapons

Demolition charges, bazookas, flamethrowers, panzerfausts, machineguns, anti-tank guns, howitzers, and mortars; *SL* has it all. But of all of these I think the two most interesting are the MGs and off-board artillery. Fig. 7 shows a typical medium MG. Its unique aspect is this business of penetration. Once a line-of-fire has been established between the weapon and a target, units beyond the first target hex are subject to attack if their hex lies along the LOF and the firing unit has a clear line-of-sight into their hex. As pointed out in the Designer's Notes, this helps recreate the lethal effects of this weapon system. You'll note (7.2) that units, friendly or otherwise, do not block either the LOS or the LOF. This, as it came out in the playtesting, is a practical necessity in this game. The alternative would be to allow players to create concealing terrain by hiding more valuable units behind less valuable ones. Neither that situation nor the one mandated by the rules is completely "realistic," but the former does eliminate some peculiarities from the play. If you wish to avoid one source of aggravation and frustration in *SL,* avoid using the MGs in a stack unless they will move you up a column on the IFT; great is the outcry when you use a LMG to raise a total to 14 and then roll a 12, causing the MG to malfunction.

The use of off-board artillery is handled in a very interesting way. When it's available, summoning it requires a leader and a radio. Since there are no leadership-modified events in the routine of using such artillery, this is an excellent job for a low grade leader. The artillery fire mechanics require that contact be made with the supporting battery during the Rally Phase of any (friendly or enemy) *player* turn. If all goes well a spotting round will end up within the LOS of the radio-equipped leader during the Close Combat Phase of this first player turn. If radio contact is maintained during the next Rally Phase, the player owning the artillery will be able to fire for effect (FFE) during the second player turn.

The player attempting this must roll a die or dice at least three times during this procedure: to establish contact, to check for scatter of the spotting round, and to maintain contact. Assuming that the spotting round, if it does scatter, will not scatter out of the LOS of the leader concerned, it is instructive to consider the probability that one will succeed in getting a FFE mission in the minimum two turns. For the Russians the probability is a function of the year of the scenario: it's 16% in '41, 30% in '42, and 49% for the rest of the war. This last value is equal to the probability of success for the Germans throughout the entire war. American forces also have a constant set of requirements which are easier to attain; their probability of success is 81%. Another

interesting set of numbers is the probability that one can get off three FFE missions in four player turns. These values are 6%, 16%, 34%, and 77% for the four categories just considered. Taken together, I think that these numbers give a reasonable view of the relative worth of artillery to the different forces represented.

A knowledge of what you can expect in terms of reliability from artillery is extremely important when it comes to purchasing a force from the Point Value Chart. For an American force, artillery is almost always worth having and comes at a bargain price (three-fourths of what the Germans pay and half of what the Russians pay). Until one's played enough to learn just what can be expected in terms of total performance there seems to be a tendency to accord artillery too much respect, particularly in the Russian-German scenarios. Deciding when and how to employ it is sometimes a difficult decision.

A Bit on Tactics

The basics outlined in the rule book deserve careful reading, and I have but a few points to add.

Whenever a unit in a building or in trees is broken by enemy fire a decision is required as to whether or not the unit should retreat. In most such situations it is best to retreat the unit in question so long as so doing does not place it in greater jeopardy. If at all possible it should be retreated so as to prevent the enemy from continuing to fire at it each turn, thereby forcing the unit (assuming a leader is available) to try to meet the stringent requirements of Desperation Morale. It does happen that the isolated unit left in place can suffer an ignominious fate. If it is not rallied, it cannot move unless an enemy unit moves adjacent to it or it is again fired upon. Do not be surprised if the unit remains unattacked while the enemy maneuvers so that a retreat will later be forced under circumstances that will guarantee the unit's destruction.

In selecting defensive positions in a scenario allowing some leeway, it is important to site weapons and units with a view towards the retreat routes available to any enemy units that might be broken. Remember that a broken unit unable to reach satisfactory cover without crossing a clear terrain hex within both the LOS and the normal range of an enemy unit is eliminated. The game mechanics relating to broken units (section 13) are quite straight forward. Good play, however, requires careful consideration of the hazards and opportunities they create.

The voluntary destruction of your own support weapons deserves a brief mention. Practically, it is probably best to destroy such equipment, most particularly LMGs, when you no longer have the manpower required to use them. On balance, I have seen pessimism in this area rewarded more frequently than optimism.

A Personal View

I think, before we turn to the scenarios, that this might be a good time to give some consideration to what we should expect to find in a game on this extreme tactical level. Practically, we should expect to see a lot of confusion. I feel that the concept of the broken unit handles this sort of thing very well. Units are completely reliable until they move to within range of enemy fire. While this may not be completely realistic, a little thought conjures up some terrifyingly complex alternatives. This breaking and rallying of troops reproduces an ebb and flow appropriate to the time scale of the game, at least so far as the Germans and Americans are concerned.

With the Russians we find a more brittle force because of the general lack of Russian leaders. Assaults will tend to be more massed in character since mass is more available. This brings us to the

second thing we should expect to see: organizational and nationalistic differences. These we find in plenty. Besides the numbers and quality of leaders provided, there are the morale values and the exemption of American squads from the penalties of Desperation Morale.

This is by no means the first game to reflect the things mentioned above. It is, I think, unique in that it provides the game player the opportunity to, locally, bias the behavior of his troops by the allocation of leaders. Chance will always play a large part in *SL* games and that, too, is as it should be. But here, anyway, the players can make at least partial amends for the shortcomings of his particular force.

THE SCENARIOS

As with all of Avalon Hill's Programmed Instruction games, this one directs you to play the scenarios in order. Think awhile and you'll see how that idea poses particular problems in playtesting. In order to do anything at all with the later scenerios I found it necessary to have some players skip ahead. Given the standards of the day, the complete set of rules is not all that formidable; but players who had gone ahead tended to experience more frustration and less satisfaction. The level of interaction among all the bits and pieces is very high. To play well one needs a good grasp of what's been covered up to the scenarios being played.
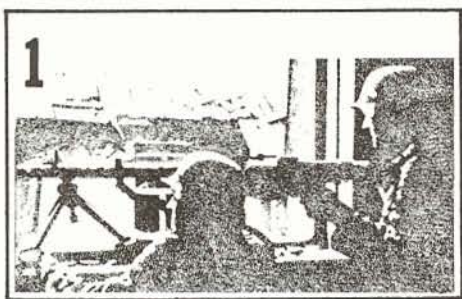
In an era of monster games you'd almost have to call this one a micro game. Fig. 8 shows the map area used and one possible deployment. To win the Russians must completely occupy two more of the stone buildings initially occupied by the Germans (F5, K5, I7, M7, and M9) than they lose of their own initial buildings (N4, J2, M2, F3) to complete German occupation, or have a favorable 3:1 ratio of unbroken squads at the end of the game (5 turns). To completely occupy a building requires that your forces be the last ones to have occupied any hex in the building at game end.

The primary burden of attack is thus upon the Russian player and his major striking force must be the dozen 6-2-8s located in building F3. Initially the ratio of squads is only 20:13 in favor of the Russians so the German player is winning all around at the start.

Since the German player sets up first let's take his problems first. Since buildings I7 and M9 are single hex ones, their setups are fixed. In M7 hex L6 must be strongly held because, coupled with all those Germans in I7, this divides the Russian forces (by the clear North-South LOFs running through I7 and L6) into three groups. Probably the greatest versatility is obtained if everything goes into hex L6. Deployment in building K5 can assume a number of forms. The primary objective of the one shown is to establish a strong LOF across the North side of building F5. The one weakness of this part of the German position is that all hexes in K5 can be brought under fire. For this reason the 8-0 leader is left by himself where he can do little harm. By way of

an aside, hexes C5 and D5 are both just visible from hex J4, using a string as thick as the white dots.

The German deployment in building F5 poses some interesting problems. Quite possibly this building will be the focus of the initial Russian drive, one which may well be successful. Familiarity suggests that the ideal deployment is one which inflicts some Russian casualties while still allowing the German player a decent chance at extracting some of his force. The combination shown is a fairly effective one. The force in F6 cannot be fired upon by any Russian force in the initial Prep Fire Phase. Those in H5 can be fired at from only E4 and G4, a pair of non-adjacent stacks. This arrangement allows the German player to avoid a 36 strength fire attack from two adjacent hexes firing together, the most effective fire attack available to the Russians. In addition, the fire from E4 is halved because of range considerations.

The Russian setup offers fewer options. Only the location of the 10-2 leader in building F3 and the forces in N4 need be considered. The placing of the 10-2 in E4 will be explored later. Handling building N4 could give a sensitive person bad dreams. The balance of forces on the eastern side of our tiny battlefield is probably in the German's favor and offensive action may occur. In self defense the Russian needs to hold M5 and N5 even in the face of German firepower in I7, L6, and M9.

Given the German firepower available, Russian tactics must be based upon the weaknesses in the German deployment, and there are some. These weaknesses were not introduced for discussion purposes; rather, they appear because every initial deployment seems to have some. Looking from west to east, the weaknesses in building F5 is the fact that hex F5 is not garrisoned. The excellent Close Combat capabilities of the 6-2-8s make them very dangerous if they can get into the same building with the Germans. The weakness is almost unavoidable since F5 lies within the normal range of the 6-2-8s in three hexes.

Fig. 8 A probable setup for Scenario 1.
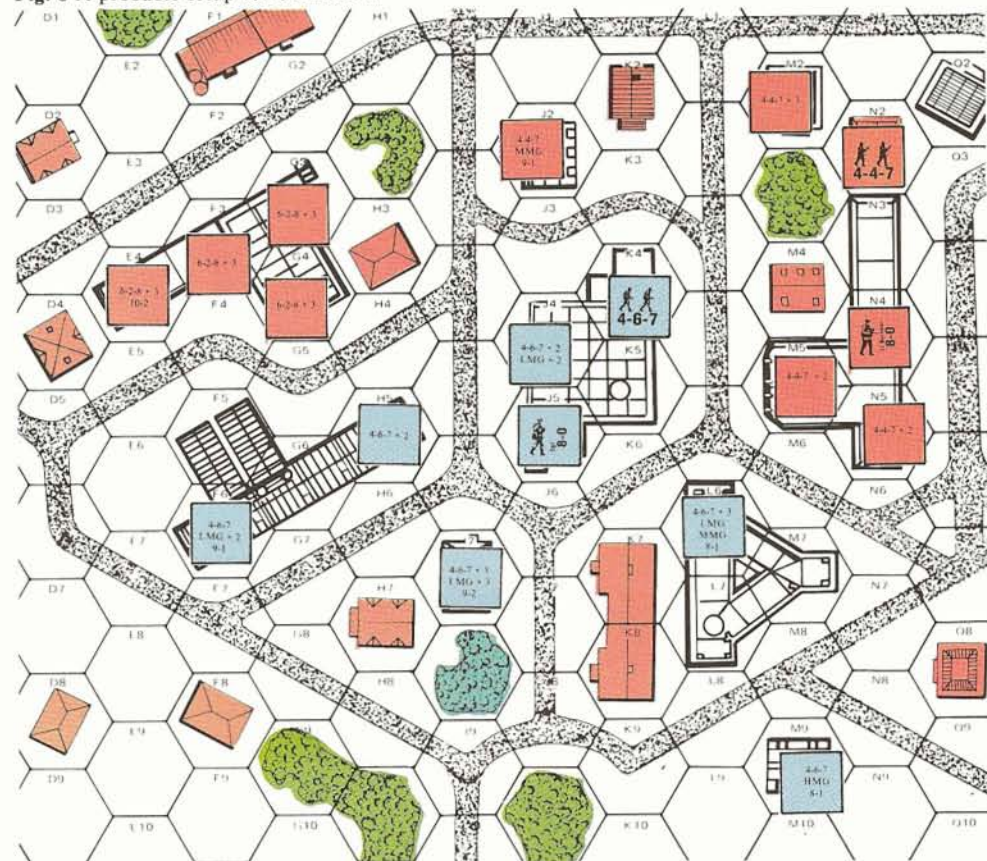
One solution to the problem is the one utilized; a strong force in J4. However, too strong a force in J4 poses a problem in the defense of the building it's in, K5. The squad in K4 has a clear LOS into hex M1, reducing the chances of Russian reinforcement of their central zone. Unless M1 is covered, Russian squads from M2 and/or N2 have a two-turn route into J2 via the partial (but playable) hex north of L1 without risking a –2 DRM attack from the L6 hex. The ability to reinforce the central zone increases the probability that an effective fire on J4 can be maintained from J2.

As mentioned, locating the entire building M7 force in hex L6 is a versatile move, but it's also an all-your-eggs-in-one-basket move. Because of the ease of reinforcement of building M7 from M9, this is not as dangerous as it might otherwise be.

With all of this, what do the Russians do? On balance, a good, aggressive opening is to move the six squads from F3 and G3 to H2 and H3. Even with some losses this makes for a respectable fire attack on J4. While this movement does create additional targets for the Germans in I7 and J4, this is not a completely negative thing. The already existing target in J2 profits from any diversion of fire to other targets. The non-moving units in E4 have the squads in H5 as their target. In order to put additional pressure on building K5 the forces in M2 can stand and fire at the lone squad in K4. The lone squad in N2 is best sent south while the units in M5 and N5 need to concentrate on the Germans in L6.

With this beginning no Russian unit is in less than +2 DRM cover. What happens after this is largely a function of how well the attacks go. Building F5 is such an obvious initial target for an assault that the German player may be tempted to advance units into it from I7. On balance, this appears to be a poor move. If he isn't careful, this sort of concentration could cause the ultimate loss of K5. More usefully, the force beginning in M9 is better deployed in M7, except for the leader who

needs to move back to L7 after helping his squad lug the HMG. L7 is the obvious collection point for any units broken in building M7.

Starting as indicated, too much depends upon the results of the first turn battles to permit further specifics of play. There are, however, a few things concerning play during the rest of the scenario that I think are worth passing along. To the best of my recollection, all of the Russian wins have involved the capture of either F5 or K5 by the Russians. However, not all of these wins involved the territorial objective of gaining two net buildings. The loss of either building provides the Russian player with some valuable opportunities to concentrate his efforts against selected portions of the German force and follow the second possible route to victory. Then, too, there's that matter of movement. The high terrain costs and the extensive fields of fire encourage moves of no more than a hex or two. Frequently, this seems to lull players into forgetting just how far a unit can go when there's no one to shoot at him or he gets lucky. My last point deals with the matter of fairness. The rules (19.3) outlaw "potential" LOS checks. As a practical matter each side should be allowed to make such checks before the game is begun. In addition, a beginner at this scenerio who's playing an experienced player should be given some free LOS checks during the game, in addition to getting to play the Germans.
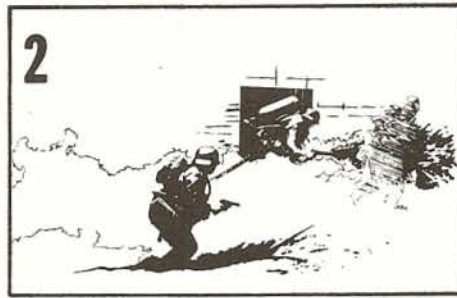
This scenario requires but one additional page of rules, but that page adds a great deal. First off, there are two new weapons, flamethrowers and demolition charges. The great strength of the former is that its attacks are not subject to any DRMs. Its weakness is that your chance of using it three times is only a bit over 50%; on a roll of 9 or more it dries up. The weakness of the other new weapon is that you must move adjacent to your intended target. Its strength is the very obvious one of a large attack value.

The concept of "concealment" is a much more far-reaching one. Most commonly, it allows units to burrow into woods or buildings, trading a halving of incoming fire for the opportunity to move or fire. In this particular scenario it is also used to conceal the initial deployment of a portion of each side's force. In order to determine the contents of a hostile stack

topped by such a counter, it is necessary to obtain a result on the IFT requiring at least a morale check. Against a stack in a stone building this requires an attack strength of at least 32 (before halving) to have a better than even chance of removing the concealment marker. In passing, it's worth noting that the probability of removal is almost the same whether fire is split or not. This means that if you have the option the fires should be split because of leader benefits. There's a second advantage if you are not designating all attacks prior to resolving any. As a final comment, the way in which this concept is presented seems to cause some players to overlook its benefits in later scenarios where it is frequently useful for protecting troops not currently involved.

Victory in this scenario is determined by either having six hexes in building X3 under the type of control defined in the first scenario or by having the only unbroken units in the building. Fig. 9 shows the terrain involved. The burden of attack falls upon both players. The superior quality and equipment of the Germans in the east compared with that of the Russians in X3 would virtually guarantee victory unless the western Russian forces can break in. The setup sequence is specified, but, to add a bit of spice, who starts is determined by a die roll.

Although the Russian X3 force sets up first, the number of concealment counters is such that, normally, the stack heights tell little. (For those of you without the game, remember that all you can see

Fig. 9 A probable setup for Scenario 2.
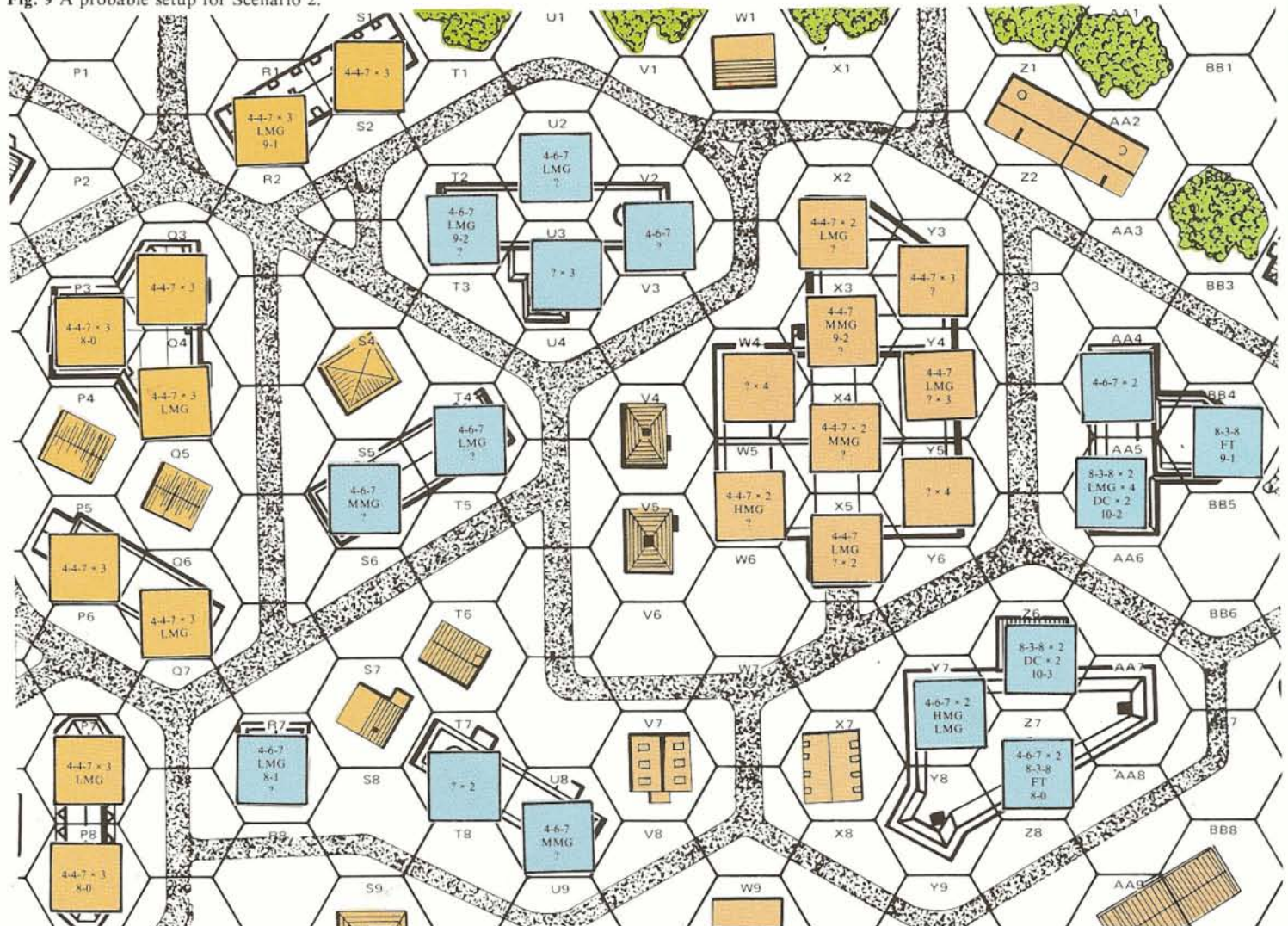
of those stacks is the "?" on top.) Since what is done in X3 is in response to German capabilities it is, therefore, more instructive to consider the Germans first.

In the west, occupation of hexes S5 and R7 is desirable. This will bring any western Russian units under fire in clear terrain should they attempt to move between building R1 and the other three western buildings. Similarly, units in T4 and T6 would endanger movement between buildings U3 and X3. Although the first of these is, initially, under German control, a change in ownership must be expected. The unfortunate part about T6 is that it may prove impossible to get anyone into there. Overall, the western German position suffers from being too thinly held. Efforts at concentrating German forces, usually into buildings U3 and T4, have been considered. The fault with such a play appears to be that the result is too brittle. It slows the Russians a bit longer, but seems to yield fewer German survivors when the dam finally breaks. While on the subject of breaking, consider the German difficulties in rallying broken units in the west. A second problem with removing Germans from R7 and T7 is that Russian movement into this area not only endangers units directly to the north, but the main attack on X3 as well.

The setup in the east is intended, first, to determine what's in hexes Y4, Y5, and X5. The forces to do this are those in Y7, Z6, AA4 and AA5. Depending upon the success of these attacks, the German force in Z7, including the leader, is available to move into either X5 or Y5, thereby gaining a foothold in X3. In anticipation of this possibility, one might wish to rearrange things enough to place an 8-3-8 into Y5. Hex X6 could then be smoked prior to any German Prep Fire, thereby greatly reducing the danger from the Russians in Z6. If this were done, however, the HMG should remain in Y7. A prudent player would consider just how much is visible from the second floor of Y7. If not used in an advance, the engineer squad and flamethrower in Z7, like the combination in BB4, is available for movement into the front line. This would allow an Advancing Fire attack upon any of the hexes attacked during the Prep Fire Phase and found to contain worthwhile targets.

Before commenting upon the Russian deployment it should be mentioned that the above approach is representative of the "look-before-you-leap" school of thought. For the heroically inclined, there is one major alternative: rearrange the engineers, smoke hexes Z3, Z4, Z5, Y6, and X6 and charge. This can be very successful, but places too much trust in dice rolls to suit me.

In the west the only options the Russian player has concern the placement of the leaders and the LMGs. The best leader is deployed into R1 in the hopes of speeding up the assault on building U3.

In X3 what we see is compromise. Enough hexes are covered so that easy movement into the building is limited without use of flamethrowers. On the other hand, it does not risk everyone, with strong forces kept back for the necessary counterattacks. Because of the number of one-story buildings to the west of X3, the HMG in W5 can be very useful against the western Germans.

That brings me to a comment about a kind of tunnel vision I've noted in myself, among others. It turns out to be quite easy to see this, initially, as two separate combats, pretty much divided by the V column. In fact, particularly when the Russians in X3 have been forced to give up many of their concealment counters, attacks by X3 units against the western Germans can be quite useful.

I think that the comments concerning the setups and the victory conditions offer enough insight into where the game will go from this starting point so that just one thing further need be said. For both

sides, the rules concerning broken units need to be considered very carefully. There are some opportunities for clever play in the west.
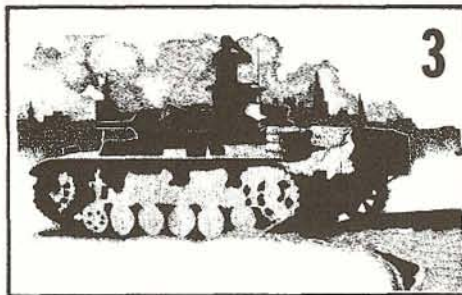
Scenario 3 comes in two main flavors, and I have a confession to make. When I first received the playtest materials I guessed what scenario 3 would be after seeing 1 and 2. And I didn't think much of the idea. Fortunately, because I dislike eating my words, I played the scenario before saying anything. The result of such play was that I said nothing about my first impression. I do so now only because I'd hate to have you miss what's in version 3A of this scenario just because you wanted to get the armor (version 3B) into play.

3A introduces Sewer Movement for the Russians which, in its present form, has fairly little impact upon the course of play. The original version of the game made this below-ground movement free of uncertainty and did not require leaders. The result was something that I and, I suppose, others found somewhat unrealistic. It is one of the pains of a game developer's life that he must wade through all of the "improvements" that playtesters generate. As things now stand, such movement is usually the result of desperation, and that seems appropriate.

To win this combination of 1 and 2 it is necessary, at a minimum, to satisfy the victory conditions of one scenario and to draw the other. If each side wins one, it's a draw. Looking at the combined boards we see that the Russian player pretty much controls the question of playbalance. He has the option of diverting squads from the relief of X3 to the battle on the western half of the board. Enough of that sort of thing will guarantee victory there, at the expense of a loss in the east. To prevent this sort of thing, the Russian player needs to go after a win, and that can be tricky. He faces the danger of falling between two stools as he tries to cope with the advantages and disadvantages of a doubled battlefield. The increase in scenario length over what it was in the first one provides the Russian player with more leisure to make his move in the west. Alternatively, he may divert some forces from the center of the board and try to kill enough German units to gain a non-territorial victory there. The German player may also try to profit from this new situation. Using German forces in buildings M7 and M9 in conjunction with those to the west of X3 may allow him to do a number on the Russian forces between them in buildings P5 and P8. But, of course, that will weaken the German position in K5 so that . . . And that's the sort of thing that makes scenario 3, even without the armor, a very interesting one.

With scenario 3B we see introduced a major section of the rules, over four and one-half pages worth, covering tanks and SP guns. Fig. 10 illustrates one of the latter. Four Russian T34s enter at I1 in turn 2 while the Germans receive five (in two flavors) STG IIIs on turn 3 at Y10 and/or GG5-GG6. Alternatively, the German armor may delay one turn and enter on any southern or eastern *edge* hex.

Figure 10

The appearance of these vehicles will not turn the game around. This is close, congested terrain and there's a lot of infantry out there. Here the role of armor is support. To put the matter into perspective let's consider two points.

The first one concerns the AFVs abilities with respect to one another. On balance, the forces are fairly evenly matched. The T34s can travel a third again as far and can both move and fire (Advancing Fire Phase) in the same turn, unlike the STG IIIs who can only do one of these per turn. In addition, two of the Germans' vehicles can fire only 105 mm HE, which is less effective against vehicles than the others' 75 or 76 mm AP rounds. However, besides being more numerous, the German vehicles have better armor. Since the outcome of an AFV vs AFV fire attack is modified by range, cover, movement of target and/or shooter, gun caliber, ammunition type, target type, and vehicle aspect there's nothing specific to say. The probability of success ranges from excellent to lotsa luck.

The second, and far more important one, concerns the AFVs abilities with respect to infantry and vice-versa. Let's consider first what the AFVs can do. The 75/76s fire on the "8" column of the IFT while the 105s fire on the "16" column. However, AFVs must first roll on the To Hit Table. For infantry in woods or buildings the net effect of this last requirement is about equivalent to an additional +1 DRM for fire on the IFT. From what we've seen before, then, the AFVs fire, approximately, on the "6" and "12" columns. If we look at the case in which either the target is concealed or the vehicle moved in some way during the turn we see an even more depressing picture.

If one of our AFVs wishes to do the maximum damage to an infantry squad in a building, it must move adjacent to its target and fire the next turn. Unfortunately, there may not be a next turn. If the target is either a 4-4-7 or a 4-6-7, there's only a 10% chance that he'll destroy the AFV. The 6-2-8s have a 30% chance while the 8-3-8s do it 52% of the time. And that's with no special weaponry. The moral is clear. Armor is used in a support roll.

If that is so, we come to the question of how is this done. The key material comes in section 31 and 32 of the rules, Transporting Infantry/Tanks and SP Guns, and AFVs As Cover. The latter is the more important one. First of all, there is no –2 DRM for Defensive Fire against passengers on an AFV moving in the open. Moreover, if the fire is directed across the "front" of the vehicle from ground level there is a +2 DRM for attacks on passengers. In addition, a stationary vehicle can provide good cover to units moving behind it if the attacker is on ground level. As an illustration, suppose that the vehicle is in I3 and the only Germans capable of firing into I hexes are those in I7. Russian units moving through hex I2 would get a +1 DRM while those moving through I1 could not be fired at.

Considering how much space has been devoted to positioning units because of fields of fire, this should give you some idea of the effects produced by adding these vehicles to the scenario. As for specifics, you'll have to discover those for yourselves. Our playtesting revealed a considerable range of possibilities. To illustrate something of this range, the German player could elect to attempt to neutralize the Russian armor by waiting a turn and entering on I10. Alternatively, there are games in

which the vehicles of the two sides never even see one another. But no matter what is done the vehicles remain only a portion of each side's strength. The key to good play lies in understanding the interactions that exist among the various components of *SL*.

If you're new to this game I think you'll find what's been said of some use. Hopefully, it's demonstrated something of the delights of the first three scenarios. If you'd like to create a whole new set of problems, try adding the Second Level rules, sections 57 and 58.

⬡ AH

★★★★★

AH Philosophy . . . Continued from Pg. 32

problem when you ask questions about more than one game in the same letter. This means that your letter sits in designer A's box until he's answered his questions & then goes to designer B's box to await his answer day. By the time your letter has made the rounds of six designers, you may find that the letter no longer contains sufficient postage given the propensity of the Post Office to raise the rates every session of congress. Speaking of which, questions that arrive without the mandatory self-addressed, stamped envelope are completely at the mercy of our designer. They are not obligated to answer these queries at all & your chances of a reply are "iffy" at best. One of our number, who is slow answering nutmail anyway, absolutely refuses to answer those without the SASE. And if you ask questions in other than a Yes-No format, you're in for a long wait. Questions attached to orders have two strikes against them before they start. The shipping department is in another building 10 miles away, and all mail orders must be kept there on file for 6 months. Questions involving grid-coordinates can't be answered without a diagram of the situation, because we simply don't have the time to set up examples by grid-coordinate. Neither can questions on the design, research, or history of a game be answered due to the time required by essay type answers. So there you have it . . . we have more people answering questions than ever before but the service is still not what we would like it to be. You can help by avoiding some of the pitfalls mentioned above.

I hope I've answered Mr. Mueller's company critique adequately, and in the process, answered some unspoken questions of the silent majority. Whether you feel the "excuses" above are justified or side with Mr. Mueller's complaints & feel I'm just sidestepping issues, perhaps now you can better understand our trials & tribulations in attempting to be all things to all people. The important thing is that we value your opinion and if you voice it loud enough and often enough, we'll do our best to do something about it. And if we don't, rest assured that management will. I'm not the only one who reads the mail, and if I'm too slow answering your *SQUAD LEADER* questions or too obstinate in running the *GENERAL* my way, a letter to our leader will surely result in a phone call from on high which will shake me out of my lethargy & into action. I'll curse you for it, but I'll deserve it. So keep those cards & letters coming in.

THE AVALON HILL GAME CO.

BALTIMORE, MD.

DESIGN ANALYSIS

GAME DESIGN: ART OR SCIENCE

AN EVALUATION OF THE SQUAD LEADER GAME DESIGN

By Don Greenwood, John Hill, and Hal Hock

Off the early mail order response and initial reviews, *SQUAD LEADER* appears destined to be a major success and perhaps more than just another entry in the game glut. So favorable was the initial reaction that we have embarked on publication of several sequels to extend the game to introduce new terrain, nationalities, weapons and added realism. Nor have reviews been limited to boardgaming circles. Several miniatures manufacturers have expressed interest in acquiring exclusive rights to the name and packaging for their own miniatures. Yet, no game is completely free of criticism and *SQUAD LEADER* is no exception. Among the game's critics is none other than Hal Hock, designer of *TOBRUK*. This really comes as no surprise as Hill and Hock are on different ends of the design spectrum. The two have widely varying philosophies as to how best to broach the data of raw history into a game format.

Hill's is the *artistic* approach akin to the impressionistic school of painting where subjects are abstracted until the *overall* effect on the viewer is such that the artist can will his impressions upon the viewer. Hence, an artistic designer studies history with concern for the overall battlefield environment and how each specific weapon relates to it, as opposed to proving ground statistics. Regardless of a weapon's value, if the soldier wielding it has confidence in his handling of the weapon and its overall effectiveness, his performance will be greatly enhanced. He subscribes to the opinion in vogue these days in battlefield research that technical differences of weapons is not nearly as important as the psychological perception of the individual using the weapon. This is a question of perception and is not to be confused with morale. Furthermore, this design outlook takes a very casual look at battlefield statistics and in the extreme case, will dismiss proving ground graphs and charts as suspect since they fail to capture the battlefield environment. All proving ground data is based on a "controlled" situation, but the battlefield is a totally *uncontrolled* environment. It is a situation where the incredible, the bizarre, the unexpected and the totally improbable, happen with an uncomfortable regularity. Nothing can be stated with certainty. Events will be dictated by the laws of unregulated fate.

Hock is the scientist and indeed has been employed in such a capacity by the government. He believes that since a battle is primarily a clash of technology, it can be measured. Proving ground data is his bible. Armor actions can be studied by careful study of "projectile penetration" vs. armor. Studies show that a 75mm AP shell will penetrate exactly "X" mms of armor at "Y" range and this very fact has led to many a gaming tank being routinely saved or destroyed by a few mm of armor in the vast majority of wargame rules currently available.

The artist responds that this shell vs. armor test does not always hold true in the battlefield environment; e.g.:

1. At what angle did the shell strike?
2. How many times has this particular armor been hit?
3. Was the vision port being opened at that instant?
4. Did that AFV have any miscellaneous equipment such as spare tracks on the hull which might have partially deflected the hit?
5. How did that particular crew react to the hit? Many an operable tank has been abandoned on the battlefield.
6. Might there be variable metal quality among seemingly identical tanks? Casting and weld quality has been known to vary from one factory to another, and especially in the case of field repaired vehicles.

The artist concludes then that when shell hits armor, *anything* can happen and that only a most generalized statement of probability can be made.

So now, we have an idea where the "artist" and the "scientist" are coming from. Given this background, we can study the finished product in a much better light. John Hill is an artist, and *SQUAD LEADER* is the prime result of the "artistic" or "impressionistic" school of wargame design. *TOBRUK* was designed to be technically perfect. Hal studies the published data tables with exacting scrutiny, and his style of game design reflects this. Being of the scientific school, he accounts only for that which is documented, and makes sure every point is played out. In *TOBRUK*, each time a tank or MG fires, every shell is literally accounted for, and his infantry squads use a recorded roster system. It is a precise, documented system where everything is mechanically spelled out. There is, however, no room in his approach for the operation of non-standard events or "imponderables." In *SQUAD LEADER*, *everything is abstracted*, while in *TOBRUK* nothing is. *TOBRUK*, with its reams of documentation, impresses your intellect, while *SQUAD LEADER* wrenches your emotions. Hill has deliberately designed the various values so the gamer can "feel" an escalation of terror, as the numbers mount up. Hence, these "terror jumps" are in easily modularized jumps, conveyed in a standardized CRT. Such an abstract concept as psychological terror thresholds might well be looked on as heresy by Hal, but they are the main cornerstones of *SQUAD LEADER*.

So, who is correct? The answer is neither and both. No game will please all of the people all of the time, but both games will greatly appeal to some groups . . . or, to put it in simpler terms: "different strokes for different folks." Yet, it might be enlightening to see how the artist fields the critique of the scientist. How much factual difference will there be when Hill's "psychological" adjustments are compared to Hock's data? We'll find out as the scientist comes to grips with the artist. Hock's comments may be recognized by the italic type.

MACHINE GUNS

The firepower, range, range dependency of firepower, and breakdown numbers of each type of machine gun appear to be sheer guesses. This is such an important fact that some elaboration is in order. MG's are critical in the game, so I will confine my discussion to them:

If, as in stated in the Designer's Notes section, the firepower and penetration values for each class of MG weapons is based upon relative rates of fire, then why, in viewing the table below, do obvious discrepancies arise?

Weapon and Rates of Fire (Cycle/Deliverable)			
Class	German	American	Russian
LMG	MG 34 (900/200) or MG42 (1200/250)	BAR (350/100) or BAR (500/150)	DP (450/150)
MMG	(none actually)	M1919A4, A6 (450/150)	SG-43 (650/250)
HMG	MG34 (900/300) or MG42 (1200/500)	M 1917A1 (500/250)	(none actually)
.50 HMG	(none)	.50 Browning M2 (450/125)	DShK38 (540/150)

Note that there is no easily rationalized way of saying that a LMG has a rating of 2, a MMG a rating of 4, and HMG a rating of 6, and a .50cal HMG a rating of 8 as is done in the game. If anything, the numbers presented above belie such an assumption no matter which weapon is actually designated as being the LMG, MMG, etc. It appears that the assumption was made for convenience's sake only with no serious consideration of the data.

Few may notice that the lethality of all of these weapons is considerably underplayed in the game. In doing my own research I've had occasion to evaluate these lethalities at great length and, for just one example, I've reproduced below the expected killing power of one LMG, the German MG42, to illustrate: Without going into too much detail, be it enough to say that the evaluation was very complete, going from the 1000 inch grouping capability of the weapon all of the way through the vulnerability of a single man and every possible advantage was bestowed upon the target unit. These results should therefore be considered as being very conservative:

Expected Serious WIA or KIA Man targets; Moving in Open MG42 LMG; One minute of aimed firing; Range (meters)							
100	200	300	400	500	600	700	800
22	20	9	5	3	2	1	1

Note the overwhelming range dependency of these results and the crippling casualty potential at and below 300 meters. Neither of these effects is modeled at all in SQUAD LEADER where, on numerous occasions during test play, I have been able to march infantry squads right up to a German LMG in the open with no losses. I can't see why you've allowed such a seemingly obvious error to remain in the game.

Hal missed the whole point of the machine gun rating, but my analysis is somewhat sophisticated if not all that obvious.

The "2" LMG represents a MG34 "type" weapon or perhaps a Bren Gun . . . with the ammo being drum or magazine fed. In reality, it may only be a French Hotchkiss . . . but being non-belt fed the operator is going to be a little more careful with his ammunition usage. All in all, in terms of relative harm to the enemy, it is roughly equivalent to half a squad in *most* situations. His weapon gives him better battle range as he probably has a bipod and his ability to saturate an area if needed with a whole clip or long burst earns him the ability to penetrate into an additional hex. This could also be a belt fed gun, being fired frugally . . . might be last belt . . . or it is ready to fall apart . . . but for most cases, consider this to be a drum/magazine fed light machinegun.

The "4" MMG and 6 HMG could be many different weapons. Hal points out that the Germans didn't technically have one . . . the MG34 was light and the MG42 was heavy. So say the field manuals. Right? Well, only on the surface. Consider an MG34 with belt feed. That is better than the drum fed MG34 since now the gunner can really put out more lead per unit area, so it is probably better than a "2". Yet, it is not equal to the MG42 with a heavy tripod, extra barrels, plenty of ammo and a telescopic sight. No, it's not that good, so it's not a heavy . . . it is somewhere in between. So, by USAGE or EFFECT it is a medium machine gun . . . and a "4," is about right, while the 6 for a gun with all those extras is really a good jump. You get an extra KIA and the increased penetrations really warp the mind of the enemy . . . he feels, he fears, he now knows the awful potential of the HMG. Its feeling carries heavy weight.

The U.S. .50 cal 8 factor MG is rated so highly simply because it was a good weapon. The Americans rated it above any other MG and hence the crews operating it tended to do better and participate much more. It has a very distinctive sound and can almost maintain a rate of fire equal to a water cooled gun. Its heavy shell negates much cover and it can literally take a wooden house apart. Against an enemy in general cover, it is the best, but since all cover is the same, I gave it the little extra effect of "8" firepower factors. Notice the beauty of this, when looking at the chart from 8 to 6 the only difference is "psychological." The KIA probability is the same . . . and that captures the .50 very well. Its loud noise and heavy cover ripping bullets scared the enemy much more than the smaller .30 cal bullets, even when there might be more of the smaller bullets.

Hal also feels that the game is not bloody enough! According to his "chart" there should be a great increase in killing power. What he forgets is that a "double break" is the equivalent of a kill, and that range does indeed play a major part, since at "point blank," range firepower doubles. A LMG at point blank range is a "4." Moving in the open adds −2, and with a MG, most competent players will include at least a −1 leader. That is a total DRM of −3 with 4 factors that yield a dice roll of 5 or less killing everything in that hex, with a 9 or less forcing a morale check. In reality, that would probably be against a quick rush, and the troops would only be exposed to the MG for 30 seconds or less. And we still have not fired the squad that is there . . . remember they both can fire. Firing both in concert yields a −3 on the 12 firepower column with a KIA occurring on a 6 or less and a Morale Check on a roll of 12 or less. No, there is no justification that *SQUAD LEADER* is not "bloody enough." And I would very much like to play Hal, *as long* as he is convinced that marching up to German LMGs in the open is a very safe tactic. If he still feels that way, my only comment is . . . "C'mon Turkey . . . ".

In summation then, Hal conveniently leaves out several other valuable characteristics of MGs in *SQUAD LEADER* which do not appear in other more conventional games. Paramount among these is the penetration factor, which allows the MG to contest several target hexes simultaneously. Add to this the fact that defensive fire affects *all* units which have traversed a target hex in the preceding movement phase, and you have the potential for a MG doing an immense amount of damage. In one test game we played, the better part of a Russian battalion was eliminated in one turn by a single machinegun. This isn't lethal? Hal also neglects the added depth a machinegun affords a position in the game. Normally, a squad can fire at only one target hex and in one direction. A MG doubles the squads directional choices, and depending on its penetra-

tion factor can lay down a devastating fire lane capable of protecting a large expanse of the board from rushing infantry. Lastly, let's not forget that a machinegun is not always used in ideal circumstances. While Hal is quite correct in pointing out its lethal aspects against exposed infantry, we cannot always assume that the target will be so accommodating. Consider the case of a ten man squad spread out behind the walls and different elevations of a stone building. Arbitrarily upping the firepower of a MG in this situation would not be appropriate. More importantly, such a design change would rob the game of any semblance of infantry maneuver—making the defense supreme.

ROAD MOVEMET

A road movement of 12 hexes (with leader) per turn equates to roughly 9 mph and in no way could such a rate be maintained by military personnel even running in track shoes on an oval track (it's beyond the Aerobics excellent category for military personnel), let alone in battle with equipment.

Actually it works out to 8.16 mph, but that is not the point. Such rates are not maintained over a long period. *SQUAD LEADER* is a game of short rushes, pauses for covering fire, and careful slow advances (Advance Phase). Given the flow of the game, the movement system is one of its strong points. Even an overweight clown like me could easily run 8 mph with weapon for a short sprint if my life depended on it. Granted, I would be fatigued and would probably rest afterwards, but this is generally what occurs in the average *SQUAD LEADER* action. While it is possible and quite unrealistic for infantry to maintain this speed in the game over longer periods, it is extremely unlikely to occur given the nature of combat in the scenarios provided. For the sake of realism, a fatigue rule should have been incorporated, but it would have been at the expense of playability and bogging down an already complex game. Such a rule will be included in the expansion gamettes for those who are really into the system, but it wasn't deemed necessary for the basic game. Indeed, in the overall analysis, reducing movement would have been unrealistic and given the game as much excitement as a jousting match between snails. This seems a high price to pay for correcting a technical error of the game which occurs so rarely, especially when one recalls that the terrain has been abstracted in any case (see Designer's Notes) for the sake of correct "feel."

AREA FIRE

A simple one-half reduction in effectiveness when firing against a hidden target goes to the other extreme of giving too much effectiveness. Searching fires in general are almost always ineffectual except in forcing self-disclosures by enemy troops.

Here, Hal is on a little better ground. He maintains that my halving of area fire is too generous. Well, perhaps . . . but to reduce it further would make it nearly worthless. As it is now, it is very weak since cover gives such benefits, and barring night scenarios, the concept is used only when in cover. The problem here is that Hal simply felt that ½ was too generous. By itself, I'd be inclined to agree, but within the overall game system wherein area fire also has to deal with cover modifiers, his point may be overstated. Remember also the abstract nature of the game. Area fire does not necessarily mean that the attacker is firing at a totally unseen target for the duration of the fire. Perhaps the first few searching shots were enough to evoke a response by the enemy—thus allowing the rest of the attackers' fire to be concentrated and more effective. The IFT accurately reflects that possibility.

FIRING THROUGH FRIENDLY TROOPS

This practice was, and still is, absolutely forbidden in field practice due to the danger involved. Firing over the heads of friendly infantry was and is commonplace provided the firer obeys the safety zone rules laid down in ballistics tables.

We adhered to the same principles and such fire was not allowed in all but the very last prototypes. Playtesting, however, showed that some very real problems occurred if infantry forces of any kind could be used to block line of fire. Sacrificing a weak unit by using it to screen the movements or existence of a more important or numerous group right behind it proved both unrealistic and harmful to play balance. Thus reinforced, we retreated into the comforting confines of our abstracted time/space ratio, or the phase system. Who is to say, after all, that any units fired through are not in a prone position during the covering fire of a Prep or Advancing Fire Phase. Certainly any friendly units fired through during the Defensive Fire Phase could lay claim to such a position. Finally, who is to say that fire lanes and paths of advance can't be defined within a 40 meter hex during a combat situation?

SMOKE

Issue of smoke candles and grenades to any unit, especially recon, was very common during the war. I don't see why only engineers are allowed smoke use in the game.

Hal is quite correct, but the decision to limit use of smoke to engineers was made more for gaming purposes than realism. Giving this capability to all troops turns the game into a smudge pot of blinding smoke all over the board before either side will make a move. Furthermore, while such materials were often issued to well-equipped troops it is unlikely that many units saw action with their full allotment of TO&E in a majority of cases. We felt restricting smoke to engineers was the best way to limit its use to reasonable quantities. It probably *should* have been mentioned that other troops may utilize this capability if so directed by the scenario in play.

AFV COMBAT

Believe it or not, I approve of the tables and methodology, but only because of the disclaimer included in the Designer's Notes section.

Hal is being kind. Actually, the armor role in *SQUAD LEADER* leaves a lot to be desired for a true armor buff, but *SQUAD LEADER* was intended to be primarily an infantry game. Given the game's appeal as a *system* in and of itself, we are expending a like amount of energy in improving the armor role in the expansions. Several of the weaker aspects of the armor rules will be modified or done away with entirely. The counters will be completely revised so that the new system can accommodate all the WWII era armor and not the selected handful of AFVs provided in the basic game.

CANNISTER AMMO

There is only one reference to the existence of such ammunition in the popular or official literature and for that reason I'm sorry to see it included. The definitive TM 1939-3, German Explosive Ordinance; Projectiles and Types document of 1953 which lists all known types which were issued to German forces doesn't even mention the round and so I assume it was only experimental. HEAT, or hollow charge, ammo was in universal issue for German AFVs, however, and so I'm doubly disappointed in the rules which do not allow them to use it in the game.

The point is a good one. In our efforts to give as varied a feel of combat as possible, we may have gone too far afield. Cannister rounds *did* exist and were used, but their use was probably not as widespread as even our limited usage would suggest. As to HEAT rounds, availability fluctuated, depending on the time period, and the Germans

never enjoyed type of abundance possessed by the Americans. The treatment used was an attempt to broadly show the advantages of the different nationalities without getting overly technical. The inclusion of an H5 symbol for the STG III would probably have been a better way to show this.

PANZERFAUST AND HEAT VS. INFANTRY

Hollow charge munitions produce blast and fragmentation almost exactly as do HE rounds and are therefore very lethal to infantry and soft vehicles. This lethality was known by the Germans who advised keeping a chambered hollow charge round ready in combat AFVs for the quick engagement of either type of target. When I personally attended the Armor School at Ft. Knox in 1966, I was trained to adopt this same doctrine in my unit for the same reason. I therefore believe both of these rules are in error and should be changed.

I have to stand with my original design here, and this is once again a design technique to reflect the tactical usage of weapons. Hal is technically right, but his points would make the game totally unrealistic. The key element to remember is that the *panzerfaust* was tactically issued as an anti-tank round and realism would not be served if we allow people to go infantry hunting with it. The overall effect here, no matter what the specs say, would be wrong.

COUNTER BATTERY FIRES

Although I used the same rule in TOBRUK, I have just discovered in a recently declassified British document that such missions generally required twice the firepower of the battery to be suppressed. That is, in general, two 105 batteries would be needed to effectively suppress **one** *enemy 105 battery and so on. It might be interesting to change the rule accordingly.*

BARRAGE VS. VEHICLES

The danger to tanks or SP guns from indirect fires is nearly negligible in real life. The modifiers for these vehicles are wildly incorrect.

In modern terms, yes, but in World War II the barrage could still be a potent weapon for bringing armor to bay. The Germans made very good use of their artillery to damage Russian armor formations. I believe the rule is correct, however, since only the KIA result is relevant. In terms of game effect, though, I have altered the modifier for AFVs slightly to side more towards your point of view.

HE HITS ON ANTI-TANK GUNS

As in my correction to the TOBRUK rules published in the "GENERAL," a 37 mm class HE hit on any gun is certainly powerful enough to demolish the piece and I believe this should be reflected in the rule.

It has been changed.

ARTILLERY VS. BARBED WIRE

The statement made is incorrect—artillery fire missions have often been called to clear wire obstacles even up to modern times. A good rule of thumb, supported by field tests, is that one HE round of 90mm caliber or so will clear about 5 yards square of concertina wire. This figure may be used to calculate volley clearances.

I feel Hal is dead wrong here. I do not care what "field tests" were used to show that "X" clears "Y" of barbed wire. I point to the battle of the Somme, where the British heavily shelled the German wire for a week with no appreciable effect. If shelling of wire worked, how can you explain failure of it to clear the wire in World War I when there was more than enough artillery preparation.

. . . and so it goes. Who is to say which approach is better? All that can be established with certainty is that some prefer *TOBRUK* while others prefer *SQUAD LEADER*. Both games are enjoyed by their respective following and that's all that really matters, isn't it?

The French are IN!

Design-Your-Own Scenarios for Wooden Ships and Iron Men

by   John D. Burtt

Most 18th Century fictional naval heroes share a common trait—they're British. And there's good reason for the Hornblowers and Bolithos; historically, the British were winners. (Except for the unfortunate Admiral Byng, shot for 'losing' at Minorca in 1756.) This historical fact is reflected in the scenarios that Avalon Hill has provided with *WS&IM*. Frankly, it's hard to win with the French, unless your British opponent makes a series of gross mistakes, like colliding and fouling his entire fleet. This is fine for those wargamers among us who thrive on taking the underdog and (Hope springs eternal . . .) pulling off a major upset. For the rest of us, however, the battles boil down to not losing as badly as the other guy when the sides are switched.

The AH Design-Your-Own (DYO) concept adds a whole new dimension to the game and the period it represents, giving us a fast and easy method to construct well balanced, exciting scenarios—minus most of the historical bias. For ardent Anglophiles, this can come as quite a shock—witness the Series Replay, in Vol. 12, #6 of the *General*. With a DYO game, the French can sail the seas with heads held high.

General tactics for the game will undoubtedly be the subject of many articles to come. My intention here is simply a compilation of thoughts and insights I have stumbled on in the course of many battles. There will be those of you who will violently disagree with some of the things I say, but that's what it's all about, folks!

The Ships (Napoleonic Era)

A general overview of the British and French ships up for sale for a DYO is in order here. As a rule, the French start out with more guns and more crew, a holdover from the way things were back in those days. In the historical scenarios, this is a blessing as it gives the French a glimmer of hope. In a DYO, these edges can add up to a rude shock for British players. The catch is that the ships cost more in points. A squadron of five crack British 80s' cost 155 points; the same French squadron costs 165. That 10 point difference might not seem like much, but in order to fit those five 80's into 155 points, one of the crews must be reduced to Poor. Things do even up!

Hull 1 (French 120, 110; British 120, 110, 100, 98)

The French hold a decided edge in these ships. Both French class 1 vessels outshoot every other British ship, except the 120. Couple this with an elite crew and the French will hold a two table advantage over their opponents. (This is reduced to a single table in the Advanced games.) Crew sizes give the French another big advantage with a total basic melee strength of 110 Total Melee Strength (TMS) points for an elite 120 versus 90 TMS points for the same British ship. The British 110, 100, and 98 Ships-of-the-Line (SOL) are glorified two deckers in broadside strength and thus are markedly inferior to the French. For you British players, if you don't want to spend the points for a 120, stick with the class 2 vessels and their greater mobility. French players have a choice, though. Screened as shown in Figure 1, a three decker can cause extensive damage without being hit in return (note to purists, you *can* hit a 120 in this formation, but that means a ship is being clobbered by one of the 80's!)

The disadvantage of a three decker is, of course, its turning ability and its rigging. It can't stay up with a standard L1R maneuver, so your line is short some punch after such a move. And blow a rigging section away, then transfer the fighting elsewhere on the board—it's immobility will make it nearly useless, except for long range rigging shots, helpful to the cause, but you don't win battles by crippling an enemy ship aloft. Its position should be in the middle, anchoring the entire squadron and staying in the fight.

Hull 2 (French 80, 74; British 90, 80, 74, 64, 50)

The meat of any squadron. Ship for ship, the French and British are fairly equivalent. In the Basic game, while the French have a larger crew and the British one extra rigging square (and I'm sure there are those who will gladly testify as to how important a silly little rigging square can be at times!), the 80 gun SOL will batter each other with the same HDT until guns are knocked out of action. In the advanced game, this alters slightly in favor of the French, as the British will find themselves shooting it out on a smaller table. In fact, outside carronade range, the French 80's broadside is as powerful as the British 110 and 100 Class 1 SOLs. A very worthwhile ship!

The 74 gun SOLs are an exact reversal of the 80's story. In the Basic game, the French hold a one HDT edge in broadsides outside carronade range. Other than that, the two nationalities are as close to equal as you can get (and still be different . . .). WARNING: to British players playing the Basic game rules—in picking your 74, note that a single gun hit will nullify any advantage of closing to carronade range if you pick a Common class 74, while it takes *two* gun hits to do the same with a Large class ship. In the advanced game, the 74's will shoot at the same HDT initially, despite the Frenchman having more guns. A difference in the rake advantage is the reflection of this fact.

The other British ships have their advantages and disadvantages, but in the many games I've played, my opponents and I have stayed away from them, so I'll leave them to you.

With neither side holding a decided edge with their class 2 ships, superior (or lucky . . .) movement will tell the tale. Watch out for trying an overly trick move; a single unanswered broadside, especially a rake, can tip the scales to your opponent.

Hull 3 (French 44, 40, 38, 36, 32; British 50, 44, 40, 38, 36, 32)

The Series Replay mentioned above does a far better job than I could in reviewing the main frigate class vessels—there's nothing like a battle to spell out the advantages and disadvantages. The most powerful ship is, of course, the British 50, being the only frigate that can hit shot for shot with the big boys inside carronade range. It's getting there that's the problem!
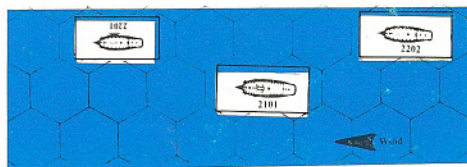

Figure 1: Two French 80's screening a three decker Class 1 vessel from an enemy line to starboard

The British 40 is the best all around ship for the points it costs, particularly in light of the three carronade (read soakoff) squares it has. The French 40 has fewer guns, although like the bigger ships, outside carronade range, it will shoot on the same HDT. Generally, the single crew square advantage the Frenchman has will mean little. In the advanced game, the British situation, 40 verses 40, looks even better.

The 44 gun frigates are a completely different story. Here the emphasis lies completely with the French crew size. It's double the British 44's crew and nearly equal to that of a Large class 74. In a squadron action, if at all possible, the French commanders should have one or two of these vessels around to mop up damaged British ships, or nullify, by boarding actions, a larger vessel. Standard operating procedure for British players—given an opening, nail the rigging sections of these vessels FAST, before you find the crew swarming all over you.

As a general rule, the frigates have no business tangling with SOLs, but amazingly, many players will discount the frigate vessel completely when planning their move or firing their broadsides. Granted, they can't take much punishment, but if your opponent refuses to shoot at them, you'll find that you'll be able to do extensive damage with them before they strike.

This has been a very brief look at the available ships up for grabs in a DYO. Since buying your ships is a good portion of the game, a word or two on how to buy them. For the *WS&IM* novice, this is easy—you buy big ships with elite crews. Experience shows, however, that this ain't necessarily so.

Take a close look at the HDT Modifiers. For all ships with 7-12 guns per side (13-24 guns per side in the Advanced game) a crack crew will deliver the same broadside as the elite crew. This affects the French 80 and 74, the British 110 to 74, the mainstays of most squadrons. Extra points saved could be put to better use.

Example: An elite French 80 and a crack 44 cost 56 points and deliver a basic HDT of 2 and 0 at a range of five hexes, not counting the initial broadside. A *crack* 80 and an elite 44 cost 55 points and deliver 2 and 1 HDTs at the same range. For less points, you get more punch. Something to think about.

Also, when you're buying a squadron, it's a good idea to purchase ships generally equivalent in value. Doing this will minimize your loss if a ship is lost. An excellent example is the previously mentioned Series Replay. The loss of mobility suffered by *L'Brennus* should have cost the French the game—bad luck and a disastrous collision made up the difference.

TACTICS (For Frogs and Limeys alike)

Once you've picked your ships, you are stuck with them, for better or worse. The heart of the game becomes maneuver, hit without being hit, the use of the subtle art of second guessing your opponent. The ancient adage, "Do unto others before they do unto you" was never more true. What follows is a few hard earned "helpful hints." (Note: most of the examples, and thus their explanations come from games fought under Basic rules—but the rules and hints can be applied to the Advanced games also).
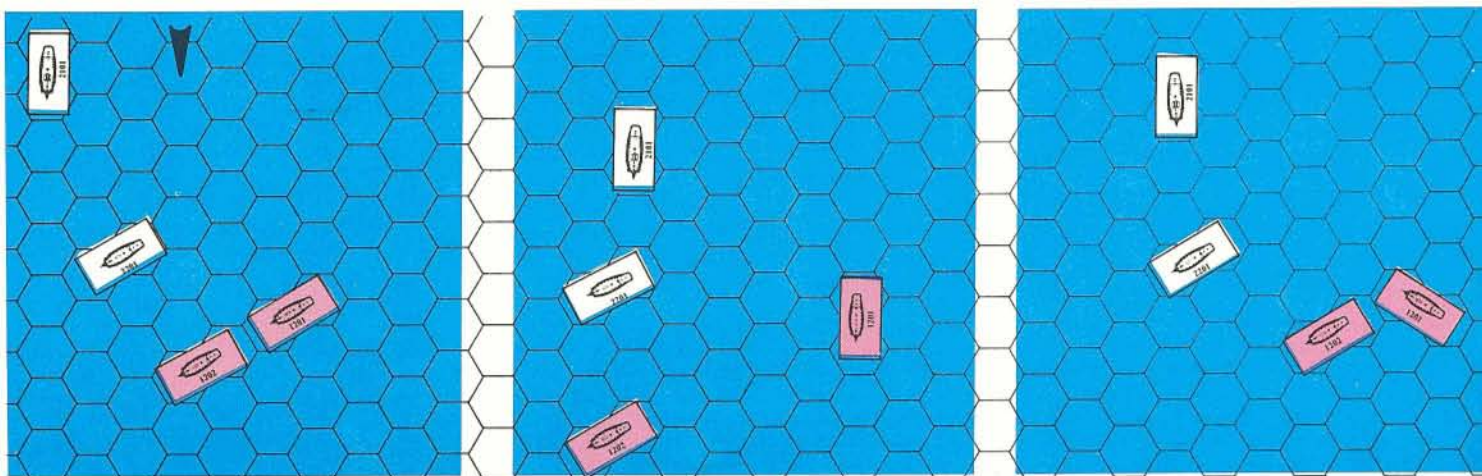
Figure 2: A crack French 80 and an elite 110 versus two Common 74s: Damage: 2101, 2201, and 1202 minus one rigging section; 1202 minus two.
2a: Initial position—excellent for the British

2b: Aggressive action by British

2c: Actual move by British player

First and foremost is the attitude you take into the game: playing a DYO scenario with a well matched opponent, you've got to concede *in your head* that your ships will get damaged and some will be lost (shudder . . .). The days of the overwhelming victory are gone—with exceptions, of course. If a ship is damaged, no sweat, keep on fighting. If you can screen a damaged ship effectively, great, but don't go overboard to do it. (On one memorable occasion, an opponent screened a crippled frigate with another frigate AT FULL SAILS! Result: 2 crippled frigates.)

With this attitude firmly entrenched, a variety of aggressive tactics worthy of Nelson himself can be found.

Example: Figure 2a shows a recent position. For the British an excellent one. The French 110 (2101) can't bring her guns to bear and the two British 74's are firing into the hull of the French 80 (2201). In this situation, the Frenchman has very little choice in the matter. The 80 must move forward to escape the two-on-one, and the three decker must move down to get into the battle. Figure 2b is possible in two turns, given an aggressive British commander.

The 110 can open fire now on ship 1201, *but* the 74 has a stern rake on the unfortunate French 80. Coupled with the initial two-on-one, the smaller French ship will be hardpressed to win its duel with 1202. Figure 2c is what the British commander actually did. 1201 cannot be hit by the 110, whose guns remain silent another turn (repairs anybody?). In my opinion this was not the best move—sooner or later the French 110 will hit 1201, so the British should get the most out of the ship while he can.

Tables 1-4 give a breakdown of the Basic and Advanced CRTs. Using the max and min values, a player can usually tell when he has a "doomed ship," i.e. one that is one or two broadsides away from striking. It's generally the play of these ships that spell the difference in a game. (Note on the tables: The average hits was added for the statistical freaks among us—actually, knowing you can expect 3.33 hull hits firing on HDT6, only makes the pain worse when you roll a 1 or 2 and score only 2 hits!)

The owner of a "doomed ship" has three basic choices:

A) Run and hide/repair
B) Foul or grapple an enemy ship
C) Position to fire from both beams

Although occasionally useful, option A will deprive you of a set of guns and, in a close match, this could leave your opponent with an unanswered broadside, or allow him to disengage a ship for a raking maneuver. Neither is a pleasant prospect. Remember that a ship with twelve guns and one remaining hull square will hit as hard as a ship with no hull damage and the same number of guns—just not as long!

Option B is particularly well suited for the French in light of their larger crews. It is risky since grappling/fouling requires a die roll and failing to grapple/foul simply means the ship will get shot up faster. If you do succeed in boarding, go with everyone and do as much damage to his crew as you can (besides any crew left on board a ship that strikes must remain on board. Going with everyone will keep them fighting longer! More on melees later.) Chances are good your opponent will hold back a section of crew trying to finish you off with his broadside. It should be pointed out to all you eternal optimists that this bloody option should not be tried if the tables show he's got an excellent

Table 1—Hull Hits a) Basic CRT				Table 2—Gun Hits a) Basic CRT				Table 3—Crew Hits a) Basic CRT				Table 4—Rigging Hits* a) Basic CRT			
Table #	Min.	Ave.	Max	Table #	Min.	Ave.	Max	Table #	Min.	Ave.	Max	Table #	Min.	Ave.	Max
0	0	0.17	1	0	0	0.17	1	0	0	0.17	1	0	0	0.17	1
1	0	0.50	1	1	0	0.17	1	1	0	0.17	1	1	0	0.67	2
2	0	1.33	2	2	0	0.33	1	2	0	0.17	1	2	0	1.33	2
3	1	1.83	3	3	0	0.67	2	3	0	0.33	1	3	1	2.33	4
4	1	2.33	4	4	0	0.83	2	4	0	0.50	1	4	2	3.00	5
5	2	2.67	4	5	1	1.17	2	5	0	0.67	2	5	3	4.00	5
6	2	3.33	5	6	0	1.17	2	6	0	1.00	2	6	3	4.33	5
7	2	3.17	4	7	0	1.67	3	7	0	1.17	2	7	4	5.17	7
8	4	4.67	6	8	0	1.67	3	8	0	0.67	1	8	5	5.83	7
b) Advanced CRT				b) Advanced CRT				b) Advanced CRT				b) Advanced CRT			
Table #	Min.	Ave.	Max	Table #	Min.	Ave.	Max	Table #	Min.	Ave.	Max	Table #	Min.	Ave.	Max
0	0	0.17	1	0	0	0.17	1	0	0	0.17	1	0	0	0.17	1
1	0	0.50	1	1	0	0.33	1	1	0	0.33	1	1	0	0.50	1
2	0	1.00	2	2	0	0.50	1	2	0	0.33	1	2	0	1.00	2
3	0	1.33	2	3	0	0.67	2	3	0	0.50	1	3	0	1.33	2
4	0	1.83	3	4	0	0.83	2	4	0	0.50	1	4	1	2.17	4
5	1	2.17	3	5	0	1.00	2	5	0	0.67	2	5	1	2.83	4
6	1	2.33	4	6	0	1.33	2	6	0	1.00	2	6	2	3.33	5
7	2	3.00	4	7	0	1.50	2	7	0	1.00	2	7	2	3.67	5
8	2	3.33	4	8	1	1.50	2	8	0	1.33	2	8	3	4.16	6
9	2	3.50	5	9	1	1.83	3	9	0	1.50	2	9	4	5.16	7
10	2	4.17	6	10	1	1.83	3	10	0	1.67	4	10	5	5.83	7

*firing at the rigging

chance of blowing the rest of your hull apart with one shot. All you'll accomplish then is give him an easy ship to capture and double the victory points he will reap.

Then there's option C. Loosely translated, this option becomes "get in there and shake things up!" Loaded guns are no good to a struck ship, so, if possible, try to maneuver to unload both sides into the enemy. This particular stratagem works wonders on an opponent who, seeing the extensive damage to your ship, assigns one vessel to finish you off and ignores possible rakes as he moves off to engage another ship. Double engagements are to be avoided generally, but when you've only got a couple turns left in a ship, you probably won't have to worry about that unloaded broadside. You'll also find that in order to get into a position to fire both sides, you will most likely screen your own ships from fire and, if you're lucky, throw a wrench into the finely tuned battle line of your opponent.
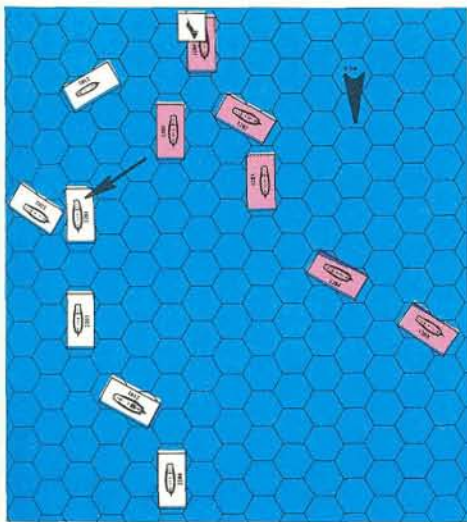

Figure 3: An Elite French 120, 80, and 44, plus three crack 80s versus five elite British 80s and an elite 74. The 74 has struck and ship 1201 is doomed.

Example: Figure 3 shows a position in a recent squadron action. British elite 80, 1201, has just undergone a horrific bombardment from three French ships, including a rake from an elite 120. With only three hull squares left, it is a "doomed ship." Her rigging is still intact and the problem is to inflict maximum damage before striking. Option A is out—there's no place to hide. Option B is out—she can't possibly escape at least a two-on-one broadside next turn, so a single round of fire will do her in. Option C is the only one left. By going to full sails, she can increase her mobility and by moving 1R11 or 11R1, she'll be in a position to fire both sides. Another possibility is R111; this might just shove her into the crease in the French line, possibly fouling a French ship. She will be easy to capture, but with the frigate to windward, and only three hexes separating her from the French she's as good as captured anyway, so it might be worth the points lost to block the enemy lines of fire and disrupt their movement.

And finally there's option D. (Didn't I mention that one??) This is for those innumerable times when the doomed ship has so little maneuverability left that A, B, and C are impossible. In this case, pick out an enemy ship and fire away as you sink slowly into your crying towel.

So much for doomed ships.

In your movement, ALWAYS be aware of the firepower that your opponent can bring to bear; again, Tables 1-4 can be a tremendous help here.

Example: An opponent recently turned his crippled 120 to keep a crack 80 from gaining a raking position. In the process, he gave an elite 120 a stern rake. Whoops . . .

If you're certain you're going to be hit, try and minimize the damage as much as possible. This sometimes can't be done, but usually will involve second guessing.
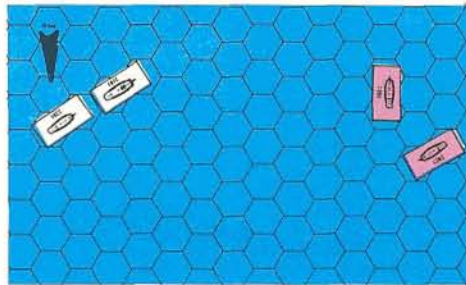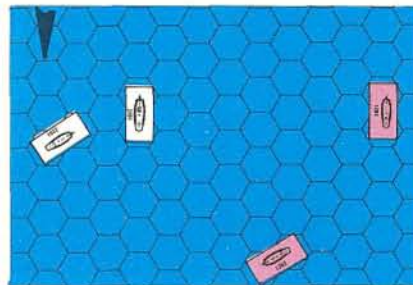

Figure 4: Same ships as Figure 2, 2101 has 6 rigging hits.
4a: Initial position

Example: Figure 4a shows a position at the beginning of the game. The French 110 (2101) has already sustained six rigging hits and is at Battle Sails. By turning the three decker into the wind (L), the British 74 (1201) loses its rake and the HDT drops from 3 to 0. However, as shown in Figure 4b,

4b: The 110's rigging section is doomed.

the second 74, 1202, has the capability of gaining a rake position and pouring its initial broadside into the stern of the French vessel, and HDT5 shot. Combined, an HDT0 and HDT5 shot have a minimum hit possibility of three rigging hits and a maximum of six. In short, the 110 loses a rigging section and is in deep trouble—not to mention the rest of the French squadron! If, however, the 110 moves ahead (1), with the same British movement, as shown in Figure 4c, the British will fire HDT3 (rake from 1201) and HDT2 (initial broadside from 1202). The minimum rigging hits is now one and the maximum is six. Probability still indicates the loss of a full rigging section, but the possibility exists that the remaining three rigging squares will survive the exchange, while two French ships can take their revenge on 1202 at full sails. The second alternative is the one the French commander chose. In actual fact, his British opponent moved 1202 downwind out of firing position and the 110's rigging survived an HDT3 shot. (so all that fantastic second guessing went for naught . . . sigh . . .)
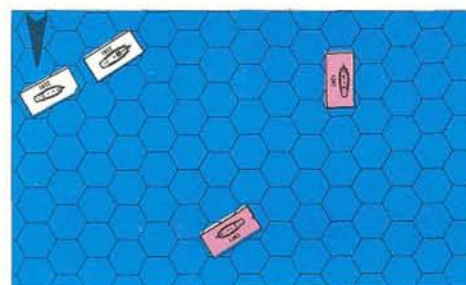
4c: The 110's rigging section can survive (with luck!)

Melees are risky to all concerned and should be avoided, except as a last resort (a doomed ship) or under one of the conditions outlined below.

A) You are fouled/grappled by an enemy who doesn't know he's not supposed to melee. In this case the fight is forced upon you and you have to make the best of it. If you can see that a three round melee will *not* cause the loss of your ship, hold back a section and punch some holes in him. At one hex ranges, you might knock off some of his boarding party, and at worse, if you happen to lose the fight, his hull will be that much more damaged for your companion ships to take advantage of. If you're hopelessly outnumbered, fight on and pray for instant telekinetic powers to roll that 1 or 2.

B) Your crew is assured of a three round victory. If the melee drags on longer than a single round, some joker on the other side is going to either join the fight (friendly ships grapple automatically) or sneak in the back way and put some rakes into you. Should you decide you've got it in the bag and go for the doubled victory points, DON'T FOUL TO DO IT! You'll have to unfoul to free the ships afterwards and that takes a dice roll. And if the luck runs bad, there's that joker again . . .

C) Your ship is about to get nailed with a one hex rake. (Figure 5) In this case, you are grappling and boarding simply to avoid excessive damage to your ship. And there is always the possibility that he'll hold back too many crew sections to pound you with, leaving his ship liable to capture. The more crew he throws into the fray, the less he'll shoot with.
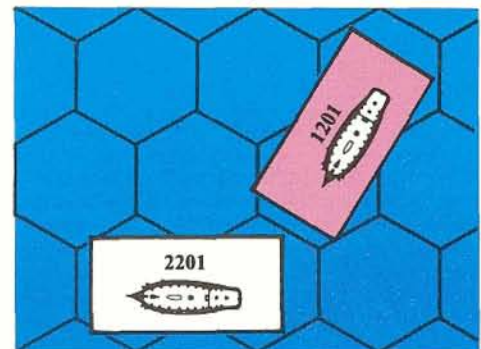

Figure 5: Two crack 74s; The British should attempt a grapple to reduce the effect of the rake; the French can utilize grapeshot here if the situation remains the same.

D) *Another* friendly ship will get nailed by a rake. Figure 6 shows an example of this situation. The British crack 74 (1201) can deliver a powerful broadside into the unprotected stern of the French 80 (2201). In a lengthy broadside duel with the British 80 (1202), the French SOL would be at a definite damage disadvantage. The French frigate (2301), by grappling and boarding, can take some of the punch out of the shot. If the frigate is an elite 44, as shown, the British commander will have to use most of his crew against the attackers to insure his ship doesn't fall.
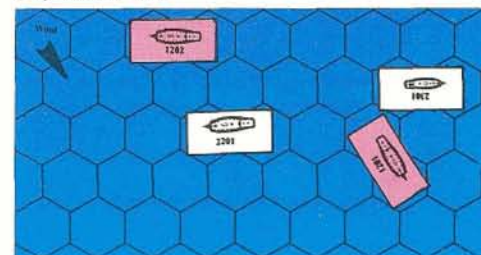

Figure 6: French crack 80 and elite 44 versus British crack 80 and crack 74: The Frigate must attempt to board to save her companion from a big rake shot.

One more quick comment on melees. If you're forced into one of the above situations—or are simply the bloodthirsty type—and a melee is

imminent, make sure you designate the correct *type* of boarding party. The rules give you several choices, the important ones being the Offensive Boarding Party (OBP) and the Defensive Boarding Party (DBP). With abject apologies to S. Craig Taylor, the game's creator, I must state I've never seen good use for the DBP, simply because the DBP must be attacked before it becomes active. A simple example from a recent game: A crack French 80 has grappled a British 74. The British commander, fearing the worst, assigns his entire crew to a DBP. The Frenchman, knowing his opponent uses DBP alot, gambles and assigns NO boarding party. The result is a one hex broadside by the French ship with no answering fire from the British, who are standing aboard their suddenly shot up vessel, waiting for someone to fight. (This was not a contrived situation; it actually happened and a British player learned the hard way that if a boarding party is going to be formed, MAKE IT AN OBP!)

And, finally, the best and most important tactic of them all—KNOW THY OPPONENT! In the last example this was used to great effect. Some tactics will work wonders on one opponent, and lead to a complete disaster with others. Watch him (excuse me, ladies). Is he cautious, going out of his way to screen damaged ships? Is he aggressive, charging in to close range to slug it out and melee? With a new opponent, you will have to learn as you go—BUT LEARN! Insights into the way he plays will come as you watch his moves. And if you get into his head and figure out what he's going to do, the game should be yours if you act on your knowledge aggressively. Ah . . . please note the word 'should' in the last sentence. If you're rolling 1's and he's rolling 6's, forget it, baby, nothing is going to help!

The Rules

The rules under which the *GENERAL's* Series Replay was fought are the rules I like best, with a few additions. With these rules squadrons of 150—200 points are just about right. This point total gives you the opportunity to play with the ships you can buy and find a happy medium between hard firepower and maneuverability. I have my own favorite squadron make ups, but I ain't gonna tell and tip off future opponents! The way to find your own comfortable blend is to play. (So play already!)

Some thoughts on the advanced/optional rules.

Advanced game: This set of rules makes for more realistic play, but also lengthens it considerably. It can get messy with larger squadrons. Example: the following were fouled/grappled together—French forces: 120 el, 80 el, 80 cr; British forces: two 120 el, 50 elite frigate, 36 el. Add to this that the French three decker was raking both one of the 120s (stern guns) and the 36 (full broadside—once!) and you get an unadulterated dice rolling contest. We quit when our arms gave out and we were still on the 81+ TMS column. For purists, I'd suggest that if the advanced rules are going to be used, limit your squadron size to 150 points maximum. (These rules do make for some truly exciting frigate actions!)

Now for those of you who tire of playing the Basic rules and switch to the advanced game, be prepared for a drastic change in play and tactics. This comes about because of the increased length of the game, as well as the changes in the CRT. A major factor changed is the rakes. Whereas in the Basic game, a rake could alter the game drastically, with the advanced rules, a rake will not be the deciding factor, especially at long range.

Example: Figure 7 shows a squadron of crack British 74s closing in line abreast on a battle line of crack French 74s. Assuming for the moment that all ships have fired their initial broadsides, the following HDTs are used.
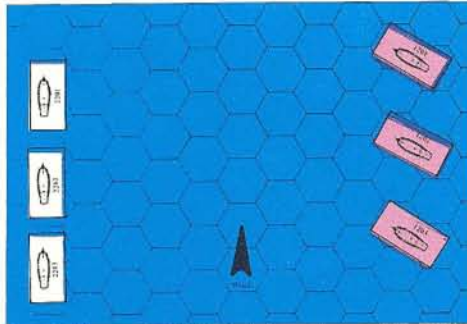

Figure 7: Three crack British 74s closing on three crack French 74s. The rules can determine the tactics of this maneuver.

Basic—three HDT5 shots, one against each British ship, or more likely, all three Frenchmen firing at a single target to really put him out of the fight (minimum rigging hits = 3 x 3; maximum = 3 x 5)

Advanced rules—three HDT4 shots, same possible targets, although only ship 1202 can be hit by the *full* raking broadsides of the three Frenchmen. (minimum rigging hits = 3 x 1; maximum = 3 x 4)

Advanced rules with Optional Rule XIII (Rake Determination) As none of the three French ships occupy a hex directly in front of a British ship, broadsides are normal, with no rakes. Three HDT1 shots. (minimum rigging hits = 3 x 0; maximum = 3 x 1)

As you can see, the rules make a large difference in the type of game, and the tactics you use.

Wind Direction/Velocity Changes: The wind direction change is great; it adds an element of risk and chance that keeps the game up for grabs until the bitter end. A bad wind change can be truly devastating, as shown in Figure 8. Here with no wind change the British commander can move his two crack 80s into firing positions that also shield his crippled 120s. (Note—if the two deckers were at full sails, the British should think twice about shielding the 120s this turn; if he does, he's liable to have four cripples on his hands instead of two. With the wind change of 120 degrees CW, both 80s are in "irons" and at most three English ships will be able to fire the following turn, with the 120s taking the brunt of the French broadsides. Wind *velocity*, while adding additional realism (and giving a player an out should a hurricane arrive), also tend to add time to the movement phase, already the slowest part of the game. And if you've ever fought with SOLs in a light breeze . . . yawn . . . I generally stay away from this one.
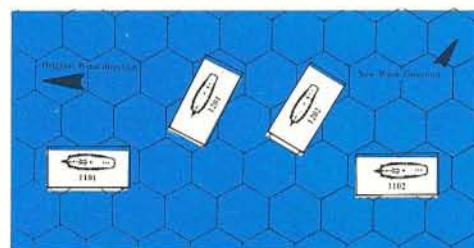

Figure 8: Two elite 120s and two crack 80s, facing a French battle line to port. The wind change ruins a good move and condemns the three deckers to extensive damage.

Critical Hits: Another excellent "element of chance" rule, that can easily be added to a Basic game. A critical hit can be deadly and make a dinkum hit into a biggie. Although most often a "no effect" will result, an HDT0 shot has a chance to obscure an enemy broadside and a single lucky roll on the HDT2 rigging table can bring an entire mast down! (Please, don't ask how I know . . .)

Types of Ammo: Most games I've played have incorporated this rule and yet it's seldom used!

A) Grapeshot. Worthless unless you have the capability to move into a boarding/raking situation such as in Figure 4. In this position, you can count on a single shot with grape, before either most of your crew becomes involved in a melee, or the other vessel moves out of range. Needless to say, don't get caught with grape in your guns if the other guy is two hexes away.

B) Doubleshot. The limited range and the extra time needed to load this type of ammo makes its use risky. The turn not used for firing in a close SOL battle will generally allow your intended target the chance to pump one into your hull, and two close range broadsides with roundshot will do more damage than one with doubleshot. Best use comes with captured ships. Load with doubleshot and, if your opponent attempts to retake the vessel, the captured ship modifier won't hinder you too much as you hit him (once, that is . . .) Another good use is with frigates when they engage SOLs. With their added mobility they can get in and hit hard, and a rake with doubleshot will be a big bonus to your sister ships.

C) Chainshot. This is the only ammo type other than round that is used extensively. In the historical scenarios, I used chain by sacrificing a ship at three hexes to the British broadsides in order to blow away rigging. It's the only ammo advantage the French have—and more and more, DYO games are being played with the British extended the use of chain. (captured from the French, of course . . .) In a DYO battle, however, experience shows that rigging is shot at from six to ten hexes; closer and the battle becomes a hull pounding contest. Spend too much time tearing rigging away and you'll have a badly mauled squadron on your hands, incapable of taking advantage of the superior maneuverability.

Example: In a recent game, my British opponent fired almost exclusively at my rigging with round and chain. The result was a 120 dismasted, a 44 frigate dismasted, and four crippled 80s with only minimal damage to hulls, guns and crews. In the same time span, my opponent *lost* by striking and/or sinking a 120, two 44s and an 80 SOL, with his remaining 120 and 80 battered and nearly useless. A won battle, one of the few times I've taken an overwhelming victory.

Destroyed Hull: There's nothing more frustrating as having successfully blown away your opponents van ship, then have to work around the d- thing in order to engage the rest of the enemy. If the hulk is set to explode as per the Destroyed Hull table, the maneuvers can really become interesting. The same goes for a sinking ship. There you are maneuvering for a line-in-column plunge into the heart of the enemy squadron and the hulk, protecting you from fire suddenly sinks . . . This is an outstanding rule to use. Despite the frustrations, it adds spice to the game and makes it all the more unpredictable!

Other rules: Full Sails and Backing Sails are naturals. The only other optional rule I use extensively is the Loss of Rigging Rule—not to be used if you have a natural talent for rolling 1s at the wrong time.

Conclusion

None.

In a game of this nature, there really can't be any hard and fast conclusions. The British found this out when they tried to avoid defeat by strictly adhering to their "Fighting Instructions," only to find out that, while they did in fact avoid defeat, they also avoided victory. What I've presented here is simply one gamer's view of an excellent game and its most exciting aspect, the DYO scenario. With a little thought and a lot of action, even in defeat, a well fought match can be enjoyed!

THE FINAL LINE

THE THIRD INSTALLMENT OF THE JARVINEN RUSSIAN CAMPAIGN SERIES

By J. Richard Jarvinen

The *RUSSIAN CAMPAIGN* has borne out its initial promise as a game of classic proportions. Grand in scope and a challenge for both players, it has swiftly risen in popularity to occupy a top place in polls of many players. A myriad of available strategies, coupled with the various and distinct fronts that are sure to form, makes each game a new adventure. The fact that it is of such a large scale means that a player can make a serious mistake or suffer a severe setback in one area and yet still have the resources to compensate for his loss by a quick strike in another. Through such a mistake, or possibly because of excellent German luck or tactics, a Russian commander may find himself with his back to the wall almost immediately. The end of 1942 can still find Stalin badly outnumbered and outmuscled, thus offering no chance for offensive action in the foreseeable future. This situation is the subject of the third part of my series entitled "The Viipuri Defense." As the entire series has concerned itself primarily with defensive tactics, it is fitting that this third article deal with the problem of salvaging a potentially lost game into a draw.

The basic premises are that the Russian production has been seriously crippled, the German army is relatively intact, and the front line stretches roughly from Leningrad through Moscow to Rostov, all areas under German control or facing threats that cannot be easily answered. The Russian army has dwindled to numbers so few that a major offense is out of the question, while a win is a concept occurring only to the most demented or wildly optimistic of souls. Thus the stage is set for the final act in one of the world's greatest conflicts.

Diagram 1—"AGN Push to Archangel" (July '42) Available Russian Units: 50th Infantry (4-3), 3rd and 4th Armor (6-5's)

Assault on Archangel

Despite the remoteness of Archangel and its naturally protective (swampy) terrain, the defense of this valuable resource center should not be taken lightly, as an alert German may quickly shift some of his forces for a swift stab at this productive port. If Moscow falls early, Archangel is particularly vulnerable. Consider Diagram 1. It is your turn during July of 1942. Moscow has suddenly succumbed and the German has pressed Army Group North forward in a push to an unprotected Archangel. Assuming you had only the three units indicated available for defense, how would you allocate them? It doesn't seem like much, but a competent Russian has to learn to play with a minimum of units. There are several adequate

solutions from which to choose, but the danger (and the point of this little problem) is that there exists one disposition that gives the German his only chance to take Archangel by November. Examine Diagram 2. Both of the armored units have been placed in Archangel to provide it with the maximum possible defense strength, while the 50th infantry has been (erroneously) placed on D1 to provide what is euphemistically called "flanking support." It is precisely this support which is the undoing of Archangel. The German would simply move up and attempt a second impulse attack as indicated in Diagram 2. The 43rd infantry soaks off against the Archangel defenders at 1-6, while the remaining units attack the 50th at 3-1, yielding an 83.3% chance of victory (a Contact is definitely a success). The Russian must now attack the 7th and 10th infantry on D-2 at 1-1. Even with the help of an extra unit on D-1, the best he can get is a 2-1. A Contact is a bad result for the Russians now as the additional unit on D-1 will be forced into a second impulse soakoff, reducing the attack on D-2 to a 1-1. The chance of Archangel surviving such a move is only about 65% (German attack fails or Russian counterattack succeeds). Not bad, you may say, but consider if you had left the 50th infantry out of the picture completely. The best the German can now do is a 1-3 attack against the units in Archangel, and only the most desperate of commanders will attempt such a suicidal mission. His only alternative is to move his units up as close as possible and hope that November doesn't bring snow, which virtually assures that Archangel will survive the winter. If you can spare the unit, the 50th infantry should be placed on H-2, limiting severely the advance of the southernmost units. I-2 is not quite as accurate a placement as it could now be surrounded without help from either unit on F-4. Note the German placement on F-1 and H-2, preventing soakoffs against E-1 from any hex other than D-1.

Diagram 2—"Faulty Russian Defense"

This problem is a nice example of where an incorrectly placed unit can do more damage than by not even bringing the unit into play. It also illustrates another theme that often recurs throughout *RUSSIAN CAMPAIGN* (or for that matter, many other wargames), and which I call the principle of the "critical" hex. In many cases, a direct frontal assault against a position is not

feasible as the position is too strongly held or not completely accessible. A secondary target is then chosen in order to flank the primary objective or to position units on hexes that must be attacked if the defender does not want to give up any ground. It is these hexes which I define as critical hexes. Obviously any hex adjacent to the main objective is a critical hex, but what is not so obvious is that six of the twelve hexes that are two hexes away from the primary target are also critical hexes. Diagram 3
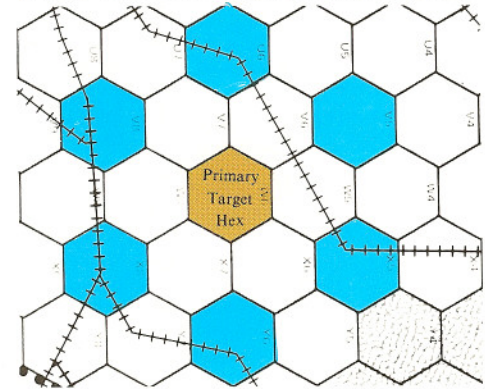

Diagram 3—

illustrates the symmetry of this concept. When protecting a city or key river line, the critical hexes around the objective should never be garrisoned with less than the effective strength of the units occupying the objective itself. If this is not possible, placement of delay units should be considered on the *non*-critical hexes. Diagram 4 illustrates the correct placement of such units when defending Stalingrad. Note that HH-6, II-6 and JJ-6 (all critical hexes) are occupied by relatively strong forces. With an abundance of units, the urge to strengthen a position by placing large forces on the critical hexes (HH-7 and JJ-8, for example) must be restrained. In a technique similar to that used in the Archangel example, the German can roll over the delay units in the first impulse and execute the second impulse attack shown in Diagram 5. If the Russian insists on fighting for Stalingrad, he will be forced to counterattack at very poor odds and only then if he takes some very bad soakoffs.
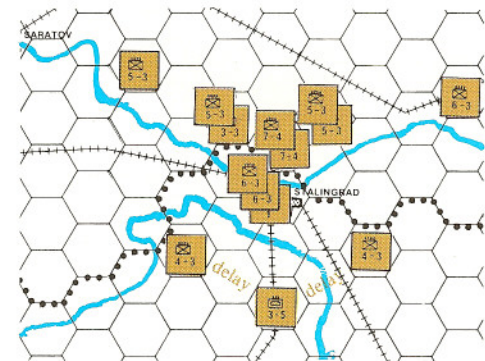

Diagram 4—"Reinforcement of Stalingrad"

Line Strengthening

An interesting question arises when placing a unit along a front that is already adequately garrisoned. For example, study Diagram 6, which shows part of the river line running from Saratov to
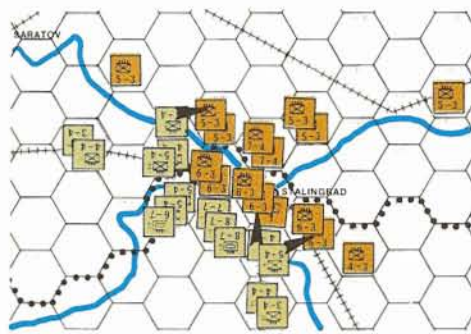
Diagram 5—"A Critical Battle"—German Soakoffs. ▶

Stalingrad. Assuming you have an extra 5-3 infantry unit that you would like to use to beef up your line, where is the best placement? In case #1 it would go on FF-5, making for quite a formidable front line. Regardless of where the German attacks, he is going to face a defense of twenty combat factors. In case #2 it would be placed on GG-5, making the line somewhat weaker locally but slightly harder to assault. Which is correct? Well, my answer is both hexes are correct! The exact placement is determined by the location of the nearest Stuka. If Stuka is available, I prefer to place the unit on GG-5. Even though a Stuka can participate in attack against more than one hex, the point is that no more than three units (on FF-6) can take advantage of this superior air power. If the units were stacked on FF-5, all six German units are able to coordinate their attack with the Stuka. Note also that if the stacking technique is used, the German is assured of breaking the line with a 5-1 attack, whereas in case #2 the line is completely breached only if the 2-1 attack on FF-5 (or GG-5) is successful.

Diagram 6—"Line Strengthening"

When no Stuka is available, I prefer the stacking technique in order to present the strongest possible line to the German commander. Stacked, it is impossible to get better than a 2-1, while unstacked, it would be possible to get a 5-1 if he can provide the units for the required soakoff. The victorious units could then advance across the river for a favorable second impulse attack against the adjacent unit.

The concept of line strengthening is an important one. Units should not be casually thrown into position; rather, each case should be examined separately. Stukas, available reserves (on both sides), and unit type are all facets to consider. The Russian cannot afford to give away too many units.

Stalin: Whither Thou Goest?

In the unfortunate circumstance where the Russian has been badly mauled in the early part of the game and the German armor hovers like vultures over a weakly defended Moscow, the Russian is forced to make a decision that will undoubtedly affect the course, and possibly the outcome, of the entire game. And the decision he is forced to make is: Where am I going to hide Stalin?

Because of the severe movement restrictions on Stalin, there are only two places where he can possibly seek refuge. The first is in Archangel and the second is along the rail line from Astrakhan to Saratov. Gorki as a haven can be eliminated for obvious reasons. The question is further complicated by strategic considerations, such as the placement of the bulk of the German army, the losses on both sides, the Russian production potential and even by items as nebulous as a player's psychology. In an extreme case, the decision may be made for you if the German has managed to capture the key city of Tula. Stalin has no choice other than to flee to Archangel as the loss of Tula also implies the loss of the rail line leading south. However, as these are questions of strategy and this is an article concerned mainly with tactics, I am going to cop out on which place is "better." Rather I will show a possible defense for both areas and leave the final decision to you.

Diagram 7—"Final Defensive Line"—Alternate Placement—Reserve Units

The Sunny South

Once the decision to go south has been made, the basic defensive line runs roughly from Gorki through the mountains and Saratov, and then along the Volga to Stalingrad and Astrakhan. Stalingrad has already been discussed, and the major tactic when defending Saratov and Astrakhan is to garrison them with the largest regular infantry forces available and avoid the critical hexes like the plague. Gorki is not necessary to hold, but if a few small armored and cavalry units are available, they are ideal behind the rivers and in the mountains found in that region. Ideally the Russian defenders would slowly fall back south and finally form a defense somewhat in the shape of that shown in Diagram 7. Hopefully you won't reach this situation before the end of 1943 because even one Stuka will play havoc with the best prepared defense. The river line from LL-6 to Astrakhan is virtually impregnable. Faced with only 1-1 attacks, the German really has no choice other than to flank the defenders along the LL-row. Reserves should be as close to the front line as possible to restrict German penetration. Don't be afraid to counterattack at 1-1. When Russia has been reduced to a mere twenty-five hexes, you're not going to quibble at a few low odds attacks in order to regain territory. Even though the German is no longer halved during the winter months, raids against the rail line along FF-3 can be very productive.

An alternate defensive setup is shown by the red shaded units. This line is stronger in that the units on LL-5 can be attacked from only two hexes rather than three and also gives you more room to maneuver behind your lines. However, it does leave the units on GG-2 very exposed. But if you can afford the units, it is the correct defense. Anything that will keep the German away from the main action must be considered productive.

If, or when, this line finally breaks, the largest units available (hopefully you still have your 1st Guard Armored left), Stalin, and Stavka should be placed in Astrakhan. There will undoubtedly be one worker unit worth two there already, with good prospects of a worker unit worth one to come later.

This would give you the rather astounding effective defense strength of forty-six. If the German has suffered considerable losses up to this point, he may be considerably pressed to scrape up enough units for a 2-1. And if he's incapable of rolling a number higher than a two, you've earned yourself a draw!

One strategic consideration I would like to mention when sending Stalin south is that Archangel stands a very good chance of surviving the rest of the war. Once Moscow falls, the German undoubtedly will exert his maximum effort to the destruction of Stalin, and allow little or no resources to take on Archangel. So what, you say. What's a few extra factors going to do for me now? Well, perhaps that is a valid point. Just how much is Archangel worth? Assuming we place our first arriving "2" worker in Archangel (a good tactic, I might add), he starts producing his normal output in January, 1942. After eight turns (May, 1943), his output doubles for the remainder of the game (thirteen turns). The Archangel replacements begin in January, 1942 (an average of three and one-half per turn) and continue until December, 1944 (eighteen turns). Thus the total potential production for Archangel is:

$$(8 \times 2 + 13 \times 4 + 18 \times 3\tfrac{1}{2}) = 131$$

One-hundred and thirty-one factors! And if you count carefully, you'll find the *entire Axis* reinforcements for the entire game listed on the OOB is only one-hundred and twenty factors. Makes you think twice about the importance of Archangel, doesn't it?
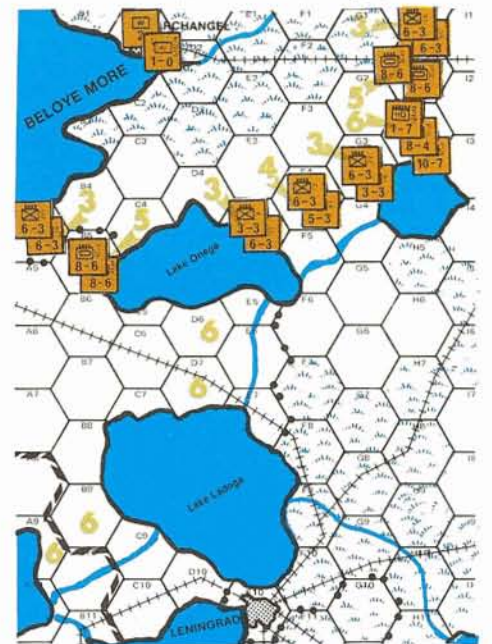

Diagram 8—Archangel Defense: N = Number of corps size units which can attack indicated hex.

The Frozen North

By chance or by design you may find yourself and most of your army trudging through the swamps of the far north. This area has advantages and disadvantages, as does the other, but are of a somewhat different nature. There's only one river line (excluding the Archangel river) to hide behind, but the total front exposed to German attacks is smaller than in the south. Again assuming you can hold out until the end of 1943, the defense in Diagram 8 is recommended. With only some minor exceptions, this entire line is 3-1 proof, and the river line is actually 2-1 proof. Thus the front line is somewhat stronger than that in the south, but one of the features here that is so conducive to defense is also one that hinders the Russian player. This feature is the large swamp lying in the north-east corner. While somewhat retarding any German

TABLE I

Number of Attacking Units	Max Strength	Factors Needed to Prevent 3-1	Factors Needed to Prevent 2-1 (dbl'd)
3	34 (32)	12 (11)	9 (9)
4	42 (40)	15 (14)	11 (11)
5	50 (48)	17 (17)	13 (13)
6	58 (56)	20 (19)	15 (15)

Note: Figures in parenthesis should be used prior to November, 1944.

advance, it also becomes quite a large stumbling block to the Russian as he is trying to maneuver his not so maneuverable forces into optimum positions. The wise German will retreat the Russian infantry into the swamps whenever possible, which effectively removes those units from play for one game turn. Placement of Russian reserves is extremely critical as they must be prepared to fill the gaps regardless of where they may occur.

The circled number in each hex reflects the number of corps size units that can attack the given hex. (Because this defense is so dense, a terrible price may be exacted from the German in the form of soakoffs.) Thus it can be seen that the most vulnerable hex is H-3, not H-2 which might be expected to be the weakest on casual observation. These numbers, when analyzed together with Table I, reveal some interesting statistics. The first fact is, given that the German has taken no appreciable armor loss, that it is impossible to make the line 3-1 proof. Prior to November 1944, there are two hexes, B-5 and H-3, that the German can attack at 3-1. But he can do this *only* if all his large armored units, his 2nd SS Res and all three Army Group Headquarters are available. Furthermore, if he wants to use the Headquarter units, he will only be able to do so in the second impulse. While technically possible to achieve a 3-1, it is in practice a rare occurrence, and the Russian commander will not have to worry about a DE result. Unfortunately, preventing 3-1's does not guarantee that the line will hold. After all, a 2-1 is not that bad of an attack, and if the German has more units than the Russian, the front will slowly but inexorably be driven back. Unless resources are plentiful or the German is badly depleted, I doubt that this defense can keep OKW from attacking Archangel for more than a year.

If the Russian is lucky enough to have some extra units lying about, the right flank of the defense may be extended to the rivers lying to the east and north of Lake Ladoga. This placement doesn't particularly help the defense, as the main German thrust will undoubtedly come through the H-row, where there is slightly more mobility and the units on G-1 can be more quickly flanked than those on E-4. The units around Lake Ladoga may find themselves quickly isolated and unable to help in stemming a German breakthrough. However, this particular placement may cause some problems for the German as he will be forced to protect his left flank from sudden incursions into his supply lines, or possibly even into Leningrad or Helsinki. Again, the entire strategic situation must be considered when making such a decision.

Similar to the defense in Astrakhan, the Russian can always stack his largest units (and Stalin, of course) in Archangel during the final hours. One advantage that Archangel has over Astrakhan is that it can only be attacked from two hexes, which implies that a mere fifteen combat factors will forever prevent a 2-1. If the 1st Guard Armored still survives, the German may be lucky to even get a 1-1.

Once Stalin is firmly entrenched in Archangel, extreme care must be taken with reinforcements or replacements. Do *not*, and I repeat most emphatically *not*, make counterattacks in the region of Archangel unless absolutely imperative. Leaving a unit on F-2, for example, can be disastrous. On the first impulse, the German could attack it, hoping for a retreat result. This unit would then be retreated to D-1, and guess what? The cycle has come full circle and it's Diagram 2 and critical hexes all over again! Instead, newly arriving units should be used to harass supply lines and rear areas of the German lines. All Stalin can do is sit on his hands, take his lumps and pray.

Conclusion

This concludes my study of defensive tactics in *RUSSIAN CAMPAIGN*. Offensive tactics, a vital and necessary field of knowledge for any Russian commander, will remain the subject of a future article. Hopefully you have gleaned some small bits of knowledge concerning the finer points of defense in this excellent game; if not, I'm sure you can have a lot of fun looking for loopholes or discrepancies in the various setups. And even if you (shudder) lose, you can always blame your loss on the author of the *Viipuri Defense*.

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The Early Years . . . *Continued from Pg. 31*

be undefended. To continue examining the premise, why does the conquest have to be a one turn victory? There are times when Allied forces are not available or the fleets have already been used. Alternatively, one can manipulate BRP levels to get two turns in a row. Finally, I don't see any reason why the German shouldn't be happy to counter-punch a British invasion. It ties up a higher percentage of the British forces than of the German in what is basically a side-show, at least compared to the conquest of France or Russia.

"The British need have little fear of a "Sealion" in 3R . . . The main threat to British survival is an air assault on London."—David Bottger. I gather the definite impression Bottger favors sending all but seven factors (holding London) away from home. Like all insufficiently examined premises, this can get sticky. Someone showed me at Origins 77 a little trick with the German paratrooper landing on a port, SRing units in and next turn combining air and land assault on London. If the Germans have been manipulating their BRP level, the next turn could be before the British get a chance to react. Even if not, seven factors are not enough to stop the Germans, at least not frequently enough for my preference. You have to watch out for these "unfair" tricks. *"We were not fairly beaten, my lord. No Englishman is ever fairly beaten."*—George Bernard Shaw.

A final Bottger proposal proves it ain't those things you don't know that hurt you—its all those things you know that ain't so! He knows what he wants, to tie up the most German armor and air

units with his defense of Warsaw. What he knows that isn't so is that German infantry can reach Brest-Litovsk. His criticism of the Beyma or Standard defense is that he prefers "to make this 2:1 attack with a 3-3 infantry, a 4-6 armor and 1 air factor." Naturally this ties up fewer armor units and results in a lesser expected loss. Except that Bottger's "Standard" Defense (not Beyma's) is defending Brest-Litovsk against an infantry unit that can't get there to attack the Polish 2-3 untripled, his reasoning is flawless. *"Whatever is only almost true is quite false, and among the most dangerous of errors, because being so near truth, it is the more likely to lead astray."*—Henry Ward Beecher

I do have one modest suggestion to amend the Beyma defense which is indeed a standard. I like to put the air unit on Brest-Litovsk. It has psychological effects that can lead the German to attacking a 1-3 and then Warsaw across the river. If it doesn't work, you haven't lost anything vital. Along with the conquest of Poland, Bottger has some options. You know my methods now, Watson. As usual, I disagree that it is wise to avoid the "Do Nothing" option. There is a concept in Naval Warfare, of a "fleet in being." *"Force is never more operative than when it is known to exist but is not brandished."*—Alfred Thayer Mahan. Building up your forces to exploit enemy errors is a mini-max strategy. You try to minimize the maximum loss you can suffer. With two-front war strategies, even if one front is "only" Poland" the Germans are taking chances that they may not need to risk. If 60 factors of infantry you could build in the Fall of 1939 (or 28 armor, or whatever) could exploit enemy errors next turn and in future turns throughout the game, but you will not have the forces available to take advantage if they are not built now, you have a difficult decision to make. Defense in depth is seldom an error. Either side can make errors that require lots of troops for the German to win after. You might plan a lot of attrition. It works better with 61 factors.

We already discussed attacking Russia. See how the assumption that Poland must be attacked first has clouded the situation. With the same data I chicken out, but Bottger *decides* not to attack because "most of (Germany's forces) will be attacking Poland on the first turn." We also discussed attacking in the West, which Bottger discards as ineffective. But it is ineffective because everybody is messing about in Poland. Finally, we have covered the fallacy in attritioning Yugoslavia—that a major power can take the losses instead. To recapitulate (never capitulate, just recapitulate), you owe it to yourself to ask the magic question "Why did he say that" when you hear an authority speak. *"The important thing is not to stop questioning."*—Albert Einstein.

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PASSING IN REVIEW

A CANDID GUIDE TO AVALON HILL WARGAMES
By Nicky Palmer

Many GENERAL readers doubtless buy the magazine on the basis of owning just a few Avalon Hill games. They have a choice of dozens of other games which they might buy, and they might all sound pretty good in the advertisements, though they get vaguely distorted impressions from acquaintances: "don't buy BULGE, that's a real turkey"; "THIRD REICH is unplayable," etc. Presumably they make their choice on the basis of what information they have, but frequently they may get something rather different from their expectations, whereas another game would have been just what they were looking for. Disgruntled, they chuck wargaming and take up girls . . .

The RBG as an objective tool is only a partial solution—speaking as it does in tones of gray—with hundreds of likes and dislikes distilled into a form of middle ground gruel. For many unable to interpret the averages, only subjective reviews are truly meaningful.

It is hard to conceive a more commonly accepted independent critic whose views have not been influenced by a special relationship with any publisher than Nicky Palmer. He laid claim to this title and a wargaming milestone at the same time with his publication of THE COMPREHENSIVE GUIDE TO BOARD WARGAMING (reviewed in Vol. 14, No. 4, pg. 35); commercial board wargaming's first hard cover book. In addition, Nicky writes the regular wargame review column for the British published GAMES & PUZZLES magazine and is president of Britain's International Game Club (IGG). Mr. Palmer's stimulating views are his own, and no doubt will be disputed hotly by other players, but, as he suggests; a survey from a single source may give a good picture of the highlights of many games in comparison with each other."

There is an odd tendency audible in increasingly widespread wargaming circles: they think there are *too many* wargames. This bizarre phenomenon is suggestive of Casanova complaining that women keep pestering him when he feels like a quiet evening home in his *palazzo*: one doesn't quite believe it either.

But there is a reason underlying the madness: the trouble is not really that there are too many games—except insofar as this indicates tight deadlines and botched jobs—but the frustration engendered by the inability to enjoy all the delights simultaneously. Possibly Casanova had a similar problem. One has to choose, limited by constraints of time, money, and available opponents.

This, however, is easier said than done. One can read the advertisements: all the games sound terrific, except the ones that are being phased out to make way for infinitely better replacements which even old owners of the game should buy at once. One can read a variety of amateur magazines: this enables one to spot a few supergames which everyone loves, and a few dollar-traps, but in general one gets a blurred impression of conflicting opinions on scores of different games.

What is needed is a basis for comparison: the same people talking about a range of alternatives, with the advantages and drawbacks of each. In my book, I tried to do this with often too brief reviews

of more or less every game on the market, culled from my own experience and that of friends. I'd like here to have a more detailed look at the Avalon Hill range, in the hope that it will help readers choose those games which they do not already own which suit their particular tastes. Most *GENERAL* readers will have some of the games discussed, and can use the comments on these to decide whether I'm talking enough sense to make the other reviews worth considering. The readers who have all the games mentioned can compose letters to the editor pointing out all the errors of judgement. In any case—beware: my comments are subjective. All reviews are subjective, whether they admit it or not, though it is not necessary to go as far as the noted English book reviewer Sydney Smith, who never (he said) read a book before reviewing it, because it prejudiced him so. Rest assured that I am restricting myself to AH games which I know personally. I assume that most *GENERAL* readers will know the general features of AH games; what I want to do is convey the *atmosphere:* what are they like to play?

Start with the *Panzerblitz* family. Are they all much of a muchness, with a change of scene and some polishing done on the later games? Far from it!

Arab-Israeli Wars is almost certainly the most realistic. The dominance of armor in the earlier games is eliminated to give each type of unit a strong role to play, helped, of course, by the advances in anti-tank technology which have rocked the military balance in the Middle East. The right balance is found for the "Panzerbush" problem which threatens realism in *Panzerblitz:* units which hide in towns and forests are safe when hugging the ground, but the moment they move or fire they become liable to attack by any long-range guns which the enemy has placed on appropriate hills. A wealth of detailed rules in a booklet which, unlike the *Panzerblitz* rules, doesn't fall apart with repeated use, makes *AIW* a delight for players with an eye for realism.

However, is it really realism that is your first priority? Is it the thunder-and-lightning image of armored warfare that interests you? Would you reject a game called *Soldatenblitz*? Do you like really mobile positions, with swift thrusts all over the board in a few turns?

If so, then *Panzerblitz* is more your game than *AIW*. Infantry and in particular towed artillery are frankly undervalued in the game, and tracked vehicles, given a clear run on an open road, can put on a turn of speed which makes them look like Ferraris. Never mind: the point is that *Panzerblitz* is primarily a game of armored warfare, and it has gathered an immense following because it is one of the very few games which recreate the atmosphere of tank combat: mobile, fluid, and—given a chance—potentially deadly at the first shot. They say that people are divided into convergent and divergent thinkers, with the former brilliant at problems in a firmly defined environment, and the latter revelling in open-ended situations which change with every passing minute. *Panzerblitz* is for divergers: unless you choose one of the narrow-board scenarios featuring a delaying action, you will find that everything turns out a little differently from your expectations.

Panzerleader is somewhere in between the two: much more realistic than *Panzerblitz*, with the wild lunges curbed by opportunity fire, mad dashes tending to get stopped in mid-run as they cross an open space. The game resembles *AIW* in a number of respects: the handy rulebook; the useful though unsightly spot in each hex for measuring line of sight; the (limited) provision for air support—and the general atmosphere, though the game is more fluid than *AIW*, and the panzers still put on a slightly surprising gallop at times. One advantage is the possibility of invasion scenarios which are provided with a board showing a long beach: these are much more of a change from the usual than the Suez Canal-crossing rules in *AIW*.

Neither *Panzerleader* nor *AIW* can be played satisfactorily solitaire, whereas *Panzerblitz* can without any difficulty, and is also easier to pbm.

For a serious simulation of combined arms combat, *AIW* is much the best choice of the three; however, an interesting alternative is *Tobruk*, which uses a very different approach. *AIW* is a platoon-level game, and retains elements of operational planning over a medium-sized area: the rival forces maneuver in separate groups along the numerous twisting roads through the dense terrain. *Tobruk* works with individual tanks and infantry sections in a virtually open desert. As well as being totally tactical in orientation, the absence of natural terrain obstacles collapses the battle into a single general melee, even if the action is currently concentrated in one sector of the line.

The *AIW* combat system is basically similar to that of *Panzerblitz:* revolutionary when it was introduced, it is still in the general tradition of board wargaming: each unit has its range, combat factors, and speed, and firing is calculated according to the attack: defence odds, modified in general categories (such as armour-piercing shells fired at infantry being halved in effect). *Tobruk* makes a total departure from this style by descending into mind-boggling detail. A great deal has been written about the imposing numbers of die rolls needed in *Tobruk:* it is not always recognized that this stems directly from the decision to study each round of firing in microscopic detail. Is this the first time you have fired at the target? What is the exact caliber of your gun? What is the angle of fire? what is his armour like against your type of shell? Have you hit him? Where? How severely? Is he incapacitated? Can he be repaired?

The technique is partly borrowed from miniatures, where it has been used to players' satisfaction for many years: *Wooden Ships and Iron Men* is its spiritual brother afloat. Basically the question is how you want to spend your time. With a *Tobruk* approach, you can simulate a small battle down to the individual level at which it will be experienced in reality. The *Panzerblitz* family retains the generally tactical aspect, but enables you to let the individual firefights take their place in a larger scenario, at the price of a certain blurring of detail. It should be added that *Squad Leader*, with features from both *Panzerblitz* et al and *Tobruk*, as well as many new ideas, is currently getting a rapturous first reception from the hobby. I haven't played it yet myself, but it certainly looks good . . .

Many players believe that tactical games like those above are the closest one can get to realism. There is a very strong case for the reverse theory: that realism increases with the strategic level. Fighting in a trench or firing a tank does not really feel remotely like playing *Tobruk*, however closely the game may simulate the actual outcome: it is unreasonable (perhaps fortunately) to expect any game played on a dining-table to involve the incredible confusion and gut reactions of tactical combat. An operational or strategic game, however, does get remarkably close to the situation for the higher-level commander: like us, he is sitting with a map, estimates of unit strengths and positions, firm instructions from On High about territorial objectives, and the necessity of giving orders without any certainty of the outcome.

A glance at recent products shows this to be rather an unfashionable view: the majority of new games are either tactical level, or "monsters" simulating a number of levels at once. However, fashion is primarily the reflection of last year's feedback and designers' impressions, and anyway we needn't be bound by it. The AH range includes a considerable range of "higher-level" games. First, the "classics", on which most of us who have been playing for more than a few years were reared.

D-Day. The first invasion game, with an interesting choice of landing areas for the Allies, from the bitterly-defended area near Germany to the usually undefended South of France which, however, is a rotten place from which to invade Germany. The snag about the game, apart from its abolition of the French Railways, is that one gradually discovers that what appears to be the optimal strategy for each side is not conducive to excitement: the Allies should invade in a "safe" area, and gradually steamroller France; the Germans should evade early combat, and keep their powerful units for a last-ditch defense of the frontier in a maze of fortresses prepared for the purpose. The "Banzai complex" manifests itself so often, however, that International Game Club statistics show the results in *D-Day* to be exactly balanced: for every cautious Allied player plodding to victory, there is a devil-may-care fellow storming ashore at Calais. I have not yet had a chance to try them but I understand the 1977 edition rules improve the game greatly.

The interest of the game can be stimulated by allowing the Germans a face-down setup, or even (for a really wild situation) a secretly noted setup, though to keep touch with reality it is recommended that the latter version is restricted to the mobile forces, as the static divisions were, as their name suggests, not given to gadding about the continent. Another alternative is giving the map a rail net doubling speed, and the Allies an option of bombing it; one can then simulate the idiocy of the German general, a former cavalry officer, who was asked how he would get his reinforcement trains through Allied interdiction. "We shall ride them down!" he replied grandly, in a message which was intercepted and caused much hilarity in the British War Office.

Afrika Korps is another game (like *Panzerblitz*) for speed freaks: units on both sides can streak over the long coastal board in a few turns, and every game features a bitter struggle for the coastal road combined with great, looping hooks around the inland flanks. The absence of fixed lines makes precision important on every turn: one slip, and the enemy will break your front with a string of automatic victories and snatch your supplies. The game has lasted well, and is probably still played more than any other North African game. It bears the stamp of the best of the classics, in that it gives the essential atmosphere of the campaign with the basic "classic" rules almost unchanged, by the clever use of terrain. The very fast movement along the single coastal road and the wide open spaces to the south give the vital ingredients for the free-wheeling series of battle. The main drawback is the "sudden death" CRT of all the classics: a game will often hinge on a single die-roll in an assault on Tobruk.

Stalingrad is the game which really introduced me to the hobby. I was a freshman at MIT, and wandering around a cavernous hall filled with the college clubs from the association of underwater basket-weavers to the society for salmon-tasting, when my eye lit upon a display of wargames. I recognized them because I had an old game of *Midway* for which I had never found a willing opponent. I asked the affable guy running the stand (Joel Davis, now a *General* staffer) which game he would particularly recommend. "Well," he said, with the cautious manner characteristic of good game reviewers, "It's rather a matter of taste." I looked frustrated, and he unbent. "*Stalingrad* is the one which really absorbs people: everyone has his own winning strategy."

From a strategic angle, *Stalingrad* is rather good: it conveys the dilemmas of the German strategists very neatly, despite a reckless disregard for detail (nearly all German infantry units are strength 4 or 5; the air force does not exist). There is a lovely trap for unwary Germans: the rail lines near the frontier plus the good weather at the start enable him to throw his forces from one sector to another with carefree abandon. Soon he links up with the Rumanian front, and can operate over an even broader stretch. This is naturally very jolly, and he gets into the habit of putting an armour corps wherever it will be most tactically useful. Then, all of a sudden, it's winter, and his tanks are scattered all over the map, struggling to reach the front in a seemingly endless frozen landscape, with nothing but the snarling motors and their drivers' chattering teeth to disturb the white peace to the horizon. The Germans *must* concentrate their armour before the winter, or the game is almost lost.

Expert belief is that the Russians can win most games, despite the suggested lower reinforcement levels than historically appeared, but the I.G.C. records show that in practice, this is another evenly balanced game: probably the theoretical Soviet edge is counterbalanced by the difficulty of attaining the precision needed for a perfect defense.

Waterloo is yet another "classic" which works quite well, though the piece density is rather low, giving the game a curious and perhaps realistic flavour of a violent battle fought in the midst of an otherwise completely peaceful countryside. This effect makes the game rather less dramatic than most of the other "classics", where there is something going on over a long front. The new rules remove some anomalies in the old version and perhaps tilt the game towards the French.

The old *Gettysburg* was less of a success than the other classics, due to a combination of low piece density and feeble victory conditions emphasizing unit destruction rather than terrain: as a result, the game tends to degenerate into scattered chases with little resemblance to historical simulation. The new versions in *Gettysburg '77* sound more promising, but I have not seen them myself yet.

Kriegspiel is a brave bore: there are a number of interesting innovations which the game introduced, such as prisoner capture and exchange, and an ingenious negotiating interaction table, but the game fails to jell on a tiny board, and in practice there is little room for ingenuity.

Blitzkrieg was an early attempt in the "monster" direction, with air forces, paratroops, invasions, and supply rules; while its reputation for stalemates can be belied by two aggressive players, it suffers from a tendency to end in the disintegration of one side before a real breakthrough has been achieved, as well as having the disadvantage of being totally abstract (Big Red versus Great Blue). Quite exciting, but now looking a bit dated: postal players should avoid it (too many units).

Midway has survived well in a specialist's field. There are two basic ingredients to the game: the searching (which is more or less guesswork once the standard techniques have been mastered, e.g. not moving to the corner of a search-square since it restricts the areas to which one can move next), and the air strikes. Surface combat is very rare, as the Japanese fleet would normally win it; the Americans must rely on the bombers. The game maintains a steady suspense with intermittent bouts of furious action, though it is a little short on variety.

Battle of the Bulge has an undeserved reputation as a German cakewalk. Despite a map of dubious accuracy, this remains my favorite of all wargames. The fascination of the game stems from the fact that you can never be sure who is winning: the Germans always seem at the point of breakthrough, but the growing tide of US reinforcements keeps plugging the gaps. IGC records show the Germans winning 90% of the games, but tenacious resistance by the US with fortification construction at every opportunity make the game almost balanced in my personal experience. The basic game results in a tedious series of engagements for days on end all over the board, and should be skipped in favor of the advanced version at once. An errata sheet for the rules is urgently needed, especially for the advance after combat and movement through rough terrain sections: players should decide exactly how they will interpret these before playing. But for excitement pure and simple, *Bulge* is simply unbeatable.

Luftwaffe has deceptively complex-looking rules, and is actually a pretty simple game to play. There is a fair amount of historical "feel" as the slow-moving bomber fleets roll into Germany against increasingly desperate resistance from the numerous fighter airfields en route: many a raid is frustrated just as it is about to reach its target. The players have a good deal of careful planning to do, with the Germans especially dependent on careful placement of their different aircraft types: for playability reasons, all planes of the same type fly together (and run out of fuel together), so you can't safely have Me109's both guarding the front and acting as a strategic reserve. The advanced versions of the game add little in the way of new ideas: they are usually merely longer with a few extra ideas thrown in. The game is interesting, in the same way that *War at Sea* is interesting: both sides have difficult choices of strategies. Neither game has a great deal to distinguish it from land games, however, because of the strategic level: dogfight and single-ship action enthusiasts should look elsewhere.

War at Sea chauvinistically suggests that your girl-friend might be able to manage it, or failing that then your kid brother. Despite this frank disavowal of hard-core simulation appeal, the game has become quite popular as a quick beer-and-pretzels relaxation, and its comparatively simple odds calculations have given the mathematicians amongst us a field day, as *General* readers will have observed. A fashionable touch of fantasy gaming is introduced by the "disabled" rule, in which ships under hot pursuit from a swarm of faster enemies are able, when hit by enemy fire giving a "disabled" result, to sprout wings and fly back to their home ports. "Teleports" would be a more accurate description, though the severely serious-minded may prefer to use "driven off". As a simulation, *War at Sea* is frequently absurd but as a not unchallenging quick game, it has much to recommend it.

Anzio is altogether different, and should only be tackled by the serious simulator. Featuring a delectable long map of Italy and a magnificent set of

counters for all the units in the Italian campaign with replacement counters for each step that they lose, the game offers an absorbing, hard-fought struggle all the way up the peninsula. There are four levels of complexity, from the moderate to the mind-boggling, and three of length, from an evening's play to a week's campaign. Invasion and air support rules add color to the bitter land fighting, and the sophisticated breakthrough rules in the advanced versions prevent a trench war from developing. There is rather a lot of accuracy to the nit-picking point: the Poles get depressed after Yalta, such-and-such a division starts a point under strength, and so on; these features can be hard to remember unless one plays the game repeatedly, but they can generally be skipped if the players prefer, with little effect on the game.

Moving up the complexity scale, we arrive at *Third Reich*. This is a brilliant game, with possibly the worst rules ever published by a leading game company. The first edition generated whole booklets of errata, and yet every game seemed to generate another unresolved question. *Nevertheless*, the hobby just couldn't keep away from it, and every week sees hundreds of determined men all over North America and the UK sit down for another game: teeth set, eyes fierce in concentration, they batter their way through the rules to reach the unrivalled game underneath. The fact is that *Third Reich* remains the only game on the market in which the whole European war can be simulated in the course of a reasonable space of time, while preserving a reasonable degree of realism. The backbone to the game is the outstanding production system, which steers everything from unit production to the costs of opening up the war on a new front. Both the two-player and multi-player versions work well, though diplomatic possibilities are constrained by a historical straitjacket enforced by the rules: no British attacks on France! Surprisingly, a postal game is also quite feasible, if a gamemaster is available. The 2nd edition rulebook, incidentally, is said to be a notable improvement, though still not quite devoid of ambiguity.

Finally, there are the diplomatic games: *Diplomacy* and *Kingmaker*. The player interaction is greatest in *Diplomacy*, where it reaches extraordinary heights: impersonation, forgery, bribery and incredible flights of deception have been recorded, especially in the postal game. A celebrated game in Britain featured an offer by Italy to Austria to send $9 as a surety, to be returned after the move if Italy moved as promised. Austria agreed; Italy moved as promised; Austria then wrote saying "I will only return the money if you do as I request on the next move." Back came the cool reply from Italy, "If you retain the surety after written consent to the agreement, you are guilty of grand larceny, and liable to two years' imprisonment. If, however, you have consulted with Germany about this, as your letter implies, then you are guilty of conspiracy. The penalty for this is up to life imprisonment." The $9 was in his letter-box next morning. But the alliance resumed next turn anyway.

Kingmaker is a chancier game, and a great favourite at conventions late in the evening: it may not be a tremendous test of skill, but it is remarkably good fun. There are plentiful opportunities for careful planning, but the schemes tend to be outdone by the slings and arrows of outrageous card-turns: your leading noble is called away to face a peasant revolt, or your armada of seaborne toughs are swept ashore by a violent storm into a peaceful harbor in France. *Diplomacy*, while making less attempt at simulation than *Kingmaker*, is a less unpredictable game, with tremendous suspense deriving from the simultaneous movement and total player distrust. Buy *Kingmaker* for colorful fun; *Diplomacy* to discover the true depths of twisted

ingenuity to which you and your friends can sink! But note that both games require a number of players (3 or 4 in *Kingmaker*, 7 in *Diplomacy*) to be much fun, so you should either be willing to play postally, or have a lot of mad friends.

⬡ (A/H)

★★★★★

BUGS & BREACHES . . . *Contd from Pg. 30*

discover that the Arachnids have run out of units in some areas of the perimeter, allowing you to shift and redistribute forces to concentrate against greater threats.

While the Terran player must always maintain a balanced force, the Arachnid must strive to pull him off balance by using surprise, feints, and general sneakiness. There is no set formula for this, since it depends on your enemy. Nevertheless, there are some tricks you can pull:

On the first turn you can pop up in V-11 safely, since there is no way for the MI to attack it, and you pick up an easy five points. After the first turn, a good Terran player will be able to attack every hex within his perimeter. The mountains are good places to surface, because of the die roll modification. Especially nasty are hexes surrounded by rough terrain, because they are so hard for the MI to reach; note that a trooper must be adjacent to attack with ranged fire.

The barren terrain is good for feints, or a surprise assault. One good tactic, if it is lightly garrisoned, is creating three breaches in one turn without sending units through them. You now have the threat of six units popping up in the desert at once (assuming that three tunnels have branches beneath the desert), and he will have to rush reinforcements there. If he doesn't, you have the capability to embarrass his desert troops with an attack. If the desert is reinforced, attack elsewhere; the threat is maintained.

Your threat to enemy troopers is greatest in the savanna. Any MI trooper on or adjacent to an engineer unit ready to make a breach is just asking for it. Breach, emerge with warriors, and trample the trooper. Be warned: odds of 3-1 or 4-1 are better than higher odds, because you don't want to kill, just maim. It is better to be stacked with a live but stunned or wounded MI unit than with a KIA. If the target isn't KIA, the Terran cannot use his HE rockets on you; he must jump in and make a close attack. If you have caught him off balance he may not be able to make a good attack, and you have a chance of picking up some points.

The same tactics will work using a heavy weapon beam, and you can be up to three hexes away in savanna, or adjacent in rough or barren terrain. The ideal situation is a Terran in a hex surrounded by rough terrain adjacent to one of your engineers, without too many friends nearby. You create a breach, your beam surfaces and frys the fool. After wounding him you move to his hex, immune from counter-attack for a turn or two while you collect points. This can also lead to ambushes of enemy reinforcements or pull the MI off balance allowing you to attack elsewhere. Be careful with your beams; you only have five of them and they are always valuable as a threat.

One trick you can pull against the unwary opponent is to keep one sector of the perimeter completely quiet during most of the game while the action blazes elsewhere. Hopefully your opponent will figure that there is nothing beneath and station no one there. All of a sudden the area bursts with bugs, forcing him to rush troops there not quite in time, and giving you some points.

Now you have a bag of tricks to use in the first two scenarios of *STARSHIP TROOPERS*. The more you play the more tricks you will accumulate.

⬡ (A/H)

AWAY FROM THE COMBINED FLEET

New Concepts and Tactics for Midway

By William B. Searight

With *MIDWAY* some 14 years old, you could well believe that everything that could have been written about strategy and tactics in the game has already been printed. Probably because up to now the Japanese player has been mesmerized by the Rengo Kantai (combined fleet) concept, where, except for one or two scout cruisers, the Japanese group their ships into one huge carrier group and the *Yamato* group. In all three of the *MIDWAY* "Series Replays" in the *GENERAL* since 1973, the Japanese have lost. Since the old concepts and tactics don't seem to work for the Japanese, one must consider new ideas on mass, movement and time-distance ratios.

Search Pattern

All too often the Japanese, restricted by lower number of searches, ends up biting his nails in fear of a 1700, June 3 attack. To prevent an undetected first day air strike, the following search pattern will disclose the Americans everytime. When searching, insure the *Nagara* moves into one of the central B areas in order to search the F column on the second turn. By the sixth turn, *Nagara* should be in the central or southern D column.

June 3

0500	None		
0700	F4,	F5,	F6
0900	F1,	F2,	F3
1100	E5,	E6,	E7
1300	E2,	E3,	E4
*1500	D4,	D5,	D7

(one ship search by *Nagara*).

1700	D1,	D2,	D3

(*Nagara* does not search, but evades detection)

*If no contact is made by the 1500 turn, then the 1700 safe sanctuary will be in any zone within the A column.

Of course a much simpler search pattern could detect the American Fleet, but then the Japanese would normally hug the A,D,G zones of the A column with no room for maneuver during the night turns. Obviously during the first day the Japanese are almost always kept under observation; especially during the 1500 and 1700 turn when he joins with the four cruisers. The two night turns and the 0500, June 4 turn are of little benefit as he combines with the *Atago* group. An American 0500, June 4 search of A1, 2, 3, 4, followed by an 0700 search of A4, B4, 5, 6, will locate or trap the Rengo Kantai within a restricted area.

The American, during his two night and 0500 turn, could be within any one of 25 areas. With this being the case, any surprise to be gained lies with the Americans.

Fleet Tactics

To try to bring the pendulum of surprise back towards a somewhat more even basis, the Japanese must abandon the Rengo Kantai tactic and employ a novel strategy. During the previous described search pattern the Japanese could be in any zone of the A column. A distinct advantage, as will be shown.

During the two night turns of June 3-4 and the following 0500 move the *Kaga*, *Hiryu*, two BB's and five CA's advance into the C column. The *Nagara* is further ahead and is not counted as part of this group. During the same time frame the *Akagi*, *Soryu* and *Suzuya* move within the A column to join

the *Atago* group. This separation of the CV's is known as the split CV concept. When the American searches the A column areas he will most likely locate the Japanese, but not what he expects. A Japanese response would be; carriers, battleships and cruisers located in (area-zone). Since the actual names or total numbers do not have to be disclosed, the American will assume that he has located the Japanese Rengo Kantai. Unaware that a CV strike force is steaming westwards, the Americans could easily be caught unprepared with readied aircraft on deck. With suicide attacks ruled out the Americans would feel safe 8 or 10 zones away from the Japanese even if he were located in return.

(a) *Akagi*, *Soryu* and *Zuiho's* attack aircraft fly 10 zones; attack the Americans and land on the *Kaga* and *Hiryu* decks.
(b) Simultaneously *Kaga* and *Hiryu's* attack aircraft fly 4 zones, attack and fly on to land on the *Akaga*, *Soryu* and *Zuiho*.

As in previous articles, the best attack on readied carriers is the 6-9-6 formula. Six torpedo sqds. on each beam of two carriers with nine divebombers on top of each, while the third carrier is attacked with three torpedo sqds. on one beam, six on the other and again nine of the divebombers. The remaining T and D sqd. can be used against the *Atlanta*. As explained previously, this attack will definitely sink one, and possibly two carriers.

Of course with your positions now disclosed, the Americans could counterattack, but only the Kaga group. Weakened by the loss of at least one carrier with its complement of aircraft, his strike would be weaker and deficient in fighter escort.

As the Japanese initial surprise attack would not require escorts, he would now be free to fly full fighter CAP (32 sqds.), over the *Kaga* group.

Against a weak American fighter escort (17 or 18 sqds.), the Japanese could strip off his excess fighters for ship defense. Up to 15 sqds.; the equivalent of three battleships.

Naturally, once the Americans have been stung by this strategy, he will definitely vary his own in future games. He may stay further east and conduct an 0500, June 4 search of the C column in order to locate and attack your *Kaga* group.

The Japanese in turn, should vary his strategies such as:

1. The advanced *Kaga* group moves west, but stays in the B areas instead of full movement into the C column.
2. Vary the direction of the advanced group (north, center, south).
3. Not splitting them up at first and have the jittery American looking for a ghost CV fleet until his split searches have lost your actual fleet. Then divide it into a more balanced CV, BB, CA disposition.
4. Keep both CV fleets in separate A areas on 0500, June 4 with a balanced BB, CA force (oncoming *Atago* group arrives in two separate areas to meet with the two CV groups), so that each has the same ship type and approximate anti-aircraft protection.

As you can see, there are at least four basic methods which could cover 21 possible areas. Whereas before the Americans had an 80% chance of locating the combined *Atago* CV group within an A area, now he will be pulling out his hair trying to locate and keep track of two CV groups and later on, the *Yamato* group. Gone is the time when a Japanese CV force spotted 8 or more zones away leaves the Americans feeling safe from air attack. Now any CV contact within 13 zones can give the American a nervous breakdown as he tries to decide when to throw up CAP. Who knows, another CV fleet just might be sitting right next to him.

As with any strategy or tactic, none is ever perfect. The split CV concept does not guarantee a Japanese win, but rather a more evenly balanced game.

Doolittle Strategy

For every strategy there is eventually developed a counter strategy. For the Americans this is in the form of a first day sneak attack upon the Japanese. Instead of combining all of the American ships together, split them up into two groups. One group will consist of two carriers and two cruisers to act as the decoy force (D.F.), while the remaining carrier (*Hornet or Yorktown*) and six cruisers make up the strike force (S.F.) When starting from the east edge of the board, the decoy force proceeds across the center while the strike force moves by the northern or southern route. On the second turn, two objectives are met. First, move the D.F. into one of the F3, 4 or 5 areas to deliberately be located, while the S.F. moves on undetected. By announcing CV's and CA's, the Japanese will believe what you want him to believe. Second, launch and transfer aircraft from the decoy carriers and Midway to the S.F. and vice versa so that the final aircraft complement on the strike carrier will be 16 torpedo and 10 divebomber sqds. With the Japanese under the assumption that he has located the entire American fleet, he will concentrate all of his future searches to keep this group in sight. Meanwhile the S.F. is steaming westwards. The D.F., so as to not alarm the Japanese, could slow down just enough so that in appearance the Americans would not be able to launch a first day air strike. By 1700, June 3 your S.F. would unleash its 26 attack sqds. The Japanese fleet caught by surprise with readied aircraft on deck will be in trouble.

To increase the odds of sinking a carrier, be sure to concentrate your attack on the *Hiryu* or *Soryu*. With torpedo attacks of 8 sqds. on each beam and 10 divebombers from above, you should get at least two 1-2's and a 2-1 attack. With readied aircraft, the thin skin carrier could only sustain two hits before sinking.

It is important to remember that once tried successfully, twice against the same opponent could prove disastrous. Japanese counter strategy could be to fly full fighter CAP on the last daylight turn when U.S. carriers could be in range.

First Day Attack

The split CV group concept may be split sooner than you desire if the American is the kind who likes to charge across the board, regardless of being found, in order to strike during the first day. He would gladly take the chance of losing one carrier for two Japanese flattops. Against this it would seem that the jig's up.

One way is to surprise the Americans first. But how? By hitting him when he least expects it from 8 zones away from your located CV's, BB's and CA's on the 1500, June 3 turn. Remember that no suicide attacks are allowed. Basically it would work as follows, although the described mechanics are not exactly necessary each time to make it work. With a little experimentation you can come up with several alternate methods.

	CV's,BB's,CA's	CV's	American
0500	A5C	A6C	—
0700	B4E	A6C	—
0900	C4A	A6C	—
1100	B3H	A6C	—
1300	A4C	A6C	—
1500	A4E	B5E	D4D
1700	B4G	B4G	—

In the table above, the American position is shown once as he is steaming across the board with no evasion tactics. The previously described Japanese search pattern can easily locate and track him.

Each time the Japanese are located they are only obligated to give their exact location and ship composition (not names or numbers of each type). This tactic is possible as the CV group with escorts moves about the above co-ordinates while the two other CV's (*Kaga* and *Hiryu*), remain undetected and are moved into the B column on the sixth turn. *NOTE:* However you utilize this tactic, insure that the main CV group can not move into the same area or the same possible area as the two lone CV's until after you have launched your attack.

This unexpected attack would catch the Americans with readied aircraft on their flight decks. With the loss of one carrier, the Americans may seek revenge on the now disclosed second carrier. On the following 1700 turn, the Japanese forces combine in a single zone and fly full CAP (28 sqds.). This allows the Japanese to strip off up to 10 fighter sqds. for ship defense (equal to five cruisers, but more flexible). With a weakened American attack, you may suffer only damage with no actual carrier losses.

It is imperative to stress that the actual movements are for illustration purposes only. With a little experimentation, alternate ways to accomplish the desired results can be discovered. You may also want to move out the two single carriers on the third turn instead of the sixth turn, depending on how the Americans approach (north, south). Using the same tactics it is feasible to move the two carriers out on the third turn; conduct a four carrier strike at 1300, combine the carriers at 1500 and conduct a second strike at 1700 (if the Americans have not already retreated). True, the *Mikuma* group could not join the main force until 1700, but those same 10 extra fighters on a 1500 CAP are worth five cruisers.

Midway-First Day Strike

Only once in all of the previously written articles has there ever been any mention of a first strike against Midway. Probably because the two lone carriers, after reducing Midway, were reduced themselves. Although at first thought it seems suicidal that a single carrier could attack Midway and survive, it is possible in the beginning by a lone carrier *(Hiryu)*, moving into A7C, while the main fleet is in A1-A5 (example A5C). With aircraft readied on the first turn they are shifted about so that on the second turn the *Hiryu*, now in B7B, has a total of 20 attack sqds. and one fighter sqd. Since you state that you are readying aircraft two turns in a row, he might wonder what you are up to. Try to lull him by announcing on your 1700 turn that you are de-readying planes (actually only two fighter sqds.). One of the sqds. can be from the *Hiryu*. By moving along the 7 row and then angling up the board, the *Hiryu* can be in position by 1700 (example E4F). With no expected CAP over Midway on the first day (who ever has), the *Hiryu's* attack odds will be one to one against Midway. That is a 67% chance to reduce Midway by at least one half of its strength. In addition, a number of American sqds. will be destroyed on the ground. With two night and the 0500, June 4 turn to run, the *Hiryu* could be within any one of 25 areas before the American can strike back. The American expecting the carrier to run for the safety of the main fleet could search the four C areas in hopes of catching you there. Obviously you don't want to be there, so you move elsewhere; even nearer Midway itself. There exists a one out of six chance of the carrier being located. This constitutes better odds than that of finding the main fleet. If the American does concentrate on locating the raiding carrier, he will most likely lose track of the other CV's or if he were to split his searches between both, he may lose sight of everyone. On the 0500, June 4 turn in expectation of a second strike, he might fly everything off

Midway and fly CAP over the island, leaving his aircraft grounded on the following turn.

Even without a second strike, the damage already done is worth the effort. An even better time for a second strike would be after the American fleet has been located further than 7 zones from your carrier *and* Midway.

Baby Flattops (CVL's)

The *Zuiho* and *Hosho* comprise one third of the Japanese carrier force although in total aircraft they only carry three fourths that of a single fleet carrier. Weak in anti-aircraft firepower and in ability to sustain hit damage, they more closely resemble glorified light cruisers except for their point value.

Regulated to remain in fleet formation, they are doomed when attacked. Not even Japan's largest gunned battleships could save them against a determined American air attack. Their role up to now has been to provide additional aircraft in an attack. This is well and good up to a point. As time progresses with the Japanese advancing towards Midway, what of them then?

It has been found through play that both CVL's stand an extremely good chance for survival through independent action. In the case of *Zuiho* she could drop back into the A or B area as the CV group begins its westward movement into the C or D areas, without the Americans being aware of her absence.

The *Hosho* can easily be despatched as the battleships move on towards Midway. These carriers act as undetected floating supply depots. Replacement aircraft could be flown up to 14 zones to land on one of the advanced fleet carriers already attacking Midway. Even when denuded of aircraft their function could be to save many valuable fighter sqds., if one of your carriers are sunk, that had been flying CAP.

In both of the above situations these carriers' positions would not have to be disclosed since none of the aircraft participated in any attacks upon the American fleet.

Summation

In order to balance play in *MIDWAY* several exotic strategies and tactics have been brought fourth. Some of these you may concur with while others seem suicidal in concept, but all have been playtested and are workable. Depending upon your skill and ability to take calculated risks, the unsuspecting American can be stung in a variety of ways.

The split CV concept is able to close upon the Americans while seemingly out of range in order to attack first. Even after he is aware of this tactic it is always harder to keep track of two CV groups than just one. In reducing Midway an attack would disclose the location of one CV group, but not the other.

The tactics involved in striking the Americans before he can attack the first day and a first day strike on Midway, are all part of expanding the Japanese offensive capabilities. The more variations eventually used the more cautious the Americans will become.

A word of warning to the Japanese player. Never continuously use the same tactics time after time. What would give you victory in one game could crush you in the next. Vary your play and you will give the American player the jitters chasing a real or ghost CV fleet. Never again will he feel really safe even if he locates CV's 8 or more zones away.

The American, using his favorite split board search of A1-A4 on the first turn and A5, B4-6 on his second turn, is consistently and unknowingly falling into the same rut as the Japanese. Rather, the American should vary his search patterns to try to disclose any unusual Japanese tactics.

OF BUGS, BEAMS, AND BREACHES

By Jim Stahler

When I first heard that Avalon Hill was making a Science Fiction game, I was skeptical. Up 'til now they had stuck to historical games, or at least pseudo-historical games such as *TACTICS II* and *BLITZKRIEG*. So AH was finally going off the deep end.

Well, I was given a copy of *STARSHIP TROOPERS*, and I couldn't help looking at it. Having looked at it I couldn't help playing it and having played it I couldn't help loving it. Although a radical departure from Avalon Hill's usual bill of fare, it is an excellent game. We will have to wait 200 years to see if it is realistic, but it does a good job of capturing the feel of Heinlein's novel and it has the highest excitement level of any game that I have played.

STARSHIP is divided into eight scenarios, numbered one through seven (no, my counting is not fuzzy, there are Scenarios 5A and 5B). Each scenario introduces new rules, new units, and a new situation. I will discuss the first two scenarios, giving you hints on strategy, tactics, and some of the dirty little tricks that I have discovered in the play of the game.

SCENARIO ONE: FEINT AGAINST THE HUMANOIDS

"Our mission is to let the enemy know that we could have destroyed their city, but didn't."

The first scenario is a simplified game, good for beginners new to wargaming, but still interesting for the veteran. It depicts the raid on the Humanoids described in the beginning of the novel, in which a Mobile Infantry (MI) platoon drops onto a Humanoid planet to destroy as much property as possible. The game only has one squad instead of a whole platoon—representing only part of the action. Many elements that appear in later scenarios, such as HE rocket launchers, Humanoid heavy weapon beams, drop procedures, and MI retrieval, are not included in the first scenario for the sake of simplicity.

In Scenario One we first meet the Mobile Infantry. These include three types of units: Marauders, Scouts, and Commanders. They are all quite mobile, as befits the Mobile Infantry. The Marauders are the main striking power of the MI. They are heavily armed and heavily armored, making them difficult to kill. You will use your Marauders to go after enemy units, installations, and strong points.

The Scouts are nearly twice as fast as the Marauders, although they are not as powerful and much more vulnerable due to their weaker, lighter armor. Their main mission in the first scenario is that of intelligence. The Scout must use his speed to investigate possible installation sites to determine if they are real or decoy, so that you will know where to zero in your Marauders. Care must be taken to insure that the weak Scout doesn't get into trouble. Since it has only three defense factors, the Skinnies can get up to a 4-1 on the Scout using six warrior units, or 2-1 using only three. Nevertheless, damage to the Scout is worth fewer points than damage to a Marauder or Commander, making a risk to the Scout more acceptable. Note that heavy damage prevents the Scout from attacking, but it can still move and gather intelligence.

The Commander is worth the most points if damaged, in Scenario One, but it is as hard to damage as a Marauder. Since the Commander is as fast as the Scout, his role is also intelligence gathering. Because of the Commander's heavy armor, you could send him into areas too dangerous to send a Scout. Don't neglect the offensive power of the Scout and Commander; together they are as

strong as a Marauder, and the two factors that they each have could be just what you need to up the odds in an attack.

Humanoids, or Skinnies as they are affectionately called, come in two varieties, workers and warriors. The workers are completely harmless. The warriors aren't much more dangerous to the MI, but they can be irritating, especially to the Scout. Both types of units are sufficient to prevent an installation from being destroyed, but the warriors are much harder to kill.

The workers are useful to deceive the enemy, for example in defending decoys. Since in Scenario One the Humanoid player gets points for eliminated workers, it is a good tactic to force the Terran to fry plenty of workers if he wants to wipe out an installation. Also, just one worker unit is sufficient to prevent a strongpoint from being automatically eliminated.

The only real force the Alien player has consists of the warriors. Because they are weak in the attack, it doesn't pay to be very aggressive against MI units. It may be worthwhile to come out in the open to attack an isolated Scout or Commander, but not when there are lots of Marauders about. Warriors are best kept in strongpoints or in the city, coming out only when an installation is threatened. It is useful to keep warriors in groups of three, since six attack factors are needed to get 1-1 on a Marauder or Commander, and 2-1 on a poor little Scout.

Strongpoints are important to shield Skinny units while the MI approaches. They should be placed near enough to installations so that units in them can move to defend the installation in one turn.

In Scenario One, there are two terrain features of importance: the roads and the city. The Humanoid units move twice as fast along the road as off it, which leads them to set up along one of the roads to give them greater mobility. The road also helps the MI to get through the mountains quickly if they are heading toward the Northwest corner of the savanna.

The city not only speeds up the Humanoids but slows down the MI, so that the Skinnies are actually more mobile in the city than the Terrans. By subtracting one from the die roll in an attack, units are harder to kill in the city. This makes the city a good sanctuary for the Skinnies. The Terran player will not let his troopers get bogged down in the city since he is on a tight time schedule. Of course, it is also more difficult for the MI to get hurt in the city, but they are so hard to hurt anyway that their added safety in the city is of little importance.

The only type of fighting allowed in Scenario One is Close Combat. This involves jumping onto the enemy and fighting it out with hand flamers, bombs, and fire pills. Note that regardless of odds the attacker can never be hurt, so if you have units in the same hex with enemy units it always pays to attack. You can't lose anything, and you may damage or at least immobilize some enemy units. This applies to Scouts and Commanders discovering a host of Humanoids, as well as to Skinnies defending installations.

Now that we have met the adversaries and examined the field of battle, let's get on to strategy and tactics. The key to the Humanoid defense is dispersal. Note that Marauders move six hexes per turn. It is therefore convenient to put installations seven hexes away from each other, so that the Terrans will waste an extra turn going to the next installation to burn. Since the MI enter from the South, it is wise to set up along the North edge of the board, so that they will spend nearly half the game

just reaching their targets. I have found setting up along the northern road very effective, alternating strongpoints with installations or decoys, so that the units in a strongpoint can reach two or three installations. It is also convenient to place installations adjacent to the city, so that units in the city can reach them easily while being safe from the enemy. Each installation should be within reach of troops from more than one strongpoint. Be sure to vary your setup from game to game to keep your opponents guessing.

Keep your troops safely within strongpoints or the city until the Terrans threaten an installation by moving onto it. Then come out to defend it, attacking the offending unit in hopes that it will be stunned or even damaged and reduce the Terran offensive power. Remember that the Terran must destroy three or four installations to win. Don't blow everything defending one installation, allowing the enemy to steal a march on you and blast the rest.

One setup that I have had great success with is to put the installations and decoys in five pairs on hexes M5, M6, T2, T3, AA3, AA4, HH2, HH3, PP3, and QQ4. Strongpoints are all on the road in hexes P4, Q4, W5, X5, DD2, and EE2. I vary the arrangement of decoys and installations, and place all workers and warriors in strongpoints or in the city. Of course, the workers are placed to cover the decoys.

There are several nice things about this setup. Since it is along the North edge of the mapboard, it takes a Scout or Commander at least four turns to reach a possible installation, and a Marauder cannot reach one until turn six. The MI must waste nearly half the game just marching. This puts a time pressure on the Terran player. Normally, the MI reaches the decoys/installations along row H, and finds two decoys. Now he must decide which way to go. If he goes East to the city, he generally won't have enough time to kill those installations and then go the other way. Similarly, by going West he has to leave alone the two Western installations. By splitting his forces, there usually isn't sufficient strength to destroy any installations at all. To add to the discomfort of the Terran, note that each pair of installations is at least seven hexes from the next pair, or two turns of movement for the Marauders. The workers and warriors are stationed in the strongpoints or the city, each within one turn's reach of several installations.

There are a few ways to improve this setup. A decoy or installation could be placed in QQ11, at the Southeast corner of the city. This can be covered by part of the city garrison. Any MI unit wandering over here will be out of action at the main front for a turn or two. Similarly something could be put near the rough terrain on M12, also causing Terran troops to waste time investigating. This could be either a decoy covered by a worker or a real installation covered by a warrior. Also, the bends in the road at S4, X4, and EE3 are good places for installations because they can be reached from three hexes away along the road in either direction.

The Terran's main enemy is time. He has only twelve turns and has far to go with much to do. The Scout and Commander must dash ahead to discover the locations of the real targets. The Marauders must follow up with a knockout blow. It is important not to split up the Marauders. Only three warriors are needed to prevent half the force from achieving 2-1 odds.

There are two main tactics open to the Terran player. One is to attack the enemy units in their

strongpoints, destroy them, and then wipe out the installations unopposed. The other is to advance onto an installation, watch the Skinnys flock to its defense, and eliminate them there.

The Terrans have a total of 32 attack factors, giving a maximum of 3-1 on a strongpoint. Using the first method of attack, an average of one strongpoint in two turns can be eliminated. This is too slow to win in most situations. I favor the other method, especially since the Scout or Commander can be used to initially draw the Humanoids out into the open, where they are vulnerable. Sometimes a combination of the two will work, in which some MI units attack strongpoints at 2-1 or 1-1 in an attempt to pin down the defenders, while others attack the installation. This tactic is especially useful when an installation can be reached by Skinnies from only one strongpoint.

SCENARIO TWO: OPERATION "BUGHOUSE"

"Bugs Mr. Rico! Zillions of 'em" "How many zillions, trooper?"

If you think that Scenario One was full of surprises, wait until you play Scenario Two. It involves a full MI platoon attempting to secure a beachead from the Arachnids, who continuously pop up from their underground tunnels to compromise it. This is part of the First Battle of Klendathu, also notable as Juan Rico's first combat drop, which later turned into a fiasco—too many bugs popped out of too many holes, resulting in a wholly disastrous situation for the MI.

The Arachnids, or bugs, emerge in Scenario Two. They have tunnels, queens, brains, and engineers underground, but only their warriors, workers, and heavy weapon beams appear on the surface. Any one of these three types of units, even the lowly workers, are sufficient to get points for the Arachnid player, and deny them to the Terran. The workers are slow, weak, and cannot attack at all. Nevertheless they are useful for drawing off enemy troopers, and they too must be killed for the MI to secure the perimeter and earn points.

The warriors are relatively weak in defense, although much tougher than workers. They are ferocious in the attack, even stronger than a Marauder. A stack of four warriors can get at least a 4-1 attack on any MI unit, which guarantees at least stunning the hapless victim, not to mention the Terran player. Like the workers, warriors are very slow creatures above the surface, but within the tunnels move at lightning speed.

The key Arachnid units are the heavy weapon beams. These are tough to kill, especially in the mountains. They have tremendous offensive power—it only takes one to get a 3-1 on any MI unit; and they are fast, being the only bug units able to move in rough or barren terrain. Your strategy must be based around these units. They should only surface when reasonably safe and with a fat juicy target waiting.

The Arachnids are much nastier than the Skinnies we met in Scenario One, but the Mobile Infantry platoon has correspondingly greater fighting power. Not only are there six times as many men as in Scenario One, but they have superior mobility due to their extended jump capability, and the 15 HE missile launchers give the MI platoon considerable punch.

The roads and city have vanished from the mapboard, and the rough and barren terrain have become the critical mapboard features. On the barren terrain hexes the MI has an advantage over the bugs because of mobility. The MI can rocket at full speed through barren country, but most Arachnid units cannot move at all and the heavy weapon beam can only crawl one hex per turn. Since barren hexes don't affect combat or block ranged weapons, a few MI troopers with HE launchers can

command the entire barren area. The only real danger is from the beams; warriors can attack an MI trooper only if he is standing on a breach (not too clever) or where a breach is about to happen (not too likely).

In the savanna, everyone has full movement. The MI can range far and wide, but standing adjacent to a breach or an engineer about to build one is unhealthy. This multiplies the target area of the Arachnid warriors by a factor of seven, making this area more fun for the Arachnids than barren terrain.

It is in the rough terrain where the Arachnids can really bug the Terrans. Although the Arachnid mobility vanishes in barren hexes, the Terrans' mobility is greatly reduced also. The bug's most important advantages in rough terrain are the die roll modification and the blocking of HE fire. Thus, it is much harder to kill bugs in the mountains, while the MI is just as vulnerable as in savanna. Also, to shoot at Arachnids surrounded by rough terrain, the MI must be adjacent to his target. Since this will usually involve moving one or two hexes into the mountains, it could be very difficult to attack a bug unit properly placed.

Before the game starts, the Arachnid player draws his complex on the Alien Control Sheet. This is critical because it determines the Arachnid capabilities for the whole game. Where you put your complex is determined by the layout of the terrain and the possible locations of the Terran perimeter. Mark the perimeter center (V-17) on your Alien Control Pad, and then mark off two perimeters with radii of 6 hexes and 16 hexes around the perimeter center. All the hexes within the inner perimeter must be within the Terran perimeter, regardless of where the perimeter marker is placed. The hexes within the larger perimeter may or may not be within the Terran perimeter, depending on the placement of the perimeter marker. It is wise to make the inner perimeter dense with tunnels, including parts of all five tunnel systems. Pay special attention to honeycombing the rough terrain. Put some tunnels into the outer perimeter, to threaten more territory. There is no point in running any tunnels outside of the outer perimeter.

Once the tunnel system is drawn, the Terran player selects his perimeter to defend. Leaving the perimeter marker at V17 is a good way to include the maximum Arachnid tunnels in the perimeter, and this the Terran player doesn't need. It is best to move it the full five hexes away in one of the six directions.

When placing the perimeter marker, there are four factors to take into account:
1) How long will it take to get the MI into position?
2) How much rough terrain is included in the perimeter?
3) How much barren terrain versus savanna is in the perimeter?
4) Where does the Alien player expect the perimeter to be?

Moving the marker south allows the MI to deploy sooner since they enter from the south, but it includes a lot of rough terrain. Moving the markers southeast cuts out some of the mountains in the northeast as well as incorporating some of the mountains to the south. Placing the perimeter to the north or northeast makes a longer journey to position the MI, and swaps barren terrain for savanna. On the other hand, it tends to be unexpected and removes a lot of the southern range of mountains, which is likely to be festering with bugs. Moving the perimeter marker to the northwest eliminates the Southern mountains entirely, but it is very dangerous because it includes plenty of rough terrain to the northeast and takes a long time to station the Mobile Infantry. It may be a good move for this very reason—your opponent is

likely to think that you wouldn't be foolish enough to do it and so he wouldn't place any tunnels very far to the northwest. This is your opportunity to show him that you *are* foolish enough to do anything! Finally, moving the perimeter to the southwest trades maximum savanna for barren terrain, which is to your advantage. However, it also includes maximum rough terrain, which could hurt.

Once the perimeter marker is placed, it is useful to place unused yellow counters at the six corners of the perimeter to easily determine the limits during the play of the game. Remember that Arachnid units outside the perimeter don't count toward victory points.

The Terran tactics are based on dispersal of the MI troopers to defend the entire perimeter, but they must be concentrated enough to be mutually supporting to give a hand to any trooper in trouble. The key to the defense is mobility and the critical units are the Scouts and Commanders. Every Scout and every Commander should carry an HE launcher. With their high speed, they can range far and wide, maximizing the effectiveness of the ranged weapons. They should be placed so that every hex of the perimeter can be reached by at least two HE weapons to insure a 6-1 attack on a warrior, should one appear.

The main purpose of the Marauders is to protect the HE-carriers who will be their main strike force. It will be a favorite trick of the Arachnids to disable—stun or wound—a Terran and to end the turn in his hex. This prevents you from using HE fire, lest you risk hitting your own man. It is the job of the Marauders to close with and destroy the enemy in this situation, but don't overlook the extra help that Scouts and Commanders can give. Note that they can make a close assault and fire HE rockets in the same turn. Normally use HE to fry the enemy; close in only when you have to.

The perimeter will be divided by rough terrain into two areas: barren and savanna. The enemy is not likely to put up much fight in the barren terrain because of his lack of mobility. You should station 6 of your 15 HE launchers and two squads to protect them. This force should be sufficient to defend the barren terrain and the adjacent mountains.

The rest of the platoon should be positioned in the savanna near the rough terrain, to enable them to deal with breaches in the mountains as well as anywhere in the savanna. Make sure that each MI trooper is within one turn's movement of plenty of friends, in case he gets pounced on. Beware of three blunders that can boost the bug's chances of success:
1) Don't stack your units at the end of your turn. This makes tempting targets for enemy heavy weapon beams. You may have to concentrate to make a close attack, but be sure to use extended jump to spread out afterwards; that's what it's there for.
2) Don't end your turn in savanna adjacent to a breach. You never know what will come boiling out of the hole; it could be dangerous to your health. This rule may be difficult to follow late in the game if there are a lot of breaches, but you should try. Why give enemy warriors free targets?
3) Don't end your turn in rough terrain. You get no defensive advantage from it, and if the Arachnids manage to disable you and end the turn in your hex, you will have the devil of a time destroying them. They get defensive help from the terrain, you cannot use your HE, and you will have problems getting troopers to the hex because of the reduced movement through mountains.

It pays to keep track of the enemy's breaches, to get some idea of how the tunnels run. Remember enemy losses in each cell. After a while, you may

The Early Years Reexamined

By Richard Shagrin

"It's what you learn after you know it all that counts."—John Wooden

"Beware of false knowledge; it is more dangerous than ignorance."—G. B. Shaw

"Knowledge is ruin to my young men."—Adolf Hitler

"I knew I should have called play 17."—Thomas Shaw

This is my second draft of a criticism of David Bottger's article on THIRD REICH in volume 14, number 3. Thanks to your friendly editor's mini-review "Well written, but incorrect" I have agreed to rewrite it. Therefore, I want to make clear that all brilliant ideas are my sole property, and any mistakes are the fault of the editor! *"The victor will never be asked if he told the truth."*—Adolf Hitler

"If facts do not conform to theory, they must be disposed of." Mr. Bottger has disposed of some inconvenient facts and I have a feeling that despite his request for "outraged" reaction that Winston Churchill's comment "personally I'm always ready to learn, although I do not always like being taught" will apply. I must request an examination of his premises. First, why must the German player "occupy Warsaw in Fall 1939 . . . or delay the Axis timetable for the conquest of the low countries and France"? To digress briefly, I "invented" the one-way American Kamikazi attack on the Japanese carriers in Midway based on a similar examination. The rules do not require the Germans to attack Poland (I cheated—I looked through the rules to make sure). To win, the Germans must conquer at least one of France, Russia, or England. Two make a tactical victory and three strategic victory. The marginal victory condition does not require any be conquered, but it is hard to conceive of 28 objectives being occupied by Winter 1943 without at least one down and two to go. In the Alliance game, Germany only needs six to eight objectives, but even this objective is greatly facilitated by conquest of not Poland so much as the major powers. Now all this is logic, and "logic is like a sword—those who appeal to it shall perish by it."—Samuel Butler, Poland is worth BRPs and must normally be taken by Germany eventually. But what if . . .

We might attack in the West. Bottger's third option discusses the advantage (??) of letting the French occupy Luxemburg, in order to attack them across a river in order to get a bridgehead. Why not let them into Berlin in order to attack from the east (across a river) and put a bridgehead in Berlin, too? Of course this is sarcasm, in the remote eventuality my readers think I advocate making the German attack any harder than necessary. Do I get an Ironic Cross? The advantages of the Fall 1939 Western offensive include starting one hex closer to Paris thanks to Luxemburg's lack of garrison. I like the attack Bottger suggests under the heading "A Two Front War" but I don't see why it has to be run as one. To get a bridgehead, infantry can attack from Aachen into Belgium (against a tripled one factor infantry), taking advantage of a now solid front of non-attritionable hexes (Antwerp, Brussels, bridgehead, Aachen and Essen. With infantry support the French may well be rolling for "Vichy" by mid 1940. In addition to the bridgehead attack, one infantry should occupy the vacant Maginot line hex. An infantry and an armor attack Sedan with air support as required. Now we have three exploiting armor (two from Frankfurt, one with the infantry in the Maginot line) to send against (a) the hex between Sedan and Paris and (b) Brussels (one armor with air support can attack from the newly cleared bridgehead square and then move in, completing the

clearing of our supply line to the armor adjacent to Paris. Two more infantry can easily clear the Hague, and the remaining infantry can attack Denmark with support from the fleets to make a 3 to 1. Ye friendly editor has confirmed that from their base in East Prussia this can easily be accomplished. What about the rest of the 25 factors required to start in the east? Well, the rest is air that staged to useful western cities in time to aid in the attack—all except one factor that flies to Helsinki to scare away the big bad Russian Bear. We could save some BRPs on declarations of war (the Netherlands for one, Denmark for two) and start some infantry in Finland. Whatever you put there on setup stays there (and subtracts from the points you can put in other minor allies) until you attack Russia and march in overland or capture a port. No SR transport, or invasion is permitted into Finland as it has no ports or beaches. Of course, builds in the East are rapidly required to bring us up to 25 factors—two infantry, two fleets, and a one point air unit in Finland do it nicely, and can sit in the port in East Prussia and not even suffer attrition. Best put something in Rumania, too. But enough minor, obvious points. What about my other "What if . . . "?

Let's consider attacking Russia in Fall, 1939. I have no shame, why should you? If the fleet is in Leningrad and the Russian northern garrison is weak, particularly if non-existent between Lakes Ladoga and Onega, a reasonable case can be made for a super-quick two front war. A 3-1 is conceivable against a Russian two factor infantry unit in Leningrad (quadrupled to eight factors). With 75 BRPs or 60 if Moscow also falls, and no fleet in being, almost all the Russians must be on the board all the time. The winter of undoubled Germans will occur in 1939, with Russia at its weakest. Holding in the West will be a difficult assignment, but under the circumstances could be worth it. Russia can only spend 45 BRPs per turn (37 in 1940). If reduced to 39 factors on turn one, 36 must be built to stay alive. This takes 30 BRPs for infantry and 12 for armor. If Germany can kill 4 more factors of infantry (even less air/armor) in Fall 1939 (in addition to the 2 lost in Leningrad) Russia must surrender! Makes the palms of my hands sweat. The offensive is even free. Mind you this time I'm NOT recommending this attack. I'm with W. S. Gilbert, who *"led his regiment from behind—/ He found it less exciting./ But when away his regiment ran,/ His place was at the fore."*

Another benefit that should be brought out is the 25 BRPs for the partition of Poland. Somewhat to my surprise, ye fiendly (sic) editor has informed me that Russia can capture them before Germany takes Warsaw. This "amendment" to rule 6.2 (second paragraph) makes delaying the capture of Warsaw less attractive, but given a superquick two front war as above, the Russians probably won't be able to afford the BRPs, units or time to capture what is otherwise theirs. And the Germans can, with luck do so before the start of 1940. This makes up for a lot of Western neutrals not captured. I don't know how to coordinate rule 6.4 prohibiting offensives in Russia in the first winter with the probable need to conduct an offensive against Poland. Probably if you "offend" against Poland you will not be able to Attrition against units in Russia. Maybe the editor will put in his three cents worth to settle the question. (Inflation is everywhere, it used to be two cents worth. Or as W. C. Fields said, *"the cost of living has gone up another dollar a quart."*) As I read the rule, an offensive would be allowed in winter against the cities needed

to capture the 25 BRPs. (*Poland and the Baltic states are not in Russia—thus the prohibition against German attacks in winter would not apply as the Germans wouldn't be in Russia yet—Ed.*)

I'm saving some comments on taking Warsaw for last, so now let's consider the strategem (as opposed to a strategy gem) of Italy "piggybacking" into war with Yugoslavia (saving the cost of a declaration of war) by virtue ("virtue is learned at mother's knee; vice at other joints") of Germany's declaration of war on Yugoslavia, combined with activation of the Axis alliance by Italy declaring war on an Ally. The laconic editor, with a single "yes", has notified me that this rube-goldberg play works. However it also makes Yugoslavia an Ally of France and England. Even if they were not, as soon as the "clever" attrition ploy is played, France (for example) can eliminate one of their own units in the Med, and gain Yugoslavia's BRPs. See rules 3.71 and 3.7, particularly the last paragraph of 3.7. Since elimination of at least one Yugoslavian unit was required for success, this approach must be judged a failure.

In the matter of Russian Invasion of Turkey (RIOT, for short) the calculation of the present value of saved BRPs is correct as far as it goes. But it doesn't go very far. What happens, given RIOT, when Huns Undertake Reconquest of Turkey (HURT, which is both the long and short of it)? Russia loses a fast 30 BRPs, and lives with a base of 106 instead of 124 for the rest of the war. This 18 BRP difference could be Russia's every year. If you believe Turkey will stay Russian every year, I have an interesting real-estate proposition for you—the Brooklyn Bridge. Among other reasons, the Germans need to kill the fleet by denying it a Russian port or other friendly port to park its carcass. The shortest distance to Batum is through Turkey. As an alternative to a Russian attack on Turkey to avoid the "unwanted initiative," how about an attack upon Persia and Iraq? Perhaps the British in Egypt could use some help. For motivation for this generous act, this may open up the southern lend-lease route or at least gather Mosul (the red dot might be useful) to the Russian side. If Lebanon-Syria is Vichy, Russia might even get 5 BRPs out of the trip.

On page 23 the article makes another of those comments that just MUST be examined. Marx said *"Military intelligence is a contradiction in terms."* Groucho Marx, not Karl. It must have been Bottger's military intelligence that decided Germany must effect a one-turn conquest of Norway and that that objective can be attained only by a paratroop assault. (Does anyone know what to call Polish paratroops? Give up? Air pollution.) There is a rule that can help the Germans carry out a one-turn assault with armor, without building more fleets. Rule 3.8 allows the Germans to use an Italian 2 factor armor unit together with a German 4-6 (together they make the carrying capacity of the two fleets) to attack a Norwegian beach and exploit to attack Oslo. Thanks to having air support available there is no need to risk the paratroop unit. It dies forever if eliminated out of supply and there is no adjacent German ground unit (new rules). For ten lousy BRPs and an opportunity to stop Britain from *"breaking windows with Guineas"* (sending BRPs to Russia early in the game when Britain can't really afford to), the risk (of losing the paratroops) is too great. Note that if the fleets and armor start in Kiel the invasion can hit either beach—one will have to

A.H. Philosophy . . . *Continued from Pg. 2, Col. 3*

slight variations in rules, and incidentally, trying to catch your opponent when he forgets a rule which pertains to that game only. But the inclusion of phrases such as "when entering from a road hex-side" and "from a non-road hex-side" would remove much of the ambiguity from rules pertaining to movement on escarpments (and mountains, rough terrain, rivers in other games).

Many good variations have been printed in *The General*. One of the best for *Afrika Korps* was Dave Roberts' "Competitional Afrika Korps" in Vol. 14, No. 1. Certainly some of these variants could be included in updated rules. If Avalon Hill is leery of "chasing away" new wargamers by having too complicated a set of rules, why not follow established procedure and list a "Basic Game," "Tournament Game," and "Options"?

A review of the questions most often asked would certainly indicate the rules which cause the most trouble. Any revision could remove the "worst" problems (the most "infamous" which comes to mind is that answer to Question 3 under RETREATS, Tournament Game, only, in the appendix to the *Battle of the Bulge* battle manual which is at exact odds with a specific sentence under "Advance" on the Tournament Game Battle Results Table).

While on the subject of questions, it appears to me that the increase in the size of the company has not been accompanied by an increase in the amount of personnel handling gamers' questions. I have today sent a letter to Research and Design, asking if they would check on what happened to a set of questions I asked the first week of September. One of my PBM friends recently re-submitted his questions, not having received an answer for eights weeks. I can expect that the increased number of games, and the subsequent increase in the number of wargamers, has caused a flood of questions, but two and a half months without an answer is a *long* time!

I guess what I'm really asking in this letter is that you don't forget there is a core of wargamers out here who still look to Avalon Hill for leadership in the field and who still expect more from AH than from its ever-increasing list of competitors. There seems to be an anomaly here: In "the good old days" when AH could have pretty well done as it pleased it didn't; yet today, with more quality competition, when one would expect the leader to be more "on its toes," certain fine points seem to be lacking.

Many of us (I think) feel a sense of loyalty to Avalon Hill, and will bend over backwards to give you the benefit of the doubt. But we need some help from the company, loyalty only goes so far. Perhaps, in these days of an exploding wargaming community, you won't miss the old-timers if we go. Perhaps you will.

James D. Mueller

Elyria, OH 44035

Quite a blend of harsh and faint damnation, what not? Let's take James' points one at a time starting with the blanket generalization of neglect of the hardcore wargamer. This one really hurts, but we've heard it before, so at least some of you agree with the charge. Yet, it seems

to me you remember the good old days through rose-colored glasses. In point of fact, AH offers more services to the hard core than it ever did. In ye olden days, AH was too busy trying to stay solvent to worry about doing good deeds for the hobby! Getting the *GENERAL* out every two months or so was about as concerned as the company ever got. Proposals for side projects which would benefit the hobby, but not yield a buck simply could not be given any credence whatever in the undermanned Dark Ages of AH. In contrast, recent vintage has seen the implementation of the AREA rating service—a losing financial venture if ever there was one. Bringing AREA into being required the addition of a full-time salaried technician—a salary which soon ate up the token $2.00 (later $4.00) membership charge. An even better example would be our creation & sponsorship of the original two national ORIGINS conventions—a project which easily ate up enough R & D time to cost us another game design. One less game is no mean sacrifice for AH. Because of our comparatively slow publishing schedule, a new game means more to us than it would to a company producing 20 or more titles annually. We make up the difference in number of titles published by the quantity sold of each title. To reduce our rate of production by a game was a sizable concession by management in the interests of the *hobby*. Dana Lombardys of the world aside, the promotion of ORIGINS was a major beneficial gift to the hobby and a helluva dumb business move by AH. Think, if you will, how many Third World customers we gained at ORIGINS in comparision to the number of AH devotees who were exposed for the first time to the tiny game companies which exhibited there. It was not their non-existent magazines or miniscule mailing lists garnered from the Opponents Wanted page of the *GENERAL* which lured thousands to the first truly national showplace convention of its kind. It was the combined clout of AH & SPI which more or less gave the Third World a free chance to strut their stuff before our assembled customers. The cash sales generated by these conventions were miniscule when compared to the revenue another new game could have brought in, and doubtless would have been made up anyway in mail order or retail sales at a later time, because the convention goers were more or less our steady customers. Is this ignoring the best interests of the hard core?

But these are grandiose examples on a tangent. Mr. Mueller's real gripe seems to take aim on the quality of recent releases, that . . . "Avalon Hill doesn't do it right the first time any more." Jim is partly right . . . Avalon Hill doesn't do it 100% right the first time. But it never did, nor does any other game company. There never has, and never will be, a game that couldn't be improved the second time around. But to say that AH first editions are not as good as they used to be is a highly questionable, subjective statement. Compare the first edition rules of, say, *SQUAD LEADER,* with the king of the good old days—*PANZERBLITZ*—which still holds the record for generating the most "nut mail". The ambiguity and omission problems of *SQUAD LEADER,* a far more complex game, are almost non-existent in comparison to *PANZERBLITZ.* Fundamental errors, such as Mr. Mueller himself cites in the *BULGE* rules, *are* non-existent. *CAESAR-ALESIA* is an even better example. When it came time to do that game's second edition, only one typo could be found after the game had been on the market for a

year. Other games have had more problems, to be sure, but to say that the games are not as well done now as before is ludicrous in my opinion. The main difference is that AH no longer ignores the problems & sweeps them under the rug under the guise of a complete game. Now we make the effort to pursue excellence, no matter how evasive it may be, by updating subsequent editions as soon as possible, rather than letting the problems persist for years, as was done with the old classics. And when changes are extensive or recent, (not just a case of the rising state of the art), we offer the second edition free to *GENERAL* readers in regular deals. More care, time & expertise than ever before goes into the design of a new game. We have not fallen victim to an increased publication schedule. Any increase in game output has been matched by a corresponding increase in staff—not a shortening of the design and development period.

As to new rules for old games a la *D-day* '77, the outlook is not good. These projects engender much R & D time, and generate very little revenue in return, and by necessity must be limited to those games which really need the facelift. *D-Day* did. *STALINGRAD* & *WATERLOO* do not—the current edition of those rules suffice quite nicely for the classic set. Changing them would be a waste of effort and would displease as many veteran players as it would pleasure. *BULGE* does need a rewrite and it is an ongoing project—albeit one with low priority. The main question now seems to be whether to just clarify a la *D-Day* or to come out with an entirely new game a la *GETTYSBURG. AFRIKA KORPS* could probably use a less ambiguous set of rules, but the need is not great and clouding the issue by printing Dave Roberts' variant would not prove anything other than abandoning the 17 years of experience & tradition which is the game's forte. Me thinks you doth complain too much . . .

Questions . . . uh oh . . . he got us. Frankly, our question answering isn't what it ought to be. Delays of 2 months are not all that uncommon. Actually, I'm relieved that the example you cited is only two months. One of our designers has been known to sit on a bulging box of nut mail for the better part of a year before getting up the intestinal fortitude to answer it. But, believe it or not, this service, too is better in some ways than it used to be. In the olden days, Tom Shaw would grab any warm body he could find to answer questions at the going rate of 20¢ a letter. I even got a shot of this "employment" back in '71 before I made the mistake of coming to work at AH fulltime. The letters with a simple yes or no question on *STALINGRAD* were easy money, but the guys who tendered field manuals of several hundred questions resulted in slave labor wages. Pay was per letter—not per question. There's still somebody out there waiting for me to return his 25 page single-spaced manuscript of *1914* questions. With this sort of 'revolving door' answermen, it's no wonder that conflicting answers to the same question often arose. At least we've improved on that problem. Nowadays the nutmail is handled directly by the AH staff designer or developer who was originally in charge of the game. Because this assignment never changes, the answers should be more accurate, albeit just as slow in coming. Each staff member is instructed to answer all his nutmail at least once a month. Many of us make the effort to do it weekly, but when publishing deadlines of a particular designer are near, he may well let the nutmail go until his game is finished. You compound the

Gentlemen:

The issue has been brought up regarding the actual value as it was to the Americans of holding the Island of Midway, as it pertains to fairness to the Japanese player. The rule in the AH *MIDWAY Battle Manual* states: "The player who has accumulated the most points when the game ends is declared the winner." Prior to the actual battle, both sides were completely aware of the island's unquestionable strategic value. Midway was a necessary possession for either side in order to conduct any future assault against the enemy's mainland.

Admiral Yamamoto, regarded by all of Japan as the only undisputed genius of the war, realized the hopeless position Japan would be in if the war were prolonged. It was time to act, as danger lurked in America's dockyards.[1] To be sure, time was in favor of the United States. However, if Yamamoto had decided to slow up his main striking force for ONE SINGLE DAY in order to unite it with his occupation force approaching from his south, THAT ONE DAY would not have made a difference in the strength of America's defenses. The *MIDWAY TIME RECORD* has dictated that, with no ship losses on either side, (or an even exchange in sunk ships), the Japanese must complete their invasion of the Island before 1500 June 6th in order to win the game. Historically, the Japanese called off their pursuit of the Island on June 6th, but with a stronger main striking force the battle might have continued another day.

Under the present rules, if the Japanese player waits or is delayed just sufficiently enough, the U.S. player can sink the searching liaison ship, withdraw completely, and let the *TIME RECORD* do the rest! Realistically, the U.S. Navy would NEVER have abandoned the island simply because the Japanese Navy was a day later than expected. To make up for this time advantage which the U.S. player enjoys in the game, it is suggested that a modification be made with regards to *MIDWAY REDUCTION*. As it stands, the Japanese player gets nothing in return for reducing Midway's defenses to zero. On June 3rd, the Japanese plastered the island, but they failed to damage the main installations: the airfield, the radar and the radio.

Therefore, provision is made for the destruction of these installations in the form of FUR-THER reduction of the island. A second bombing of the island COULD HAVE RENDERED MIDWAY OUT OF COMMISSION, and therefore out of the battle. The proposal is this: If the Japanese player reduces the island an additional 15 points (making a total of 35), the U.S. player ceases to receive points from that turn on, even though the Japanese player hasn't yet completed the invasion. By closing the back door on the U.S. Player, he is not only forced to stay and fight, but it will also mean an automatic sixteen points will not be in effect upon sinking of the cruiser ATAGO. (It was eleven transports which had carried the Japanese Army, and *not* a single heavy cruiser!) After each attack on the island, reduction points are added. If defenses are already zero, one additional reduction point would be awarded per Japanese Dive Bomber or Torpedo Bomber which then attacks the island. If U.S. Fighters are stripped off and used against attacking Japanese planes, the number of U.S. Fighters then would be counted as odds in the use of the *MIDWAY REDUCTION TABLE*.

By halting the accumulation of points for the U.S. player through FURTHER REDUCTION OF MIDWAY, the U.S. player is forced to prevent the Japanese from taking Midway, even if he is slightly ahead in points and the Japanese player is out of "clock range". The sole purpose of this modification proposal in the rules is to incorporate into the game *realistic objectives* which existed on both sides at the time.

Melvin Safstrom
Calumet City, IL

[1]Peter Calvocoressi and Guy Wint, *Total War* (New York: Random House, 1972), p. 722.

★★★★★

Dear Sirs,

While reading "Barbarossa Repulsed!" in the *GENERAL* (Vol. 14, No. 3), a flaw in one of the author's tactics regarding an amphibious invasion of Rumania was noted.

The basis of the invasion is that the Russian armor unit can cut off rail movement from the north, thereby isolating Bucharest from reinforcement.

However, if German units can reach within one hex of the Russian unit by first impulse rail movement, under ideal conditions, (no snow and in supply) they can attack the invading unit on the second impulse.

An easier tactic for the Axis is simply to rail in the November reinforcement, the 51st German Infantry, to Bucharest, requiring the Russian to attack at 1:3 against Bucharest. The infantry unit can be railed to Bucharest since German units (reinforcements) can be brought on the board from any western hex (see section 20.4 of the rules).

Since the invasion tactic is occurring during September, 1941, there is no threat from the Bucharest Garrison which is only activated after December, 1942.

Lorrin Bird
Mechanicville, NY

Your point is well taken. The invasion should be executed in November 1941 (Russian turn), so that there will be no reinforcements to spoil things until spring.

While we're at it we should mention that dumbo, who poses as our editor, let Peter Olafson's letter unjustly criticizing Mr. Jarvinen's defense slip by him in his latest stupor. It appears Mr. Olafson advocates setting up German forces in Russian ZOC which is clearly illegal to everyone but our editor.

★★★★★

Dear Sirs,

In response to Mr. Staniszewski's letter in the September-October issue of *THE GENERAL*, I feel that I have to come to the defense of one of my all-time favorite games, *THIRD REICH*.

What Mr. Staniszewski fails to grasp is that *THIRD REICH* is, first and foremost, a *strategic*-level game. Any changes affecting units below the corps level scale of the game would only destroy the already perfect functioning of the game. Indeed, the beauty of *THIRD REICH* lies in the fact that the counter strengths of each nation's Force Pool show, not what was done with, say, the resources of Germany in 1939 or the U.S. in 1941, but instead the relative strengths of all the belligerents through the six years of the war. *You* control what each nation will put into the field, not some artificial game mechanics.

In a game such as *THIRD REICH* it would be impossible, nay fruitless, to simulate the effects of different types of *tanks* (or planes or guns for that matter) on the outcome of a campaign. In every case during the Second World War, it was not the *type* of vehicle but rather its application and/or numerical superiority that decided the issue. Panzer fans may hate me for that but it's true, fellas.

For instance, it would be wrong to switch the strength factor of a Soviet 3-5 for the admittedly high quality of the Soviet T-34's and KV-1's were more than offset by their small numbers at the beginning of the war as well as their being used in 'penny packets' all along the Russian line. One cannot change deployment doctrine in a strategic-level game. The fright that the Soviet tanks gave to the Germans in 1941 was always locally felt and never permeated farther up than the regiment that had been hit by the attack in the first place. Yet such a change as advanced by Mr. Staniszewski would influence theater-wide events, something they did not, and never could, do. Such manifestations are better left to *PANZERBLITZ*-level games.

Mr. Staniszewski refutes his own argument. His suggestions would not only create a 'you are there' situation but straitjacket the players into using 'artificial strategies imposed by unrealistic changes to the rules. Who says that the Allies could not have hit the Continent in early 1943??? The historical debate on the merits of an invasion of the Continent in 1942 or 1943 as opposed to 1944 still continues. Yet Mr. Staniszewski would make sure through his new rules that such an occurrence would not even be a viable alternative to try out. He would have to 'historically' go for the Mediterranean first. I can't find a better example of a 'you are there' situation.

In conclusion, there is no need to modify *THIRD REICH* counters at all. Part of the popularity of the game lies in the fact that Mr. Staniszewski's suggestions had been built into the game before he set his eyes on it. The modifications are, therefore, useless, trivial, and do not apply to the scale involved. The game can stand as is.

Ken Ramstead
Laval, Quebec

★★★★★

Dear Sir,

I hope that you will find room in *The General* to publish this letter. I would like to warn other wargamers against a problem I am dealing with. My case is as follows.

In issue #12 of *MOVES*, page 21, I saw a review of the British game, *Escape From Colditz*. The game intrigued me and I spent two unsuccessful years hunting for it here in the States. Then, at Origins II, I saw an ad in a copy of *Games & Puzzles* for Games Centre, a hobby shop in London, Lo-and-behold, there was *Colditz* selling for 4.95 pounds.

I wrote to Games Centre on 8 September, to ask for the price, in US currency, of the game and postage. I received an immediate reply from N. Thomas, Mail Order Department, who informed me that the total cost was 8.45 pounds, or approximately $15.

On 21 September, I mailed a check for $15. I received the cancelled check by the end of October, but no game. I waited over eight weeks and wrote to them, but got no answer. On 3 January, I wrote another letter with a copy of the cancelled check, asking if they could file a claim on the lost package. To that letter I also received no reply.

On 1 March, my local post office initiated a tracer on the package and has since informed me that I should have gotten some word by now. I haven't.

After waiting nine months, I am writing to you as my only recourse. I consider the game and the $15 a lost cause. I simply hope that you will publish this letter and help some other wargamer avoid a similar problem.

Michael Zynski, Jr.
Boston, MA

★★★★★

Gentlemen:

The Readers Buyer's Guide (RBG) table in each issue of the *GENERAL* is an interesting and informative description of Avalon Hill war games. The table includes a category denoted "Cumulative". Its purpose is to provide a simple measure of consumer preference. The "cumulative" score for a game is the average of all of its ratings with the exception of "Game Length". In some issues of the *GENERAL*, AH states that this average score may be somewhat inadequate since ratings in the categories are highly inter-related. This is quite possible. As Avalon Hill, we were concerned by this situation. Therefore, we tried to determine if there were some basic aspects of war game ratings which could be elicited from the table without resorting to averaging the ratings. To do this, we employed a statistical procedure, called Factor Analysis, which is often used in behavioral research. The intent of Factor Analysis is to reduce a large number of overlapping categories to a smaller number of unrelated categories. When such an analysis was performed on the data in the 10 categories (September-October, 1977), two fundamental unrelated aspects of war games, "Playing Pleasure" and "Explicitness of Rules", were obtained. It was found that the "Realism" category made important contributions to these two aspects, contributing to "Playing Pleasure" but detracting from "Explicitness of Rules". This was not surprising since a major difficulty in designing a good war game is reaching a reasonable compromise between "Realism" and playability.

Based on these results, an alternative ranking procedure can be developed. The method is to rank each game in terms of "Playing Pleasure" and also rank each game in terms of "Explicitness of Rules".

Several interesting observations can be made. (1) *Tactics II*, rated at the top in "Explicitness of Rules" is almost at the bottom in "Playing Pleasure", demonstrating the independence of these two basic aspects of war games. (2) Of the top 10 games in "Playing Pleasure", 7 are in the top 10 on the RBG chart (July-August, 1977). (3) The 3 games rated lowest in "Playing Pleasure" are also at the bottom of the RBG chart (Probably for that reason!).

Dr. V. Guymon
Glendale, AZ

Playing Pleasure	Explicitness of Rules
1. Panzerblitz	Tactics II
2. TRC	War at Sea
3. Third Reich	Caesar
4. WSIM	Origins
5. Anzio	TRC
6. SST	Diplomacy
7. France 40	CL
8. 1776	C'ville
9. Kingmaker	AK
10. Diplomacy	SST
11. Panzer Leader	Waterloo
12. Richthofen's	Stalingrad
13. AIW	Alexander
14. CL	Midway
15. Caesar	WSIM
16. Luftwaffe	Richthofen's
17. C'ville	Kriegspiel
18. Midway	D-Day
19. Tobruk	Kingmaker
20. Jutland	Luftwaffe
21. Alexander	AIW
22. AK	Jutland
23. Bulge	Gettysburg
24. Origins	Blitzkrieg
25. War at Sea	Bulge
26. Waterloo	1776
27. Stalingrad	Anzio
28. Blitzkrieg	France 40
29. Tactics II	Panzer Leader
30. D-Day	Panzerblitz
31. 1914	Tobruk
32. Gettysburg	Third Reich
33. Kriegspiel	1914

★★★★★

Dear Don,

I really have to congratulate Jim Stahler, along with everybody else at AH who got involved, for the absolutely remarkable job you've done on the new *D-Day* '77 rules. It's simple, it's fun, it's a whole new game; it's one that I hope won't get lost in the scramble as so many fine simulations do these days.

Actually, I feel in a pretty good position to judge the new *D-Day*. After cutting my teeth on *Gettysburg* in 1958, the original *D-Day* in 1961 was the title that really got me into gaming—and held my interest until *Stalingrad* followed in 1963. *D-Day* '61 was just plain a great game; it was wild, fun, free wheelin' . . . but a little too wild for a simulation (I remember one game where a South France invasion eventually captured Rotterdam!) *D-Day* '65 imposed much more logistical sanity upon the simulation, but really crimped the game (a South France invasion seldom made sense anymore). Moreover, airpower—which had been omitted entirely in the 1st edition—was introduced in a manner that seemed little more than a crapshoot.

So now we have *D-Day* '77; still the perfect PBM game, still fast and hard fun, reasonable logistical and simulation balance, but possibly the finest game on the market for beginners (*Afrika Korps* and *Kasserine Pass* are in there) and possibly the best simple, overall strategic simulation of the problems of the France 1944 campaign. Previously, *Breakout & Pursuit* seemed to me the best simulation of Allied limited supply and its proper allocation against an enemy that was "losing faster than we could win". But even this aspect is incorporated into the new *D-Day*, with the Allies having to decide whether to supply a large army for a short range, or a smaller army over a great distance! The system isn't only simple, it also (at last) finds a crucial use for Allied HQ units!

Congratulations! I'm delighted; and this doesn't even mention such strategic objectives as the German U-Boat base at Brest, or the V-I and V-2 launch sites! Hope this new game rules set gets the attention it deserves.

Mark Saha
Santa Monica, CA

READER BUYER'S GUIDE

TITLE   SQUAD LEADER
SUBJECT Tactical Game of WWII Infantry Combat

SQUAD LEADER was the 35th game to be rated in the RBG and just missed topping the ratings by .01 with a cumulative score of 2.25. On the way to its near record cumulative rating achievements *SQUAD LEADER* racked up "best ever" ratings in the Components and Overall Value categories besting *VICTORY IN THE PACIFIC* and *PANZERBLITZ* respectively. The game likewise just missed record performances in the Physical Quality and Excitement Level categories, falling before *FRANCE, 1940* and *THE RUSSIAN CAMPAIGN*. In fact, superior performance was widespread with only two categories not ranking in the top six.

Standing between *SL* and the top of the RBG were relatively poor ratings in the Ease of Understanding (29th) and Completeness of Rules (18th) categories. Neither was particularly surprising given the complexity level of this game and the immense detail it attempts to cover. While these ratings would doubtless be slightly improved by the retail 2nd edition of the rules now available—hope for sufficiently better ratings in this area would be unrealistic.

The mapboards almost universally acclaimed for their beauty, would doubtless have fared better were it not for a trimming fault that prevents them from being truly geomorphic. Thus, the game is sometimes plagued by irregular hexes when using certain multi-board combinations.

Play Balance is one of the game's better features due in large measure to the major role played by the dice. As in *VICTORY IN THE PACIFIC*, the sheer number of dice rolls tends to diminish the luck element, but there can be no denying that "not all dice rolls are created equal." 'Snake eyes' in a crucial situation can turn even the most lop-sided game around.

The playing time as in the case of all scenario games can vary dramatically depending on the scenario in play. It is safe to assume, however, that until familiarity with the system is gained that play will tend to be long winded as can be expected for any multi-phased turn system.

1. Physical Quality 2.25
2. Mapboard 1.85
3. Components 1.82
4. Ease of Understanding 3.58
5. Completeness of Rules 2.94
6. Play Balance 2.36
7. Realism 2.02
8. Excitement Level 1.82
9. Overall Value 1.92
10. Game Length . . . . . 2 hr, 16 min.

THE QUESTION BOX

SQUAD LEADER

Q. In scenario 4 are the Germans restricted to setting up on one board?
A. No.

Q. Is the die roll to see who moves first in scenarios 2 & 3 made before or after set-up?

A. After.

Q. In scenario 2, must you deploy at least one unit in each listed building or can you leave a building unoccupied?

A. No, you may leave some of the listed buildings unoccupied.

Q. Does a scenario end on the last numbered turn of the scenario card or the turn after the last numbered turn marked "END".

A. It ends on the last numbered turn.

5.54 Is a shellhole/road hex considered open ground for purposes of infantry movement such that infantry entering such a hex along a road pays 1 MF rather than 1½?

A. Yes, but the terrain effects remain cumulative for vehicles. In addition, units *leaving* the hex along the road hexside could do so at the road movement rate.

5.7 How is possession of support weapons indicated; e.g., assume two squads are moving through a hex carrying one or more support weapons and one squad is broken by defensive fire. May the other squad pick up the abandoned support weapon and continue movement?

A. Yes. There is no provision in the game to indicate possession of support weapons between infantry in the same hex. Those desiring this additional complexity could agree that all support weapons in a hex belong to the nearest infantry unit stacked above them. Otherwise, it is assumed that any squad in a hex has access to weapons in the hex.

6.1 What are "infantry" units?
A. Any squad, leader, or crew counter.

8.2 Suppose a squad has two LMGs. Can it fire one in the Prep Fire Phase and the other in the Advancing Fire Phase of the same player turn?

A. No, once a unit (the squad) fires in the Prep Fire Phase, it cannot fire (even support weapons which haven't fired) in the Advancing Fire Phase.

12.4 If there are two leaders in a hex, may they help each other in their Morale Checks?

A. Yes

13.41 May a broken unit already adjacent to an enemy unit move adjacent to it before moving further away?

A. Yes, the key is not to move *closer* to a known enemy unit.

20.4 May a unit be attacked more than once per player turn in Close Combat?
A. Yes, but all such attacks must be predesignated.

24.6 Does smoke along a fire lane affect fire from all levels?
A. Yes, smoke is not considered merely a level one obstacle to LOS.

24.6 & 44.23 Is fire traced through a smoke or wheatfield hex into an open ground hex subject to the –2 DRM for moving in the open?

A. No.

31.4 Do terrain effects modifiers apply to infantry fired upon while embarking onto an AFV? or disembarking?

A. Yes, to be specific, infantry would be subject to all terrain modifiers in the embarkation hex *plus* the –2 DRM for moving in the open (if an open hex) and the +1 DRM for being beneath an AFV.

33.4 Can a MMG/HMG or .50 cal weapon kill an AFV when firing at greater than normal range?

A. No.

34.9 Is cannister (C7) an alternative; i.e. can the German fire HE when he still has cannister?
A. Yes

36.11 Can a unit which has passed its Pre-AFV Attack Morale Check defensive fire at the same AFV more than once per player turn as it moves through several adjacent hexes? Or against more than one AFV per player turn?
A. No, no

36.11 If a unit fails a Pre-AFV Attack Morale Check can it try again that turn against a different AFV?
A. No

36.13 May a unit attempt to disable an AFV and also make a normal defensive fire against another unit?

A. No.

36.21 If some units fail a Pre-AFV Attack MC can the advance into the enemy AFV hex be called off?
A. Yes, and advances into other non-enemy AFV hexes are possible. Passing a Pre-AFV Attack MC does not unconditionally commit a unit to that attack. Furthermore, a leader failing a Pre-AFV attack MC does *not* force other units to take a second Pre-AFV Attack MC.

36.22 Suppose 3 squads pass their Pre-AFV Attack Morale Check and wish to advance into Close Combat with a tank carrying one squad as passengers. Could two of the squads attack the passenger at 2-1 and the third attack the tank?

A. Yes, but the attack against the tank would be dependent on the success of the 2-1 vs. the passenger. In other words, the tank can't be attacked until the escorting infantry is eliminated, and since all Close Combat attacks are predesignated the third squad would forfeit its fire opportunity that turn if the passenger is not eliminated.

36.22 If an AFV does not move out of a melee hex, may it fire at the units in the hex with it?

A. No—it would have to leave the hex to fire either its MG or main armament at the melee hex and any such fire would affect both friendly & enemy units.

41.3 Does "at the outset" mean that no other AFVs or infantry may fire other than smoke, until all smoke for that turn is placed (other than dischargers)?

A. Yes, and remember that smoke not "effectively placed" does not appear on the board at all.

41.4 Can smoke dischargers be fired during an enemy fire phase?
A. No, the rule should read during any *friendly* fire phase.

42.1 May wire and entrenchments be kept out of view using Hidden Initial Placement?

A. Yes, but only in woods hexes.

AVALON HILL RBG RATING CHART

The games are ranked by their cumulative scores which is an average of the 9 categories for each game. While it may be fairly argued that each category should not weigh equally against the others, we use it only as a generalization of overall rank. By breaking down a game's ratings into individual categories the gamer is able to discern for himself where the game is strong or weak in the qualities he values the most. Readers are reminded that the Game Length category is measured in multiples of ten minutes and that a rating of 18 would equal 3 hours.

	Cumulative	Physical Quality	Mapboard	Components	Ease of Understanding	Completeness of Rules	Play Balance	Realism	Excitement Level	Overall Value	Game Length
1. RUSSIAN CAMPAIGN	2.24	1.98	1.85	2.02	2.24	3.07	2.78	2.41	1.78	2.07	28.5
2. SQUAD LEADER	2.25	1.97	1.85	1.82	3.58	2.94	2.36	2.02	1.82	1.92	13.6
3. W.S. & I.M.	2.34	2.40	3.07	2.38	2.88	2.39	2.07	1.85	1.88	2.10	9.2
4. ANZIO	2.36	2.11	1.74	1.94	3.74	2.88	2.62	2.00	2.09	2.15	21.7
5. PANZER LEADER	2.50	2.41	2.17	2.34	3.65	2.60	2.67	2.19	2.34	2.20	13.1
6. RICHTHOFEN'S	2.52	2.28	2.62	2.12	2.63	2.94	2.60	2.66	2.39	2.45	6.0
7. CAESAR—ALESIA	2.53	2.92	2.71	2.78	1.71	1.85	3.36	2.64	2.71	2.07	27.9
8. 1776	2.56	2.16	1.76	2.45	3.27	2.62	3.08	2.72	2.63	2.36	33.4
9. 3rd REICH	2.57	2.12	2.47	2.34	4.15	3.22	2.59	2.24	1.95	2.05	34.9
10. PANZERBLITZ	2.58	2.00	2.00	2.03	4.03	3.00	3.06	2.05	2.07	2.05	14.0
11. KINGMAKER	2.60	2.26	2.84	2.34	2.83	3.07	1.86	3.65	2.14	2.41	20.2
12. DIPLOMACY	2.60	2.35	2.26	3.13	1.87	2.39	2.09	4.57	2.30	2.43	32.6
13. CAESAR'S LEGIONS	2.64	2.32	2.36	2.31	2.14	2.23	3.73	3.05	2.86	2.73	13.5
14. STARSHIP TROOPERS	2.67	2.27	3.11	2.07	2.43	2.70	3.57	3.39	2.20	2.32	17.3
15. ARAB ISRAELI WARS	2.68	2.34	3.03	1.86	3.31	2.70	3.57	2.31	2.51	2.52	13.5
16. CHANCELLORSVILLE	2.68	2.62	2.57	2.45	2.26	2.52	3.43	3.07	2.55	2.64	18.8
17. VICTORY—PACIFIC	2.70	2.47	3.26	1.85	2.21	2.79	3.38	3.91	1.94	2.53	18.0
18. FRANCE 1940	2.82	1.75	2.05	1.85	3.30	3.25	4.05	3.00	3.40	2.75	16.0
19. JUTLAND	2.83	2.84	—	2.39	3.27	3.06	3.24	2.53	2.61	2.67	29.7
20. LUFTWAFFE	2.87	2.41	2.91	2.04	2.86	3.02	3.73	3.41	2.82	2.64	24.2
21. MIDWAY	2.88	2.75	3.12	2.56	2.78	2.90	3.66	3.08	2.37	2.73	15.7
22. AFRIKA KORPS	2.90	3.04	3.10	2.92	2.12	2.29	3.39	3.57	2.91	2.77	13.5
23. ALEXANDER	2.93	2.99	3.21	3.19	2.55	2.98	3.43	2.76	2.43	2.86	12.7
24. ORIGINS OF WW II	2.98	2.69	2.58	2.80	2.00	2.22	4.00	4.06	3.11	3.40	9.6
25. BLITZKRIEG	3.09	3.39	3.28	3.30	3.14	2.89	2.25	3.67	2.81	3.05	24.0
26. TOBRUK	3.10	2.85	4.68	2.13	4.32	2.77	3.06	2.11	3.00	2.96	21.6
27. WATERLOO	3.18	3.29	3.27	3.11	2.01	3.11	3.27	4.32	3.21	3.01	16.2
28. WAR AT SEA	3.21	3.18	3.96	2.74	1.74	2.35	3.73	5.12	2.93	3.15	6.9
29. BULGE	3.21	2.93	2.80	3.31	3.08	3.40	3.53	4.11	2.81	2.95	20.0
30. D-DAY	3.43	3.72	4.54	3.69	2.56	3.09	4.38	4.50	3.60	3.56	17.8
31. STALINGRAD	3.44	3.43	3.74	3.40	2.07	2.52	4.37	5.15	3.28	3.04	20.0
32. TACTICS II	3.51	3.43	4.30	3.59	1.45	2.18	2.32	5.57	4.59	4.20	11.6
33. 1914	3.87	3.18	3.40	3.26	5.46	4.32	3.86	1.95	5.48	3.86	55.0
34. GETTYSBURG	3.88	3.59	3.84	3.54	2.68	3.39	5.08	4.51	4.34	3.98	12.5
35. KRIEGSPIEL	4.04	3.77	4.20	3.85	2.13	2.94	2.93	6.09	5.31	5.29	9.8
AVERAGE	2.92	2.73	3.02	2.70	2.79	2.82	3.24	3.38	2.90	2.84	19.6

COMING UP NEXT TIME
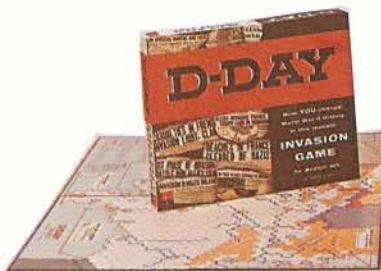
IN APRIL

We were overwhelmed by the many qualified responses to take part in our by-mail playtests of *SUBMARINE* & *SQUAD LEADER*. Requests for the latter have not yet been acted upon but those applicants which were accepted should be hearing from us soon after the appearance of this magazine with a complete playtest kit. In the meantime, we need more volunteers for *TRIREME* and *GUNSLINGER* which will be going into by-mail playtesting shortly. While we make no promises, those who respond promptly with cogent comments regarding playability, clarity, realism, etc. will receive at least a free copy of the new game in question. Those whose contributions are more significant will be eligible for far greater remuneration based on the depth and quality of their findings. On the other hand, those who disappoint us with their silence or trivial comments will not be eligible for recompense or a second chance . . . . so please do not apply unless you can give the project your time and concentrated efforts. A bit further down the road we'll be taking applications for *BISMARCK, THE RISING SUN,* and *NORMANDY,* so those interested in these subjects can drop us a line also, but don't expect a response for quite a while.

GRIPE DEPT: Those of you sending in Opponents Wanted ads which are not printed on the proper form or a photocopy of same are just throwing your quarters away. We will not take the time to rewrite your advertisement onto the proper form for you. Those not wishing to send coins through the mail may make their 25¢ token want-ad payment in equivalent amounts of uncancelled postage stamps. Readers are also cautioned that "for sale" type ads are accepted only when they apply to discontinued Avalon Hill games. Any non-qualifying ad will be rejected without refund.

New England gamers hoping to make it to ORIGINS IV in Ann Arbor, MI may be interested in the charter bus being sponsored by Patrick Flory of The Citadel, 171 Bridge St., Groton, CT 06340. The bus will leave the train station in New London on July 13th and return on the 17th. Tables will be provided for gamester use in multiplayer games en route. Send Pat a stamped, self-addressed envelope for price and other information.

Speaking of conventions, the American Wargaming Association has published a helpful little booklet on just how to go about running one. Individuals or groups interested in obtaining a copy of *The AWA Guide to Running Wargaming Conventions* should send a stamped, self-addressed, legal-size envelope bearing 26¢ postage to: George Phillies, 910 Tenth St., Apt. B, Santa Monica, CA 90403.

Avalon Hill recently took another step towards adult game diversification with the acquisition of PLAYRIGHT, INC.—a small publishing firm based in Waco, TX with a line of quality playing cards. The Playright, Inc. claim to fame rested in the decorative backing given their playing cards. Instead of the customary pictorial scene, each Playright playing card is backed by the rules of play for that particular game. The line includes card decks for Poker, Contract Bridge, Gin Rummy, and Blackjack and is available from Avalon Hill for $3.00 per two deck set plus usual postage and handling charges. Maryland residents please add 5% state sales tax.

Infiltrator's Report

Policeman Jim Bell captured the honors in the Avalon Hill Football Strategy League's Super Bowl V when his Philadelphia Eagles franchise bested the Browns of Doug Burke 31-21. Bell, in only his second year in the league, won $100 and possession of the prized rotating SICL trophy in sweeping the three game playoff series after barely making post season competition as a Wild Card entry with a 9-4-1 record. The league follows standard NFL format with 28 owners each paying $20 annually for a franchise to participate in the Saturday games. In 1978, the league will abandon its NFL schedule in favor of expansion to enable more players to participate. Those in the Baltimore area interested in playing should inquire to Don Greenwood c/o AH to be put on the waiting list for a franchise opening.

We were aware that there were alternate solutions to Contest Number 79, which makes it doubly embarrasing that the solution we published last issue is incorrect; the overrun attack (n. 14 and 15) against the woods hex is illegal. An example of a correct solution would be to use the two "A" air strikes to disperse all units in hex V2, then use the "H" air strike to disperse all the units except 3411 in hex U3. Use the MRL to disperse the infantry and MG in hex U2, then use 5121 (SU-100) to disperse the armored targets in that hex. The 120mm mortars attacking together disperse the AVLB and eliminate the truck and jeep in U3; the three BTRs disperse the COBRA in the IP. Then 6321 and 6323 (T-10Ms) move to U1 and overrun and eliminate the dispersed stack at V2, the two Centurions move into V2 and overrun and eliminate the dispersed stack at U2, and the remaining SU-100 and T-10M move to U2 and overrun the Improved Position, eliminating the dispersed COBRA and dispersing the other units in V3. Finally the engineer and COM 1321 enter U2 and CAT the IP, with the die roll +2 for the IP, -2 on die roll, all units are eliminated; the remaining infantry and COM CAT attack the AVLB and 3411, eliminating the last Israeli units.

Alternate solutions that were correct were accepted, and the following winners were selected from among the entries: J. Hooper, Santa Ana, CA; J. Jones, San Jose, CA; L. Kurowksi, Chicago, IL; J. Eliason, Cambridge, MA; R. Seeley, Hiram, GA; P. O'Connor, New York, NY; L. Lim, Toledo, OH; K. Green, Newburgh, NY; R. Mosher, Oakland, CA; and J. Morgan, La Grange, GA.

Clarifications concerning some of the errors in the entries that were submitted: all air attacks must be executed before any direct fire attacks, then all direct fire attacks must be executed before any overruns, then all overruns before any CAT attacks; the same unit cannot be attacked twice by the same type of attack in the same turn; in attacks against mixtures of armored and non-armored targets the majority of units determines the target type—and if there are equal numbers of armored and non-armored targets, the target is treated as the least favorable type for each attacking unit; "H" airstrikes are halved against armored targets; and BTR-60s move like trucks (i.e. pay truck MF costs).

The solution to Contest No. 80 is as follows. 1.) To have the best chance to control one area all available Japanese units should be placed in the South Pacific. 2.) The best chance to break Allied control in two areas is obtained by placing three air units per area in any two of the following areas: Coral Sea, Indonesia, South Pacific. The marines can go anywhere but should really go with one of the air groups in hopes of drawing enemy attacks. 3.) The best chance to actually control two areas is obtained by placing three air units in the South Pacific and all other units in either Coral Sea or Indonesia. 4.) Controlling three areas is best realized by placing two air each in the Coral, Indonesia, and South Pacific with all marine units going to the South Pacific. The best average POC gain is obtained by placing three air units each in the U.S. Mandate and Coral Sea with the three marines combining with either group.

Our accuracy record in the Contest area has been none too hot lately. Contests are extremely time consuming both to develop and to judge. As such, all of the designers here have taken to cringing in the nearest corner whenever word spreads that the editor is in need of a new puzzle. Rumor has it that the best way to get out of doing contests is to do a faulty one so as to not be asked again. Indeed, were it not for the popularity of this feature among a small but vocal part of the readership they would have been discontinued long ago. Here's your chance to do our designers one better. Design your own contest. The Puzzle Editor will select those good enough to warrant publication in the *GENERAL* and authors will be awarded $25 in remuneration or any three Avalon Hill games of their choice. Contests which have to be altered by our staff will be subject to lesser payments at the whim of our editor. The criteria used in evaluating puzzles is as follows:

1) Puzzles should be small enough to fit on one-half of a *GENERAL* page without being too small to use and must be accompanied by a diagram of the situation. Do not propose contests using grid co-ordinates alone to pose your situation.

2) Each puzzle submitted should have a clear answer included with the submission. The answer should be unique or nearly so, with few (if any) alternate correct answers.

3) The puzzle should be easy enough to be solvable, but it should not be easy to solve.

4) Avoid questions that deal directly with probability or percentages; these take too much time to check. "Where should unit X be placed to have the best chance of victory" or "which side has the better chance of victory" are acceptable, although not preferred; "what is the probability of unit X's winning its battle" is *not* acceptable except in certain cases.

5) Preference will be given to puzzles that spotlight tactics that are commonly used in actual play of the game, rather than totally artificial situations.

6) Preference will be given to puzzles that spotlight fuzzy, tricky or ambiguous sections of the rules, since we like to use these puzzles to point out the correct interpretations of oft-asked questions.

7) Last, but far from least, the puzzles must be based on Avalon Hill games now in print (NO *1914* puzzles, *please*), and all puzzles should be based on the latest version of the rules governing the game in question—puzzles based on the 1965 version of the *D-DAY* rules will not be accepted, for example, since there is a 1977 edition of the rules.

OPPONENTS WANTED

SUBMARINE

Ever wonder why Hollywood seems to make at least two submarine pictures for every one tank flick? What does the glamor factory see in submarine warfare that makes it such a popular choice for war movies? Submarine actions have all the ingredients needed to construct a successful drama: tense action, close calls, great triumphs and defeats. But most importantly, they reduce the brutal and overwhelming macrocosm of war into a clean, easily visualized microcosm of one-on-one combat. These same ingredients have been incorporated into the latest AH release, *SUBMARINE*, in order to bring the excitement and drama of the silver screen to the game table.

SUBMARINE is a tense duel of nerve and wits recreating tactical submarine warfare in WWII. Each player assumes the role of either submarine or destroyer captain and can pilot his vessel just as historical counterparts did. *SUBMARINE* has been divided into three games of increasing complexity so that one can advance to the level of difficulty that one desires.

In the Basic game, the Submarine player maneuvers his boat past the enemy escorts as he closes in on the target convoy or battle fleet. He lines up his targets and fires his torpedoes. His skill, coupled with the luck of a last minute change in course, determines whether they hit or speed by. Success means an exploding tanker or cargo ship or perhaps an aircraft carrier, the pride of the navy, sinking beneath the waves. Failure, at best, means delay in the mission. At its worst, it is a final trip to the bottom in an iron coffin.

The Escort player must locate and destroy the enemy submarine before it is able to deliver its deadly arsenal. The destroyer has a variety of weapons which can force the enemy from accomplishing his objective. When a submarine is located, the destroyer steams in for the attack dropping depth charges and firing k-gun charges and ahead-throwing weapons to force the submarine from its mission.

Both players use the popular simultaneous movement system introduced in *WOODEN SHIPS AND IRON MEN* to maneuver their vessels so that neither player is ever totally sure of the exact location of the enemy ship as his vessel conducts its torpedo attack or depth charge run. The submarine player must also maintain his depth settings as he dives and rises to avoid the deadly "ashcans".

In the Basic/Optional game an added dimension is introduced. A submarine can move hidden from view beneath the waves. The destroyers and escorts must now utilize their sonar and/or radar to contact the invisible hunter. In this game, the submarine can use its greatest weapon, its submersibility, to advantage.

The Advanced game is for the nautical devotees who want to fight the battle as it was actually fought. A more detailed treatment of ship and weapon capabilities has been incorporated. Submarines can carry a variety of torpedoes including ones which circle or home in on the noise of a propeller. Destroyers and escorts keep pace in the technolicial war as they are equipped with newer and more efficient sonar, radar and anti-submarine weapons.

A Campaign Game allows wolfpacks to battle convoys in ongoing battles across the Atlantic with success & failure in each round influencing the battle which follows.

The most versatile feature of the game is its capacity to be played with enjoyment by any number of players. Introductory scenarios enable the new player to learn the game while enjoying himself in solitaire play stalking a random moving convoy. Yet, the game is at its best in multi-player

gatherings with a three or four skipper wolfpack attacking a convoy escorted by a variety of surface craft under separate commands. The escorts can communicate with each other, but the submarines are on their own and can profit or suffer by the disclosure of a brother boat in the vicinity. It makes for a tense encounter second only to the fear of its life & death struggle counterpart in reality.

A Design-Your-Own section permits the players to add new or more exotic ships and to design scenarios utilizing the ships of Russia, Italy and France as well as Germany, Britain, U.S., and Japan.

SUBMARINE comes boxed, complete with three 11″ x 28″ mounted panels that, in combination with a slightly reduced hexsize, gives it the largest playing field of any Avalon Hill game. Included also are over 200 different ship counters and weapon markers depicting all major ships and weapons of the submarine war. Players can pilot submarines including the Class XXI German super submarine which revolutionized submarine design, the Japanese I-400 and French Surcouf (with its twin 8″ guns) monster submarines. Surface vessels vary from aircraft carriers and battleships down to the coastal sub chaser and patrol frigate. Escorts also have a variety of weapons available, including hedgehogs, squids, k-gun launchers and the standard stern rack depth charge. A log pad is provided so that all players can keep track of their ships' positions, speed, weapons capabilities, ammunition supply, etc. A 36 page rulebook with an illustrated sample game lets you get into play quickly and easily. A set of 4 Data cards organized by nationality and a combat results card have also been provided to facilitate set-up and play procedure.

SUBMARINE is rated Intermediate on the Avalon Hill Complexity Scale. Playing time varies with the scenario in play from 1 hour to an entire weekend for the Campaign game. *SUBMARINE* is available for $12.00 plus postage. Maryland Residents add 5% sales tax.

CONTEST NUMBER 81

It is the start of the Russian Prep Fire Phase on turn 10 of Scenario 4 in *SQUAD LEADER*. All rules up to and including section 46 are in play. The only remaining uneliminated units are in the diagrammed area. Movement outside the diagrammed area is not allowed. Five German and 15 Russian squads have already been eliminated as well as all leaders, radios, and MGs of both sides not pictured in the diagram above. All broken units were broken in the hex they presently occupy. Assuming the Russian rolls no higher than a "7" and the German no less than "7" (before DRMs), how can the Russian guarantee a victory in his turn?

Fill out the chart below listing any hex by grid coordinate which is fired into (during the proper fire phase) or moved into (during the proper Phase). If the listed unit does not conduct any activity during a phase, leave that section of the chart blank.

Entries will be accepted only on this form or a photocopy. No hand drawn facsimiles will be accepted.

	Prep Fire	Movement	Adv Fire	Adv Phase	Close Combat
Squad A					
Squad B					
Squad C					
Squad D					
Squad E					
Squad F					
Squad G					
Squad H					
Squad I					
Squad J					
Squad K					
Squad L					
Squad M					

ISSUE AS A WHOLE:_____(Rate from 1 to 10; with 1 equating excellent, 10= terrible)

Best 3 Articles:
1_____
2_____
3_____

NAME _____
ADDRESS_____
CITY_____ STATE_____ ZIP_____

MALEME/SUDA SECTOR: Defense and Attack.

AIR ASSAULT ON CRETE

AIR ASSAULT ON CRETE is a game where two talents are essential: the ability to plan far in advance, and the willingness to engage in sustained heavy combat regardless of losses. This is especially important for the Axis player, but also is crucial to Allied victory. The game rules are in Basic and Advanced sections, but readers of *THE GENERAL* familiar with other Avalon Hill games will easily be able to assimilate both.

The Situation: Three full-color, 8″ x 22″ mapboards are laid out to represent the northern coast of the island of Crete. On that island are counters representing 42,000 British, Australian, New Zealand and Greek troops, many poorly armed and organized. And with them are large numbers of noncombatant technicians and specialists whom the Allies cannot afford to lose. The British troops are spread across the island to protect the three airfields of Maleme, Heraklion, and Retimo, as well as the port of Suda, vital to the British for evacuation and to the Germans as a landing site for reinforcements.

Heading toward Crete is the 7th Flieger Division; four assault regiments of elite German paratroopers, each headed for a different objective. Although they know the general location of the enemy, all British counters are positioned inverted, and they include a large number of decoys and units that can be placed anywhere on the map.

The Game: Neither side has it easy in this game. Both players know that the Germans need to take an airfield to survive. One is all they need, and if they get it the powerful 5th Mountain Division will be landed. Initial set-up is of crucial importance, and the results of the first turn can be disastrous to a player who has not deployed his troops wisely.

The rules themselves are of moderate complexity, with much more of the players' efforts being needed for decision-making than absorbing the rules or game system. Special rules cover ranged artillery fire, German unit organization (integrated battalions fight better than individual companies), airborne assault, air landing, aircraft, sea movement, amphibious assault, inverted units, and Allied evacuation. The 560 four color diecut counters include the usual range of infantry, artillery, and

armor (including Allied heavy tanks that have a distressing tendency to break down when they're most needed); along with truck units, a coastal steamer, anti-aircraft units, coastal artillery, air units, glider troops, and even the half-sunk *HMS York*, the heavy AA of which aided greatly in Suda's defense.

Victory: The British player wins *AIR AS-SAULT ON CRETE* by either maintaining control of all three key airfields by a stated time, or, failing that, by evacuating the vital non-combat specialist units (engineers, dock troops, etc.) that were to later be essential in the Mediterranean campaigns. The Germans win by avoiding the British conditions of victory. In other words, they must first seize an airfield, and then prevent the British from retreating off the map. Neither side has an easy task.

A special addition to *AIR ASSAULT ON CRETE* is the *INVASION OF MALTA 1942*, which shares the *CRETE* system, though with its own set of special rules and counters. In this game, it is assumed that the Axis *could* have attempted to invade Malta, and the players find out for themselves what might have happened. Here again strategy is the key, and before the game the Axis player can pick his landing sites and plan his assault with total freedom. The British player must determine where to mass his vital AA guns and mobile troops, so they can throw the Axis airborne troops into the sea before reinforcements land on the beaches. This game is a real gem, and should become a classic in its own right.

AIR ASSAULT ON CRETE (with *INVASION OF MALTA—1942* included) is available from The Avalon Hill Game Company, 4517 Harford Road, Baltimore, MD 21214 for $12.00. Maryland residents add 5% sales tax.