The AVALON HILL
GENERAL
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FEATURING:
The Invasion of Russia
Avalon Hill Philosophy Part 45

Response to the first 34 page edition of the "General" was less than expected. Generally speaking, you either loved it or hated it, depending on what game you owned. Few people rated it between a 2 or 3. Because of the unusual format necessitated by last issue's double feature article premise, we actually covered only two games in any detail—PANZERBLITZ and D-DAY. If you didn't own those games, you were not impressed. I personally was disappointed in the start of the Volume 1 series. This was due primarily to our decision to go with the Normandy Anniversary motif, compounded by the playing Aids secondary feature, and an unusually long Series Replay. It was something we had been planning for a long time and, in our opinion, quite a worthwhile vote due to space limits. The issue itself pulled only a combined 3.16 from the readership, which is not what the real good was not the outstanding success we had hoped for. We are getting a lot of requests for more diversity in the magazine and now that we have the Playing Aids extravaganza out of our system, we will be able to get back to the readership, which although still quite good, was not the outstanding success we had hoped for. We are getting a lot of requests for more diversity in the magazine and now that we have the Playing Aids extravaganza out of our system, we will be able to get back to the readership, which although still quite good, was not the outstanding success we had hoped for.

In the future we won't have to depend on this kind of thing to bring in-depth coverage to a minimum of 6 games per issue plus the usual features, without getting into a rut of offering the same old thing every time (which is the main reason we experimented with the Playing Aids article). By the way, the individual article ratings on our 600 point maximum scoring scale for the last issue looked like this:

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<th>D-DAY</th>
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PANZERBLITZ Series Replay was a disappointment. It ranked far lower than we had hoped, especially considering the lack of many other articles for competition. This makes PANZERBLITZ a tough game to portray in the Series Replay format. It is one of those games which requires that every move be shown, rather than every turn. Such a presentation is, of course, out of the question when space limits. The issue itself pulled only a combined 3.16 from the readership. We'll probably give PANZERBLITZ another shot next year. We already have a finished game in the files which is much more exciting than the conservation played in the last issue.

A sharp increase in circulation has flooded the Opponents Wanted page with more requests than we can possibly handle. We've had to do a lot of judicious editing so as to fit in as many as we could. In the future, priority will be given to people looking for opponents and discontinued games. Other ads will be printed on a space-available basis. For more on this subject refer to the Readers page. Let us know what you think on the Survey card.

Speaking of floods, we were totally unprepared for the virtual flood of letters which came in response to last issue's Loyal Subscriber Deal. Literally hundreds of you wrote in requesting that we include your name in the drawings for those few dozen collector's items. One guy even stated that he'd buy every game in the list— including all 14 copies of BASEBALL STRATEGY! We hated to disappoint so many people though so we tried to restrict the winners of the drawings to one game per person. We even looked around for people who wanted to trade their own copies for new games so that we wouldn't have to disappoint so many of you but unfortunately we still had to return many of your letters with our condolences. Only the sports games were left and even they went to people placing multiple orders. Apparently nostalgia is running high among the readership.

We have word of a miniature convention to be held from 1 to 9 pm Saturday, Sept. 7th and from noon to 5 pm the following day in Buffalo, NY. Although there will be no organized competition in board games, an area will be set aside for their play. Diplomacy and miniatures will be the main attraction. For further details, we suggest you write Richard Kuhbach, 410 Linden Avenue, Buffalo, NY 14224.

The brief mention in the last philosophy of updating rules has brought in many inquiries and this is a good place to answer them. Rather than taking the easy (and cheaper) way out of issuing errata sheets we plan to issue completely new sets of rules for all of the old flat-box games. These won't change the games; they'll just try to eliminate any ambiguities or contradictions which might have existed before. The first game undergoes the face lift will be STALINGRAD. The rules remain basically the same except for suggesting a 4-5-6 replacement rate for the Russians and outlawing an Hungarian-Italian entry in Finland. There are other small points but those are the main changes. The new rules will be available for the nominal fee of 25c plus 25c shipping costs. (Note: the shipping coupon in the GENERAL is good for games only). Next on the list will be WATERLOO. Here the clarifications should have a bit of an effect on play-balance. Partial moves will no longer be playable, bringing on reinforcements by column will be specifically outlawed, and those annoying river rules will be clarified and made less restrictive. The net effect should be to improve the flow of play.
The Invasion of Russia

A Cultural & Strategic Analysis

By Mark Saha and Mark Irwin

When the German General Staff received instructions to begin preparations for the invasion of Russia in the coming spring of 1941, it was no real surprise. It was probably quite a shock, to realize that at last the time had come. The very size of the operation was sobering, enough to stagger the imagination and shake the confidence of even the most fearless of these recent conquerors of France. So it must have been quite a shock, yes... but hardly a surprise.

The fact is that Hitler had made it quite clear to his generals since the time of his coming to power in 1933 (and, to many, even before that) that he was turning his eyes to the east—and Hitler was Germany. He followed his words with actions; he suspended the warm relations that had existed with Russia in the 1920's and initiated a secret ten year rearmament program calculated to climax in a Russo-German war sometime in 1943 or 1944—at latest, 1950. Meanwhile, efforts were made to promote peaceful relations with France and England, and the unfortunate "bumper states" between Russia and Germany were slowly and methodically swallowed up into the "new" Germany in preparation for the great clash. It always frustrated and enraged Hitler, right to the very end, that England and France never grasped his intentions; and that, as a result, the war came at the wrong time and under circumstances much different than had been anticipated.

The Problem of Germany

But Hitler's coming to power in 1933 was in itself only the culmination of yet another trend—the rise of Prussian, and finally, German militarism. This must also be understood, because in a sense there is an almost Hegelian historical necessity in the rise of this new military power. First, Germany was a relative newcomer in the family of European nations, having united its various independent provinces slowly and painfully over the centuries. Secondly, from an overall strategic standpoint, Germany was (and still is) militarily indefensible; it is her bad luck to be geographically located in a militarily hopeless situation. Consider, if you will: France, protected by mountains and sea; Italy, the same; England, an island fortress; Russia, limitless space for retreat. Germany, alone, of the major European powers, was surrounded on all sides by potential enemies; and these enemies had time and again nibbled at her borders on various sides over many long centuries.

So it becomes quite reasonable and understandable, really, once you see this, that Germany should require a larger standing army than the rest of the nations of Europe. She had more borders to defend... and it was really as simple as that. The rest becomes a bit more complex, in that it includes a cultural and economic acceptance of this condition, but it nonetheless also followed quite naturally: the dashing young cavalry officer, in the romantic literature of the period, who brags of his exploits and makes the ladies swoon; the rise of industrialism with an emphasis on weaponry and armaments; the reserve system, which made possible the calling to arms of large numbers of trained men on short notice. . .

Finally... two other things followed quite naturally, although they were not so obvious at the time. (1) If Germany had a standing army large enough to defend all her borders at once, that same army could with little difficulty crush any one neighbor by massing an overwhelming force against it. (2) This point is a little more subtle but unfortunately also true: it is a fact of human nature that if you place an instrument in a man's hands, he's going to be strongly tempted to use it—if only to "see if it works." The Franco-Prussian war of 1870 demonstrated for all the world to see that Germany had perhaps the finest and most sophisticated military machine of the time. Can you not imagine the frustration of the men in command of so magnificent a machine when told they must simply sit on it? The career men especially, who realized all too well that power and influence and promotion come quickly in war, but slowly if at all in peacetime! The restlessness of that dashing young cavalry officer, flirting with the ladies, anxiously looking forward to the day when he will lead his first charge?

The glamor of the Napoleonic legend was far from forgotten, and as it was in Germany so it was in most of Europe. It was the romantic thing then to be a soldier, especially an officer, just as in later times it would become the fashion to be a novelist, or a movie star, or a rock singer. The nineteenth century was the time of the dashing young cavalry officer; even looking back today, the era has not quite lost its romantic luster.

Unfortunately, none of this was to diminish in any degree the point already made—that despite her dash, daring, spirit, and military excellence, the situation of Germany always was and remains strategically hopeless. This was demonstrated with dramatic force in the war of 1914-18; cut off from the rest of the world by the British naval blockade and the Russian front, Germany was already starving as early as 1916. Black erstatz butter made from coal tar was in common household use; coffee and chocolate simply disappeared from the market; and soldiers had no rubber for waterproofing of boots or tents. The plain fact was that Germany was not a self-supporting country, and had to import such basic commodities as butter, eggs, and grain to feed her population... and if war closed her borders for any length of time, she would collapse. Germany at war is in the position of a wind-up clock. The clock could only run for a certain length of time, winding down and growing weaker by the hour, until it stopped. Germany at war must always win a bold and swift decision... or lose slowly and surely and with great pain and suffering. The failure of the Schlieffen plan in 1914 dictated that the war would be a long one... and in 1918 the clock ran out.

Why Russia?

This, then, was the problem of Germany, and it was the problem Hitler set upon himself to solve when he came to power in 1933. Hitler knew, as did most people, that if Germany was ever to rise again as a world power, she must have enough land and resources to make herself self-supporting as a nation indefinitely. That accomplished, she would be immune to a British blockade, and could pursue a war with an enemy for as many years as complete victory might require. The question, then, was where was this additional land to come from? France might seem a likely candidate, but Hitler rejected that for good reason: the French had
THE GENERAL

existed as a nation for centuries, and no occupation force could ever get her to accept dissolution even if conquered. England was not worth attacking, Hitler declared, because in twenty years she would lose her colonies and become a third rate power anyway (and history has proven him exactly correct).

But in the East, things were very different: the dictator Stalin was not popular, and that vast land offered a prize of almost unlimited resources in food and raw materials. More importantly, Hitler predicted (after correctly) that within twenty years Russia would have industrialized these resources into a military power that would make her among the strongest on earth. Europe was on the decline as a world power, while the Russian giant was just now awakening. Hitler knew that if Russia was to be defeated and her empire dismantled, it must be done quickly; and so he set up the ten year rearmament plan and hoped to strike as early as 1943 or 1944. He probably actually believed it—he was quite sincere—when he referred to himself as the last hope and savior of Western civilization.

Thus, despite the many political intrigues and pretexts, and the many immediate tactical objectives, the basic strategic pattern of the expansion of Hitler's Germany from 1935-39 is clear—always he is moving east, absorbing the bumper states and moving position for the great war... while Germany's unemployed masses are put to work in illegal manufacture of armaments for the day of invasion.

Unfortunately for Hitler, the West was not all that anxious to witness Germany's swift (and illegal) reemergence as a world power—not after the bloody 1914-18 struggle they had undergone to dismember that same power. There was strong Western disapproval of the cruel Bolshevistic dictatorship in Russia, to be sure; but Germany was after all in the heart of Europe, and so, the more immediate threat. After numerous attempts to contain Germany by negotiation; England and France took a stand on the issue of Poland. Hitler invaded Poland on September 1, 1939—and, to his utter astonishment, three days later England and France declared war on him.

Stalin had actually been quite as alarmed as the West at Germany's swift rise and expansion, and was much relieved to see Hitler now at war in the west, opposite the direction he had intended to move. But Stalin's relief was short-lived; for, in the Spring of 1940, before the eyes of an astonished world, France collapsed under a swift and brilliantly executed German blitzkrieg.

Curiously, it was here that the German General Staff was discovered to have made its first big mistake—and a strange one for them. The last sort of thing you'd expect to catch the Germans on; for, if they're known for anything, it is the thoroughness of their staff work. They plan the most extreme contingency and it's difficult to present them with a surprise once they go into action. But they missed something when they hit France. The plain truth is that they were just as astonished—if not more—as the rest of the world when France simply collapsed. They had no contingency plan for this event... and, as a result, a whole wealth of German forces were left without any organized defense. They might have invaded England, but they had no special forces or amphibious vessels ready and waiting for this purpose. Franco offered them free passage through Spain to take Gibraltar, but Hitler declined on the ground that the war was over anyway. When England failed to surrender, Hitler reconsidered... but by then Franco reneged, saying they could have passage on commencement of the invasion of England (after which Gibraltar would no longer matter anyway).

Thus, what should have been a great victory turned out to be a victory in the wrong direction, and a large part of the German army was absorbed in the occupation of Denmark, Norway, Belgium and France. Further, Hitler now found that he was having the most trouble with, of all people, his own allies! Franco would not give him passage through Spain to Gibraltar, and Mussolini insisted on the honor of kicking the British out of Africa himself (with Germany supplying planes and tanks for Italian soldiers, of course). Franco and Mussolini wanted French territory on the continent of Africa, which Hitler was reluctant to grant since it would drive the Vichy government right from its last and greatest of his problems—Sweden, not to mention Poland on September 1, 1939—and, to his utter astonishment, three days later England and then France declared war on him.

Unable to deal with his friends, Hitler returned attention to the last and greatest of his enemies... Russia. True, conditions were not what he had anticipated: (1) it was still too early for five years before Germany was ready for the planned Russo-German war of 1943-50, (2) vast portions of his armies were absorbed in Western occupation duties, and (3) he was still at war with England. But Germany's situation was rather unpleasant, and could get desperate—because as long as hostilities continued in the West, Hitler was almost wholly dependent on Russia for crucial supplies of food and essential raw materials. Stalin had his hand on the water faucet; he could shut off the water at any time he pleased... especially if tempted to do so by Churchill. And this only reveals an additional hazard to a German assault on Russia: Hitler would be in effect attacking his only remaining source of supply! Clearly, he could not afford the planned Russo-German war; what he must have is another blitzkrieg like the one that brought France to ruin. Anything less than that, any degeneration of a blitzkrieg attack into a prolonged war, would simply set the wind-up clock of 1914 to ticking again.

Motorcycle units played a very important role in the eastern campaign. Their great mobility usually meant that they had to bear the brunt of Soviet breakthroughs. Usually crack troops, the Germans had to rely more and more heavily on these recon units to staff gaps torn in German lines by Russian offensives.

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Stalingrad; in the south, was of no real importance in itself, but because a decisive battle occurred there it may be taken to symbolize the many things of military and economic value in the area. First, the entire region of the Donets basin, including the city of Stalingrad, was a major center of industrial and military manufacturing. Second, the Volga river was a main artery of riverboat traffic through which supplies from England and America could be shipped all the way to Moscow; although this fact was not fully appreciated at the time of planning, it became obvious later in the campaign. Third, Rostov—gateway to the Caucasus, and Russia's only overland rail link (via Persian Gulf) with Great Britain. Finally, what was most important was that, in the planning, the valuable oil fields at Batum and Groznyy in the Caucasus, which would fall to the Germans by default if they advanced to the Volga.
There were other objectives of value not so obvious on the gameboard which should also be pointed out. First, the Ukraine—roughly the area just south of the Pripyat marshes, between the Prut and Dnepr rivers—the so-called "bread basket" of Russia that would assure Germany a plentiful supply of grain for the duration of any war. Sevastopol and the Crimea were not so important as was thought at the time, but Hitler was anxious that they should be seized as quickly as possible. Sevastopol was a major fortress and port for the Russian fleet in the Black Sea; the Crimea itself Hitler described as an "insubstantial aircraft carrier" from which bombers could be launched against his previous oilfields at Ploesti (about 20 miles from Bucharest). Finally, Hitler believed the fall of the Crimea would be a strong political inducement for Turkey to enter the war on the side of Germany.

There was one other objective of major military importance that Hitler almost overlooked and which, indeed, isn't even shown on the STALINGRAD board—the port of Murmansk. It lies in the far north, where the rail line from Leningrad crosses the Svir and disappears off the board. The importance of Murmansk derives from a rather strange slice of nature; it is the farthest north of all Russian ports—yet, paradoxically, it is the only year-round ice-free port in all of northern Russia and it can continue to receive ships when ports much farther south such as Archangel have frozen solid. The explanation for this oddity can be more easily seen on the accompanying map than explained: the warm waters of the Gulf Stream make a long and graceful journey around the North Cape of Norway to Murmansk, and keep the area free of ice... but by the time they have descended below to Archangel they've cooled again to the freezing point. Murmansk, therefore, is unique and has a distinct military importance.

Of course, a short war was being contemplated so the port would ordinarily have been overlooked. Hitler's attention was drawn to it for the wrong reason: Murmansk has a bare forty miles from the precious nickel mines of Petsamo (in Finland)... these mines were of vital importance to the German steel industry, and Stalin had long had his eye on them. Hitler was well aware of this and, deciding that the best defense is a good offense, instructed OKH that an expedition from Petsamo to capture Murmansk should be a definite part of Operation Barbarossa.

Planning & Operations, 1941

So much for the objectives. Now comes the problem of planning and execution of a military operation best designed to seize these objectives in a quick and decisive fashion. Of course, inherent in any such operation is one further objective: destruction of the enemy armed forces. How to best bring this about?

Again, a glance at the gameboard reveals something that came to the immediate attention of the OKH planners: what was soon to be the "front" would be its shortest length right at the Russian border, where it was a bare 930 miles from the Baltic to the Black Sea. Moreover, this distance was rendered even shorter by the presence of the Pripyat marshes in the very center of operations. Fortunately, much of the Russian army happened to be deployed right on or very near this border. It was here, then, the best chance for a quick and decisive victory was to be found. The Germans were looking for just that sort of lightning armored breakthrough and envelopment that had worked so brilliantly in France. If they should fail to reach such a decision on or near the Soviet frontier, they saw as clearly as you that there would be problems: as you advance deeper into Russia, the front quickly widens and you even lose the shortening effect of the Pripyat. It could quickly get away from your envelopment and OKH was fully aware that they had not nearly the troops to maintain a continuous front across such a distance. Hopefully, then, a military or political decision could be forced before such a situation arose.

But where, then, to strike? Where on the 930 miles of frontier to concentrate the main effort? Needless to say, plan after plan was discussed and considered and reconsidered, and last minute changes continued to be made right up to and (unfortunately) after the day of invasion. However, much detail and trivia can be filtered out, and the evolution of the final plan of invasion traced through three basic proposals:

If you're an avid STALINGRAD player, you're probably already familiar with the earliest since it's likely the one you use yourself. This plan was submitted by the OKH staff, and consisted mainly of a major effort in the Ukraine, south of the Pripyat. There were many reasons for this recommendation, but one outstanding: the flat, open terrain of the south was ideal for panzer operations and hence offered the best chances for success of the contemplated armored thrust and envelopment. Moreover, the greater part of Stalin's army was deployed along this border, and so offered the opportunity for the greatest "catch." (Ironically, Stalin had deployed here because he also recognized the Ukraine as "panzer country" and wished the strongest possible defense.) Finally, an attack here would yield an immediate gain of the Ukrainian "bread basket."

Hitler rejected this plan for what he considered good reasons. First, as you can see, the distance from Smolensk was far too uncertain at this time, so the attack would have to be broken into two parts—one from Rumania, the other from Poland. Furthermore, the attack from Rumania would run into a series of rivers across its front, and a possible reverse and counterattack here would again threaten Hitler's precious oilfields at Ploesti. (Hitler was right; it would have been far more difficult to supply a major effort in the south rather than center or north (a point Hitler was to forget the following year). Thus, Manstein was later to lament: "... how run-down our Panzer Corp had become in country which was most unsuitable for armored troops..." while the Ukraine down south... was ideal tank country, but unfortunately (we) had no tanks.

The next plan, offered by Halder, consisted mainly of a direct thrust to center. The thrust to be composed of two coordinated armored "prongs", and they were to penetrate and envelope all major Russian forces in the area in a series of "pockets." All resistance was to have been crushed by the time they reached Smolensk. Then it would be a straight drive along the so-called Orsha-Smolensk land bridge (the dry watershed area between Divna/ Volga and Dnepr; especially hexes S-24 to S-27) to Moscow. But again Hitler was not satisfied. He was afraid the Russians would fight stubbornly to hold the Baltics—digging in behind the Divna—and launch a counterattack on his flank and extended supply lines. He did not relish the thought of a Napoleonic defeat at Moscow, and anyway (although this is not generally known) Hitler was never throughout the war particularly excited about capturing Moscow. He placed a much higher priority on many of the other objectives mentioned; and, indeed, Russia was a land so huge and rich with tempting military objectives that one scarcely knew where to begin.

The final plan, as it was eventually hammered out and adopted, was really quite good in my opinion, and if it had been strictly adhered to probably offered the best chance of success. It was actually in many ways a sophistication and embellishment of the second plan, in that again the main armored thrust was to be made in the center at Smolensk—although it was not definitely decided the drive would continue from there to Moscow.
Group North was under the command of Field Marshal von Leeb. Serving under him was General von Manstein, the brilliant tank strategist and tactician who planned the successful invasion of France and was to gain even greater distinctions in Russia. They were assigned to advance up the Baltic coast, breaking the river position of the Divina at Riga and, if possible, take the valuable bridge at Daugavpils intact. Then, a lightning strike at Leningrad would be possible. Finland agreed to enter the war after the first week or so of invasion, and would isolate Leningrad from the north. The final assault on the citadel would probably be made with armored reinforcements from Center, which should by then be available. Thus, the clearing of the Baltic and fall of Leningrad would (a) eliminate from the very start any possible threat of a Russian counterattack from the north on German flanks (b) give only 6 miles from the Kremlin. The German flank a solid anchor at Leningrad railroad, while a German expedition from concentration of armor and the services of the conqueror of France. Their initial assignment Moscow His forward units would (a) eliminate from the very start any possible threat of a Russian counterattack from the north on German flanks (b) give only 6 miles from the Kremlin. The German flank a solid anchor at Leningrad railroad, while a German expedition from concentration of armor and the services of the conqueror of France. Their initial assignment Moscow His forward units would (c) provide the longest day of the year, German artillery forced by the Germans, and advance along the coast to Odessa. If they took Odessa, Hitler promised that Rumania could have it. This was little more than a pinning operation, insignificant in the overall scheme of things. These, then, were the objectives of the initial thrust, after which it was thought Stalin's government would surely fall. If it did not, there seemed little doubt the Germans could easily fan out to what came to be called the “AA” (Astrakhan-Arachangel) line. This would leave them in occupation of the greater portion of European Russia; the country beyond that was so primitive it was hard to believe that hostile army of any size could continue to exist there, much less carry out military operations. “Even if I have to use sixty divisions (along the ‘AA’ line),” Hitler remarked in conversation, “that will be less than I now require along the Polish frontier.” And... it would place the resources of European Russia at his disposal. This was the overall plan for Operation Barbarossa as it was finally decided upon. The main objection has already been noted—that panzers were being concentrated in the Center and North, where terrain was most unfavorable for their use. However, it must be remembered that just because the terrain was unfavorable for panzers, it wasn’t necessarily so for infantry. If the Rumanian army of any size could continue to exist there—as they had been unexpected in the Ardennes in France. Once again, they would gain surprise by attacking in the “wrong” place. Moreover, an attack here had the advantage of shorter supply lines—and the recent conquest of Greece further reassured Hitler that his panzers could handle the roughest of terrain. Most important, this plan assumed that they would be everywhere in sound position with flanks secure. The Germans would never let their armies become lost in the vast expanses of Russia and subject to Napoleonic defeats... provided only that they adhered strictly to sequence and timetable, and did not let early success go to their heads. But the main German effort was to be made by Army Group South, the weakest of the three, under the distinguished von Runstedt. He was to attack just south of the Pripyat marshes, along that strip of clear terrain I refer to on the gameboard as the “Ukrainian slot” to Kiev; from there, he was to plunge downward to the sea, encircling all Russian forces in the Ukraine. The Rumanians were also to assist with four army groups and parts of the two more heavily reinforced by the Germans, and advance along the coast to Odessa. If they took Odessa, Hitler promised that Rumania could have it. This was little more than a pinning operation, insignificant in the overall scheme of things. These, then, were the objectives of the initial thrust, after which it was thought Stalin's government would surely fall. If it did not, there seemed little doubt the Germans could easily fan out to what came to be called the “AA” (Astrakhan-Arachangel) line. 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Once again, they would gain surprise by attacking in the “wrong” place. Moreover, an attack here had the advantage of shorter supply lines—and the recent conquest of Greece further reassured Hitler that his panzers could handle the roughest of terrain. Most important, this plan assumed that they would be everywhere in sound position with flanks secure. The Germans would never let their armies become lost in the vast expanses of Russia and subject to Napoleonic defeats... provided only that they adhered strictly to sequence and timetable, and did not let early success go to their heads.

Invasion

The invasion of Russia began at H-hour 0315, June 22nd, 1941; with the first light of dawn on the longest day of the year, German artillery opened up from concealed positions behind the front. At dawn, the German spearheads quickly overran the frontier. Insofar as they influenced strategy—especially the strategic timetable and sequence of the Barbarossa plan—we’ve already referred to it. At first, this timetable went like the finest clockwork—except in the south. The most spectacular gains were made in Center, where the twin “prongs” of Guderian’s and Hoth’s panzer armies encircled four Soviet armies in the Minsk pocket and drove ahead to capture Smolensk by 16th July. Just as in France, Guderian was the driver, the pusher, pressing forward so hard and fast that German infantry was soon left far behind. It was a daring maneuver, for he was operating far behind enemy lines and if forced to stop for fuel or any other reason he could immediately be surrounded and annihilated by advancing Russian reserves. But there was method to his madness: he was able to drive again and again into assembly areas for new Soviet defense lines and penetrate them before they had been completed. “Your operations always hang by a silver thread,” the unhappy Kluge moaned... but invariably Guderian had his way.

A desperate Soviet counterattack to retake Smolensk was smashed, and by 26th July Army Group Center had achieved its initial objective in record time: all Soviet resistance in the area had been crushed between the frontier and Smolensk; there was now nothing of significance between them and Moscow, a little more than 200 miles away. Should they now drive on the capital, or should reinforcements be sent to Leningrad first, as planned?

Meanwhile, things had gone so well with Army Group North that the promised reinforcements were not as needed as they were. Soviet forces had been trapped before Riga (where the bridges had been blown prematurely) and destroyed. And, what was even more important, the impossible had been achieved: the bridges at Daugavpils, 155 miles from the frontier, had been captured intact by a clever ruse and held until additional forces could...
advance to secure it. The road to Leningrad was now open.

But the opportunity that this presented, on a silver platter as it were, was promptly frittered away in a series of tactical blunders, high command bickering, and delays. Basically, what it came down to was that OKH had a preordained plan for the taking of Leningrad by first flanking it to the southeast, but this approach bogged down against heavy Russian resistance in the swampy lower Luga. Nonetheless, the swift German advance had so surprised the Russians that Leningrad itself was virtually undefended, and an opportunity presented itself to drive straight into the city.

The German high command insisted on adhering to their original plan, and it was many weeks before permission could be obtained for this adjustment. Then, just before the assault was to be made, the Russians counterattacked south of lake Ilmen and achieved a decisive breakthrough. The assault on Leningrad was postponed, and Manstein went to the lake where he delivered a shattering attack on these Russian forces and annihilated them. He then reassembled for the final assault on Leningrad—which the Russians had by this time managed to fortify and reinforce. There seems little doubt the attack would have succeeded anyway, but at the last minute—on September 17th—Hitler called it off, and ordered Manstein south for "operations elsewhere."

Sequence Lost

The decision not to take Leningrad just at the moment when it was ready to fall into his hands—after weeks of frustrating maneuver—was probably the most single fatal decision that Hitler made in the first year of the war. The damage it caused to the overall operations in Russia was even greater than the prior strategic losses had indicated: (a) for the remainder of the war, the German northern flank was left "dangling" in an area difficult for them to supply, but easy for the Russians to supply for frequent and costly counterattacks; (b) the use of Leningrad as a port to shorten the desperately overlength and inadequate German supply lines was denied; (c) Finnish forces were pinned in the north of the city to the north, which compromised their efforts to cut the Murmansk railroad (This was more serious than anticipated, for the expedition against Murmansk from Petsamo [Operation Platinum Fox] was a fiasco: when it got underway, it was discovered that the dotted lines on Russian maps of the primitive terrain were not secondary roads but telegraph lines—there were no roads!); (d) finally, heavy German forces were pinned down here in siege, which dragged out until broken by the Russians in 1944. These troops were desperately needed elsewhere. In fact, a second attempt by Manstein to take Leningrad had to be called off in 1942 when Paulus was trapped at Stalingrad.

Thus, something very subtle but of highest strategic importance had happened... sequence and timetable of Barbarossa had been violated; the northern flank was not secured, and Army Group North was not released to join Center for concluding operations of the campaign.

Decision: Moscow?

Meanwhile, remember, Army Group Center had seized Smolensk almost two months earlier, on July 26th. Since North was doing quite well at the time, reinforcements were not sent there. About two weeks were spent in emergency repairs and overhauling of engines, and the question was raised: what next? There was no doubt in the minds of Guderian and Bock—Moscow! They could not believe it when they learned Hitler had other plans, and precious weeks of good campaign weather were lost in bitter and fruitless argument. And, although there was almost nothing left between them and the capital to oppose them, they ultimately followed orders and pursued a different objective—Kiev.

Sequence Lost

Von Runstedt was given the weakest force (Army Group South) with which to face the Russian's strongest tank concentrations. At Hitler's orders, emphasis was switched to the south to reinforce him, granting the defenders of Leningrad an 11th hour reprieve.

The problem sprang from the desultory performance and misfortunes of Army Group South. The highly capable but unlucky von Runstedt had the dubious honor of commanding the weakest of the three army groups, against the strongest concentration of Soviet forces, including most of their armor. He was so badly outnumbered that his assigned "breakthrough" was impossible, and in the first ten days of invasion had pushed the Soviets back a bare sixty miles. Progress after that was described as "slow but sure," but losses were heavy and he was under constant counterattack, especially by Soviets that withdrew into the Pripyat until he passed and then struck his flank and rear. Worse yet, this desultory...
progress delayed the expedition from Rumania, which was not supported in the first place. Stalin was well under way. Needless to say, he was also the first to encounter the dreaded T-34.

Hitler's first intention was to set up a defense line away from Moscow to clean up the situation in the south has often been described as the worst mistake of the war. It may well have been a mistake; this decision, and the subsequent abandonment of Leningrad threw the entire operational planning and logic of Barbarossa to the winds. But, at the same time, there were some very sound military grounds for the decision:

(1) Guderian's lightning advance in center had outrun the flank protection of both North and South, as well as his own infantry. If he were allowed to further extend this exposed position with a drive on Moscow, the sizable armies in the Kiev area would be sitting right on his flank for a counterattack to smash his supply lines and put him out of business. It would be especially dangerous in the coming winter, to have such an army in your rear—and Runstedt did not seem capable of dealing with it.

(2) Guderian and Hoth argued that the Russians would rally to save Moscow and so bring on the "showdown" battle of the campaign. They may have been right. But Hitler was also going after a sizable army; and, if this is the criterion, you can't argue with the result. The battle of Kiev was probably the greatest military victory in the history of warfare. If that failed to win the war, it's difficult to imagine what would have been required at Moscow.

If Hitler's decision can be criticized, I think it is more for grand strategic reasons: the really fatal clincher, to me, was the subsequent September 17th abandonment of Leningrad. Sequence and timetable were forgotten, and suddenly Hitler had his armies splitting up and scrambling for objectives everywhere. Especial­ly, he seemed suddenly not to have changed his mind about things and shifted emphasis of the entire invasion from north to south. Suddenly he was telling Guderian he needed capture of Smolensk, the Crimea, and Rostov (gateway to the Caucasus) was more important than Moscow... and that in this tactical framework, the primary line of argument was the defense line along the Pripyat, Seden to be Smolensk, and Paris as the assembly in the Smolensk area—where they kicked off for Moscow. Even this they accomplished. But then came mud... and then snow. The effect of this was to limit the German drive to very narrow frontages. If they were restricted to the few roads that were passable, and outposts sometimes watched in horror as Russian ski troops in the distance swept gracefully and silently past their positions toward the supply depots in the rearward areas.

The harshness of this brutal winter for both sides is brought home in a fantastic episode that occurred to a German unit snowed in on a narrow road, they looked up, and saw Russian cavalry on the rise, ready to charge. They were lost, for they knew there was nothing they could do to defend themselves... but the cavalry waited for more than an hour, and did no attack. Finally, they could bear it no longer, and some of the men climbed to the top of the rise. They discovered, to their astonishment, that the entire cavalry detachment—men and horses alike—had frozen solid like statues, while preparing for the charge. An attempt was made to photograph this bizarre spectacle, but not even the camera shutter would work in the intense cold.

It is said that Hitler's hair turned white during these trying months. Nonetheless, he remained ever afterwards convinced that his "standfast" order had prevented a disastrous Napoleonic defeat and saved the German army. There is good reason to suppose he was right, for if a retreat had been attempted under such circumstances a fatal panic was extremely likely.

The result of the last great German drive of the Barbarossa campaign is history. Certainly, the Germans were still strong enough to do the job, especially since there were only remnants of Soviet forces to oppose them. Distance was the enemy; distance, especially, for battered and worn-out equipment on mis­erable roads from Leningrad and Kiev to assembly in the Smolensk area—where they kicked off for Moscow. Even this they accomplished. But then came mud... and then snow. The effect of this was to limit the German drive to very narrow frontages on the few passable roads (basically a Smolensk-to­Moscow assault, with encircling thrusts at Kalinin and Tula). Meanwhile, Stalin had learned from his informer in Japan that the Japanese planned to attack in Asia, and not the Russian rear. He gambled desperately that this information was true, and stripped his Pacific Frontiers of Siberian troops and poured them in at Moscow. These last minute arrivals, and the weather, and the narrow frontages of the German assault, just barely proved to be enough.

Winter Disaster
And it was the Germans who now had to pay, for another gamble that failed. The collapse of the weather brought with it collapse of overex­ tended supply lines that the German had already outrun anyway. Worse, they had absolutely no provisions of any significance for the sudden sub-zero temperatures. Infantry lost fingers and toes by the thousands to frostbite; guns would not fire because lubricants froze; planes and trucks had to have their engines heated by hot coals, in an often vain attempt to make them start.
However, once again, the lessons of this costly "defensive victory" were to be even more expensive in the coming years, when Hitler would try to apply them to other, inappropriate, circumstances. For example, the successful airlifting of supplies to 100,000 troops in the Demansk pocket (about two hexes northwest of Kalinin) would lead him to believe he could supply 300,000 troops in the Stalingrad pocket the following year. And, more disastrously, he was to insist on the same "hegdehog" defense of Army Group Center once again in 1944—this time in summer.

But those horrors lay yet in the future; and the winter of 1941/42 was caviar, in comparison, to what was yet to come.

The Spring thaw of 1942 brought an end to the Russian counteroffensive, but it also revealed that the vaunted German Wehrmacht had virtually ceased to exist. The two and a half years of constant warfare, the thousands of hard miles over brutal terrain, the weather, and fierce Russian resistance had finally ground them down to a mere travesty of their former might and glory. Nonetheless, in the process, they had managed to do much the same to most of their enemies, and there was no real army on the continent to oppose them. Still, Operation Barbarossa had failed. Germany and Russia were now at war, and Russia had in addition to her considerable resources the industrial might of America and Great Britain—her new allies. Now, more than ever, it was necessary for Germany to somehow rally support and resources for one final effort to topple the Russian giant while it was still dizzy... for the clock of 1914 was ticking again.

—Mark Saha

"Why another Stalingrad article?" many of you ask as you read this title. The main reason is that I do not see enough articles concerning defense for any of the popular AH games. Some may feel that Stalingrad is too simple a game to do a major defensive study on. I will admit that 4-6-8 Stalingrad is so imbalanced that a good defense is not needed. I also concede that 4-5-6 Stalingrad is still weighted in favor of the Russians. But consider an opponent who would like to have a German Replacement rate of 8 per turn. Actually, a good Russian player can make a good fight of this and possibly win. However, there can be no mistakes. As an aside, I have noticed that in 4-5-6 Stalingrad the Russian can afford to make about two bad mistakes which the Germans take advantage of. To test your own perfection, here is a short quiz question: "Is there any difference between two doubled 7-10-4 units protecting three squares and a doubled 6-9-6 with a doubled 7-10-4 doing the same?"

Well, there is a vast difference. The two 7-10-4 units are not vulnerable to 3-1 attack while a 3-1 attack could be made against the 6-9-6 while the 7-10-4 is soaked off against. It is this type of difference which can lose a game. And it is the type of difference that a beginner will not realize for many painful defeats.

The primary goal of a defensive line is to make a line of zones of control of units which may not be attacked at 3-1 odds. Any line which does not meet this requirement cannot be considered a real defensive line, but only a group of doubled units. Rather than fall back to such a situation it is better to use only the portion of the line which can be made 3-1 proof and protect the remainder of the line on open terrain. This applies only if you are subsequently going to be able to make the remainder of the line 3-1 proof.

Different units, of course have different capabilities in respect to making a position 3-1 proof and I intend to explain these differences. The 2-3-6 can almost be disregarded for this purpose but they can be used if the situation calls for it. A 2-3-6 if stacked with another unit can protect one square from 3-1 attack.

The German invasion of Russia fared well until the Russian winter hit. German troops were to suffer great hardships from lack of proper winter equipment. Without winter lubricants machineguns jammed, without felt boots thousands lost toes and feet to frostbite, without fur lined liners men simply froze to death. Lack of Russian dead for items of winter apparel was accepted practice. Many didn't even have camouflage smocks as worn by the troops shown above.

Although the 4-6-4 is twice as large as the 2-3-6, its general usefulness in this role is only slightly larger. The German only needs 36 attack factors for 3-1 and should the 4-6-4 be protecting three squares this force can be pure Infantry. With a front of two squares the German must use a little of his Panzers but very little. Examples of such forces are: 4 5-5-4's & 2 8-8-6's & 3 4-4-4's & 3 8-8-6's & 4 8-8-6's & a 4-4-4 & 3 8-8-6's & 2 6-6-6's. As the last two examples show, this force can be mounted using just five units. This means that another unit could make a soak-off attack from one of the attack squares and this means if can still be attacked at 3-1. The 4-6-4's main usefulness is in protecting one square which it can do quite well since even a 1-1 attack risks 12 factors. Of course, situations will arise when the 4-6-4 can protect two or even three squares. However, extreme care must be taken when using this tactic. You will be able to use the 4-6-4 in this capacity only because the German is unable to bring enough units to bear, but always
remember that a month or two later he may be able to bring up enough force. Therefore, you must be able to correct the situation by using a more suitable unit or lose the line. This applies to all units that are used in positions which they cannot protect under all conditions. To improve your care in this area always assume that the German has purposely allowed the situation and plans to take advantage of you placing an unsuitable unit in an important position.

The 5-7-4 does not seem much larger than the 4-6-4, but it is immeasurably more useful for defensive lines. A 3-1 attack against this unit needs 42 attack factors. This means that even when a 5-7-4 is protecting three squares a lot of 5-5-4's and some panzers are needed. But the main use of the 5-7-4 is in protecting two squares. There are only five different forces which can make a 3-1 attack against a 5-7-4 and the German can only raise one of these forces at a time. They are: 4 8-8-6's & 2 5-5-4's; 3 8-8-6's & 2 7-7-6's & 2 5-5-4's; 3 8-8-6's & 2 7-7-6's & 2 5-5-4's; 2 8-8-6's & 2 7-7-6's & 2 6-6-6's. The only other combinations are larger and are formed by using units larger than necessary such as a 6-6-6 instead of a 5-5-4. Note the large amount of Panzer units needed. This is a deference in itself because of the high cost of an exchange. The possible forces available shows a very important point, which is that six units are needed and this leaves none for a soak-off. This means that two 5-7-4's protecting two squares are not vulnerable to 3-1 attack. In addition, any unit which forces a soak-off attack from one of the squares used to attack the 5-7-4, without being susceptible to 3-1 attack itself, will 3-1 proof the 5-7-4. Thus we can see that the 5-7-4 is the mainstay of the defense. I urge that this be kept in mind especially when taking replacements. Myself, I prefer to wait a month for a 5-7-4, than have a 4-6-4 immediately. Of course, the 5-7-4 is superior to the 4-6-6 for protecting one square.

The 6-9-6 is a relatively powerful unit since it can protect one or two squares by itself. However, when it is used to protect three squares, it can often be susceptible to a 3-1 attack. Such an attack will use a lot of Panzer units, but one unit must always keep in mind that the force can be raised and in fact it can be done with eight units leaving one for a soak-off (e.g., 4 8-8-6's & 2 7-7-6's & 2 5-5-4's). This is important when trying to use the 6-9-6 alone or with a 7-10-4. As is always the case, the 6-9-6 may often be able to protect three squares from local German forces. The fear of losing 18 factors in an exchange will also deter an attack and under the most favorable conditions you may be able to force two soak-offs and thus make the 6-9-6 3-1 proof.

Although, as stated, the 5-7-4 is the mainstay of a defensive line, the 7-10-4's are essential to most lines. Their use is, of course, in protecting three squares. In most circumstances their very presence will either mean that the German does not have enough Panzer units in the area to make a 3-1 attack or he will be too afraid to risk the devastating effect of an exchange. The 7-10-4 is superior to the 6-9-6 for defensive purposes due to the fact that although an attack force can be raised it must use nine units leaving none for a soak-off. A great many river positions which can make a soak-off attack factors. This means that even

UNIT VULNERABILITY TO 3-1 ATTACK

UNIT A.F. M.U. A.S. 3-1 3-1 2 3-1
7-10-4 60 9 667 N.P. N.P. N.P.*
6-9-6 54 8 675 N.P. N.P. Diff.
5-7-4 42 6 720 N.P. N.P.* Vul.
4-6-4 36 5 600 N.P. Vul. Easy
3-3-4 18 3 600 N.P.* Easy Very

Now that I have gone over the various units I have included a short chart to review them. The codes are as follows: A.F. is the number of attack factors needed for a 3-1 attack; M.U. is the minimum number of units needed for a 3-1 attack; A.S. is the average strength of the units needed (M.U.); 3-1 1 is the vulnerability to 3-1 attack from one square; 3-1 2 is from two squares; 3-3 3 is from three squares; N.P. means not possible; N.P.* is conditional requiring another unit to force a soak-off; Diff. is that the unit is usually vulnerable to 3-1 attack unless only two soak-offs can be forced but in any case it will be difficult to raise the force; Vul. is that the unit is usually vulnerable to 3-1 attack; Easy is that the unit is almost always vulnerable; N.P.** not possible if in combination with another unit but is still ill-advised; Very is very easy and needs negligible force to attack.

Forward Defense Lines

In Part I of this three part study on defense in STALINGRAD, I examined the defensive capabilities of the various Russian units. In this, Part II, I will examine, in detail, all the forward defense lines. My deployment of forces for each line shall be only what is needed. That is, other deployments will do just as good a job, but will usually use more force. The Russian just does not have enough force to waste it on over-protection. My deployments will attempt to make each line 3-1 proof, if possible. I will, however, make suggestions on what to do if the line cannot be made 3-1 proof or if you do not have the units needed. At most stages in the game, you cannot make all lines 3-1 proof, primarily because of a shortage of 7-10-4's. This makes it important that lines be defended to their optimum even if they are not 3-1 proof.

Nemunas River

Initially, the Nemunas River must be a main concern to the Russian Command. This is an easily defended line, although to protect the whole line, the two 7-10-4's are needed. It is such an important line that it should only be broken by being outflanked to the south or by low odds attacks. It should never fail victim to a 3-1 attack and if it does, someone reap your knuckles. In most set-ups, the entire line is seldom used. It can be narrowed down to two squares if there are delaying units X-16 and U-18. The two squares are protected by a 5-7-4 on S-18 and a 4-6-4 on R-18 will 3-1 proof the 5-7-4. This is seldom used because it means you must sacrifice a unit which need not be sacrificed. A more typical line uses a 7-10-4 on S-18 with a 4-6-4 on R-18 to 3-1 proof the 7-10-4 to protect the three squares to protect and a 5-7-4, 3-1 proofed by a 4-6-4 on S-18 (or 4-6-4 on U-20) or you can use the 6-9-6 on V-19 and 4-6-4 on each of U-20 and W-19 to force two soak-offs. The other method of delay is to place a sacrifice unit on X-16. This means V-19 has only two squares to protect and a 5-7-4, 3-1 proofed by a 4-6-4 will do the job. With this defense, turn two defense will be the same as turn one (initial) defense for the first four moves.

Both these defenses have the advantage of not having to use a 7-10-4 on V-19 immediately. The advantage in this is that it staves off a low odds series of attacks. Often when the German is faced with a 3-1 line at this stage in the game (this stage is critical as he has no other route to take in the north), he will make two 3-1 attacks against V-19 and S-18. If you have 7-10-4's in these squares then the attack can be very effective. This is because the 7-10-4 is totally necessary for each square (at least after a few turns) and therefore we must give a victory to the German if he gets an exchange as well as when he gets D back 2. This gives him a chance of victory of 55.6% FFT and 64% PBM. If however he cannot attack both of them then the chances are lowered to 44.4% FFT and 17% PBM.

When X-18 becomes the most southerly exposed square, you must have a 7-10-4 for V-19 with the 4-6-4 3-1 proofing from U-20. A 4-6-4 on X-19 seals the line. When the German can enter Y-18 but not Z-18, the 4-6-4 must move over to Y-19 and be replaced by a 5-7-4. When he can enter the swamp square (Z-18), the 4-6-4 must be pulled out of the line and another 5-7-4 must go to X-19 to make the line complete and 3-1 proof. Do not get sloppy or give up just because the Germans will soon break your line. If
you allow a 3-1 attack the German will gain a month. In addition, the German may be repulsed if he is sloppy in his out-flanking maneuver.

As an aside, I will explain how you might be able to repulse the German. The German units on the swamp square will move to Y-19 to attack X-19 in conjunction with forces on the river. These units will usually be only infantry because with the slow progress he has made he will have tent the Panzers south. If he does not put more units in the swamp, you have a possible opportunity. His attacks against X-19 will usually take the form of a high odds attack against one 5-7-4 and a soak-off against the other forces (it is often wise to add another 5-7-4 to the stack the turn before he makes his crossing). To give himself better odds on the soak-off, he will usually use one of the units on Y-19. This will leave only two units east of the river and, as stated, they will usually be weak. If you soak off against the forces on the river and make a strong attack on the two units east of the river, the German will be faced with a 3-1 proof line again and will have lost two months. This situation may not arise often but when it does, make use of it. Be sure to add a devilish grin as his mouth falls open.

The Bug River defense depends on Brest-Litovsk and the defense of Brest-Litovsk depends on the delaying action between the Nemunas and the Bug as described in discussion on defense of V-19 on the Nemunas. If the first method is used, that is, delaying units on Y-15 and Y-17 then Brest-Litovsk only protects two squares and is easily defended by 2 5-7-4's. This leaves the 7-10-4 for V-19. If the second method is used (a delaying unit on X-16), then V-19 does not need the 7-10-4 and it can be used on Brest-Litovsk where it protects three squares and is 3-proofed by a 4-6-4 on Z-16. With Brest-Litovsk secure, a stack of 2 5-7-4's are placed on CC-15 to protect the next two squares. The Bug defense does not always extend to the end for the initial set-up, but if it does then place 2 4-6-4's on EE-15. It should be two rather than one 4-6-4 here because any penetration by the German can be disastrous and well worth his risk of a low odds attack. We face this same danger in placing a 7-10-4 in Brest-Litovsk, but whether it is a serious threat or not depends on relative troops north and south of the Pripyat swamps and whether or not you use reserves. If you fear a split then it is best to ensure no penetration rather than 3-1 proof the position. Units on BB-15 would also be doubled if you can withdraw from Brest-Litovsk into that square. How far the Bug defense should extend is dependent on whether or not you delay between the Bug and the Hungarian mountains. If there is no delay then it must be extended to the end in the manner I suggested. If there is a delaying unit used at all, it is usually on EE-12. In this case you only use one 5-7-4 on CC-15. When defending to the end of the Bug it is imperative that there be those two 4-6-4's on EE-15, even if you have 2 5-7-4's on DD-15. The reason for this is the German's possible use of an advancing retreat, which I do not believe has been outlawed in STALINGRAD yet. For if you have units on DD-15 and not on EE-15, he can stage a 1-3 attack over DD-15 and fill on CC-15. If defending to the end of the Bug the attack is imperative.
all protect only two squares each and are doubled positions. The main factor which makes this line so great is that you know the exact German strength which can be deployed against you. You must calculate the strength he can put in five units and in six units. With this knowledge and the lessons you learned in Part I of this study, you can decide what size and how many units will be needed to defend two squares. This line is hinged on the Hungarian mountains and it is on them that it depends for its usefulness. This area must be held as long as possible, in order that German forces do not have lateral movement north and south. Once his forces can move north and south in this area, there are two consequences. First of all, you have to fall back from the Pripyat and defend on the Dnestr. This line is not as easy to 3-1 proof, because HH-16 must now protect three squares. If possible, a 6-9-6 or 7-10-4 should be available for this position. Either can be made 3-1 proof with appropriate force soaks off and the German will usually not attack one of these, in any case, for fear of an exchange. He is now advancing up the Pripyat Dnepr plain, anyway, and this means the risk is not worth it. For this position and for all positions of three squares, whenever you cannot use a 6-9-6 or 7-10-4, all you can do is make it expensive to attack. Try not to let 4-6-4's be attacked, use 5-7-4's instead. The second consequence is that you must re-assess the German strength. You must correct for his greater strength, if possible. This may entail replacing a 4-6-4 with 2 5-7-4's, but you must make every effort to have a 3-1 proof line.

Rear Defensive Lines

In Part I of this study, I discussed the use of the Russian units. Part II dealt with the defense of the forward defense lines. It is on the forward defense lines, that the German should be defeated. However, he will not be stopped. He will push on towards your replacement cities. If you have done a good job early in the game, he will be weak and in fact defeated. On the other hand, you may have done a poor initial job or may be playing some variation. In this case, he may be strong and this means he will drive all the harder against your cities. Therefore in this, Part III, I discuss the defense of the rear defensive lines. These lines vary in their usefulness. Some are strong like the Luga River and others are terribly weak like the "city" line. At any rate, I go over almost all of them. I have left out such things as the defense of the Kama River. Generally you will find a description of the defense of all lines which normally can come into play. The proper defense of the Forward Defensive Lines should defeat the German and the proper defense of the Rear Defensive Lines should stop him.

Luga River

The Luga River is an extremely good defense line. Of course, it is only useful part of the year, but when it is useful you can make it very strong. In fact, you can hold the Luga 3-1 proof with the same forces that hold the Divina weakly. All you need is 2 5-7-4's on L-30, a 7-10-4 on M-30, and a 4-6-4 on N-31. You must form up this force, as soon as possible, and if you do not have the correct force, you must have the 2 5-7-4's on L-30. Penetration here, as good as takes Leningrad and Leningrad does have the ability to defend itself. Always keep in mind the force you need especially if you are retreating toward the Luga during the winter. Make absolutely sure that you can raise the force either from the retreating units or from replacements and do not risk the units in open terrain if you cannot replace them.

Leningrad

As I said, Leningrad can protect itself, to some extent. Unfortunately, this can only be done well during summer. During summer, 2 5-7-4's on Leningrad will protect it. During snow months, the best thing to do is place the largest units possible in Leningrad and try to delay the outflanking, as long as possible. In addition, if you ever want to counter-attack during the game, this is the place. It is especially effective if you can retreat him onto lakes which will thaw on the next turn. Remember that after a thaw Leningrad becomes very powerful and therefore if you have to risk drowned troops to save it, it will be worth it.

The General

Of course, this is only relevant in the game, when defending. It does not affect the game, when attacking. The defense of these two cities is dictated by the terrain behind them. There is nothing behind Leningrad except the distant Don the breaking of the Divina, Q-30 should be reinforced with another 5-7-4. You should hold Q-30 until there is a threat of the German entering P-30. He cannot do this without entering F-29, except in winter. Q-30 should be held to reduce the front of the upper Volga. It means that no unit on the upper Volga must defend three squares, and while Q-30 is itself attackable from three squares, it will not be penetrated as we have two units there and we can drop back without giving up the Volga line. When we give up Q-30, either because of a threat or an attack, a 5-7-4 should be on P-31. A 4-6-4 can 3-1 proof this from O-31 if it is needed. It may not be needed if it is summer when the German must advertise an attack. Most other situations which call for the defense of this area, will have to be planned on their own merits. The main thing to be concerned about in their defense is not to allow penetration as you cannot hope to counter-attack effectively in this area.

Svir River

The defense of this river can take three variations. When defending the north bank you need 7-10-4 on I-35 and a 5-7-4 on H-37. These are both 3-1 proofed by a 4-6-4 on H-36. Usually, you will not immediately need all these troops as the German must advertise his attacks as he moves into the swamps. Defending the south bank, you need a 7-10-4 on J-36 and a 5-7-4 on K-34. Both of these are 3-1 proofed by a 4-6-4 on K-35. Defending the south bank but only wishing to delay, it is best just to place a 4-6-4 on each of K-33 and J-38. These squares are easily reached and retreated from. The Svir River is seldom very important but it should be defended in order that the German be slowed up. It is more important if you are defending the north bank and should be 3-1 proof if at all possible.

"City" Defense Line

I have already mentioned this line and the fact that it is very weak. Its weakness lies in the fact that every city of this line can be surrounded. This includes Dnepr-Petrovsk, Kharkov, and Kursk. It is therefore impossible to make the line 3-1 proof. However, it should delay the German or even stop him if he is low enough on units in this area. The gap between Dnepr-Petrovsk and Kharkov is closed by the zoc's of the respective cities, and the defense of Dnepr-Petrovsk has already been discussed. There is nothing you can do to delay the vulnerability of Dnepr-Petrovsk to being surrounded. The gap between Kharkov and Kursk is not closed by these cities alone, and this is a blessing in disguise. The size of the gap allows for delaying action which keeps the cities safe for a while. A delaying unit on DD-27 will mean they can only be attacked from two squares and 2 5-7-4's should be in Kharkov while a 7-10-4 occupies Kursk. The 7-10-4 should be used, if at all possible. It can be lacking this turn but should be available for the next. On the next turn you can delay with a unit on DD-29 which means the two cities can be attacked from three squares. You cannot delay on DD-28. If you keep the 2 5-7-4's on Kharkov and 3-1 proof the 7-10-4 on Kursk with a 4-6-4 on AA-30 you will have the best defense for that turn. The difference in the defense of these two cities is dictated by the terrain behind them. There is nothing behind Kursk except the distant Don
River and therefore it must be held as long as possible. At Kharkov our main concern is not allowing a penetration so that we can fall back one square to a position behind the Donets River. This part of the Donets is considered part of the “City” defense and on the next turn your delaying actions cease as a 4-6-4 takes its position on DD-30 behind the Donets. At this time, both cities can be surrounded and the only adjustment is to drop one 5-7-4 back from Kharkov to FP-28.

I also consider Stalingrad as part of this line and its defense comes about with the breaking of Dnepr-Petrovsk or Kharkov. It protects three squares and should be given whatever strength you can afford. A strong force should be put on KR-27 to prevent out-flanking. If Dnepr-Petrovsk was broken, then troops on Kharkov should withdraw to FP-28. Do not drop behind the Oksk River until you need to. This is to stop German lateral movement which is very difficult and needed at this time. This method of defense will give you the best out of this poor line. Keep an eye on German strength and keep the needed troops coming. Since the Kerch Straits are at this level and since they are usually threatened right after the fall of Dnepr-Petrovsk, I would like to mention them now. On the fall of Dnepr-Petrovsk, you should put all units defending the Donetz back towards Stalingrad. Do not try to fight in the Crimea as it is a waste of units. Remember that AH has ruled that there is no supply across the straits and have it timed out so that you place a unit on GO-25 just before he is able to move from PP-23. In this way, he may waste more force than you.

**Upper Oka River**

This is the continuation of the city defense line and runs from Kursk over to the forts with the Ugra River. This line is as important as Kursk and must be held as long as Kursk. Actually I have already used it when I 2-3 Proofed the 7-10-4 in Kursk. That same 4-6-4 on AA-20 should 3-1 Proof a 7-10-4 on Z-30 (I am assuming the German is campaigning in this area and dogs not have enough force to seriously threaten you elsewhere). The rest of this line should be held by a 5-7-4 on each of Y-31 and W-32. And these are both 3-1 Proofed by a 4-6-4 on X-32. Parts of this line can be held after Kursk falls and should be in order that the Don River is not out-flanked.

**Ugra River**

In this discussion, I use Ugra River to describe the river line from the tip of the Dniepr to the forts of the Moskva and Akh rivers. This line usually will not hold long due to the Rzhev gap between it and the upper Volga. But if you hold him off in the open terrain this line is very sound. It cannot be easily made 3-1 Proof but it can be very strong. Place a 5-7-4 on T-31 and a 7-10-4 on each of U-31 and U-33, and you will have a strong line. If you still hold the upper Oka or are not yet attackable east of the upper Oka, place the largest unit possible on U-31 and force a good size soak-off with troops on U-32. If you are being attacked along the whole line and are daring, this is an excellent spot for a trap. You may want to use this trap if you have been able to conserve your strength but can’t seem to stop or damage the German. Simply place a 5-7-4 or a 4-6-4 on U-32 between the two 7-10-4’s. He will attack this at three to one with two soak-offs and will advance. This isn’t his favorite way of breaking lines but he will take it at times. It is now time to clobber him. Bring in every unit you can spare for this surrounded attack. Only put your soak-off units next to the Ugra, and put the rest on the Moskva River. Kill one unit with your attack and the two remaining must use some force on the units on the Moskva. Leaving little to attack one of the 7-10-4’s to undouble it. If you have enough force you can destroy two units on the attack and he is helpless to save the other. Make sure you have a lot of force if you try this. You should try to pull in at least 24 factors in addition to the 14 from the 7-10-4 units and soak-offs.

**Upper Volga**

I only discuss the defense of this river down to Moscow because the rest is self-evident and is not very useful, in any case. If Q-30 is held, then 2 5-7-4’s on Q-32 and a 4-6-4 on Q-34 will do the job. If you don’t hold it, then the 2 5-7-4’s must be replaced by a 7-10-4 backed by a 4-6-4 on P-32. This line should be held a little over-strength if possible as its fall will bring about a collapse of the Moscow defense and the Leningrad defense in time.

**Moskva River – Moscow-Oka River Defense**

On this line depends the fate of Moscow and rest assured that even when you’re back to there, you can still save Moscow. Be very careful when defending or delaying along the Moskva west of Moscow. Any units here should be large, stacked, and not susceptible to attack from T-33. Moscow should never come under 3-1 attack until the upper Volga or the Moskva-Oka has been broken. By proper delaying actions, it should be vulnerable to attack from only S-33 and T-33. 2 5-7-4’s can then protect it. The following turn it will be attackable from S-33, T-33, and T-34. However, a unit of 7-10-4’s on T-35 can only protect it. This enables you to use a 7-10-4 in Moscow 3-proofed by a 5-7-4 on S-35. On the following turn Moscow should have 2 7-10-4’s and the Oka should be defended by a 4-6-4 on S-36 and a 5-7-4 on each of T-36 and U-36. U-36 and the rest of the Oka should be defended with what you have in an attempt to force the German far to the east.

**THE GENERAL**

Continued from Page 2

The changes to the play-balance. AFRIKA KORPS will also get the rewrite job eventually, although changes here will be made solely to outlaw some of the ridiculous supply rulings made in bygone years by the A.H. “answer man.” Both these rules make AFRIKA KORPS and WATERLOO rules will be made available for the same $25 charge plus shipping costs.

One game where we will be making a lot of changes will be BLITZKRIEG. Dave Roberts is handling what amounts to an entirely new design of this game which at one and the same time will clarify the games many ambiguities and install some real blitzkrieg effects into the game system. The changes in the naval and air rules are especially innovative. We are quite excited about what these rules do for this old favorite. Make no mistake about these rules will remake BLITZKRIEG into an entirely new and 100% better game. Again, all you’ll need to update your version will be the rules—all other components remaining the same. The combined rules and battle manual will sell for $1.00 plus $25 shipping charges. We honestly recommend that all owners of BLITZKRlEG update their version now as these rules become available. Don’t place orders for any of these rules yet. We’ll let you know when they are finished.

Response to the proposed mail order line has been very encouraging. Interest is running extremely high in both THIRD REICH and PANZER LEADER. THIRD REICH has generated a lot of excitement simply because of its scale. No other game has ever offered a corps level simulation of this scope in such a highly playable format, utilizing both air and naval forces as well. One of the things which stands out about THIRD REICH is the high skill level required in playing it. Some very wild things can happen if the players deploy their forces incorrectly, but a smart player has a countermove for every eventuality. We’ve had playtesters proclaim that such and such a country just doesn’t stand a chance. Then we sit in, replay the same situation with a different deployment, and presto—that side wins easily. THIRD REICH has a very high skill factor and it’s a game where the players make the decisions—and are not dictated to by a preordained historical series of events with the same outcome every time. But then, we’ve observed the same kind of reaction to 1776. Several supposedly expert reviewers have come out and said the Americans don’t stand a chance while our playtesters found it very difficult to win with the British. This comes from people making supposedly authoritative statements about a game after only one testing. I mean—they are just plain playing badly. If faced by a good opponent with experience in the game, they’d be surprised how easily they’d lose as the British. We expect the same type of initial response to THIRD REICH but good players will soon find they can win with either side. It is a game we are very pleased with. Hopefully, next issue we’ll be able to announce its availability to you.
WINNING WITH THE FRENCH

A Comprehensive Look at France 1940

by Harold Totten

Being a realistic game, the historical version of FRANCE 1940 leaves little prospect for an Allied victory. This lack of play balance was no accident, being inherent to the design concept. To gauge anything approaching play balance the optional scenarios must be selected.

Yet, we are always running across people who get their kicks by doing things the hard way. Trying to win as the French with the historical Order of Battle would be tantamount to such a philosophy. Although I do discuss which follows it more than a "how to win as the French" blur, Harold Totten definitely seems to fit the "the try harder" mold.

FRANCE '40 is a radically different Avalon Hill game, and because it is unlike any other AH game it can be difficult to grasp at times. The main intention of this thesis is to give the gamer a rather broad knowledge of the game, its aspects and its quirks. This is not easy for a game such as FRANCE '40 and has taken quite a bit of development.

In a way, FRANCE '40 is readily comparable with 1914. The play can end up in a stalemated position. That will be a good deal of what I intend to concentrate on -- how not to stalemate the game. FRANCE '40 differs from 1914 in the scene that there is a great deal more mobility; plus superior German attrition abilities and airpower make for an active game. One factor that almost guarantees an extremely limited mobile battle is the lack of the Maginot Line, giving the French player a larger area to defend and the German a larger area to attack.

Before actually discussing the play of the game I will first go into the mapboard and its terrain. The board, by its very nature, divides into four basic lines of attack. The first three of these are in Belgians: 1) the Dutch chosen, the first turn will

1) he must keep the Maginot line intact, or lacking the Maginot, he must prevent a German (lacking movement; 3) he must have minimum losses; 4) he must inflict maximum losses on the Germans; 5) he must protect Paris. Around these basic points the French player must build his defense.

The first problem which occurs in every game is the defense of Belgium. But in order to understand the strategy for Belgium, we must first expose upon the broad strategy the French player will be using. As I mentioned before, movement through ZOC's cost movement points, three movement points for entering and two movement points for leaving. Thus, to move directly from one enemy controlled hex to another you expend one to enter the terrain (or two if the unit is armored and it is entering forest or swamps), two to leave the ZOC and three to enter the ZOC, at a total cost of six (seven for armor). This raises for interesting movement characteristics within the game. This means that units may move rapidly over open terrain as long as they are unopposed. However, they cannot close with the enemy after a long march due to a lack of the movement points needed to enter a ZOC. Also, units can be pulled off the front line much more easily than it can approach the front. The total result of this is a unit may voluntarily retreat its full movement factor away from the front line, and due to the ZOC movement costs, the attacker (usually the German) cannot re-engage the retreating player.

Thus, if the French player retreats his units away from the German, usually the German infantry cannot engage the French front lines on a large scale. Armor may, however, due to its greater movement capability and its second movement phase every turn.

Thematically, then, the French player could set up the Belgians more than three hexes from their border and the German infantry could not push them on the front. This would allow German units to take the Antwerp area without a fight and overrun most of the defensively valuable Ardennes forest. However, in the central plain the concept comes off with little problem.

So the Belgian units must physically defend both the northern forest entrance to Belgium and the Ardennes Forest. However, the Belgian Army isn't adequate for this big defensive task. Eventually there would be some point in the line without back-up units. This would allow the German army to strike and then move through the hole it created with its second movement phase. This is tantamount to allowing the Germans to advance unopposed.

The answer to this problem is the use of the Dutch and French Armies on the flanks of Belgium in order to reduce the defensive task of the small army. The two Dutch units are used in the northern wood near Antwerp, and are placed on the border. This prevents the German from gaining a major flanking move on Belgium (which he probably would if the Dutch units were defending the Nethers--Germany borders and pushed them on the front). Nevertheless, this is a hole that would not allow the Germans to outflank and destroy these units, that requires precious time -- as much as two or three turns. And in the Ardennes the French units are placed immediately on the border in order not only to secure the flank, but also to rush into Belgium as soon as the German invades.

French Historical Odd

Table 1:

This sheet illustrates the concepts involved in the defense of Belgium and how the French forces are for the historical version. Each hex on the mapboard is assigned a number indicating what hex a unit is in. If the box is red it is occupied by an E23 or E24. If it is yellow on the mapboard it means three or two units respectively of that type are in the same hex.

Table 1:

The diagram and accompanying table show a possible set-up for the French using their extremely weak historical Order of Battle. The plan is rather obvious. Demonstrated is the Belgian set-up for delaying purposes. The French player will be using the French Historical Odd.

The map is rather good defensive terrain, where the French units are placed immediately on the border in order not only to secure the flank, but also to rush into Belgium as soon as the German invades.
broad front attack on the 4–6 at hex 560 and the 4–6 at Antwerp, usually guaranteeing some sort of breakthrough. This usually leaves the French player with a few defensive headaches, as he is usually forced to defend more or less in the open. In this case the French player will counterattack the exposed and divided armor which will be somewhat vulnerable until the infantry catches up, and stand in the open for a turn or two. Then he can afford to make a strategic withdrawal to the Scarpe River line (along the axis Dunkirk/Lille) and stand for another couple turns before making his final strategic withdrawal toward Paris.

The case of the German attack through the Ardennes presents a different defensive picture, though not necessarily an easier one. The German will usually push his infantry through as fast as possible, attacking and then following with armor. If the German commits the bulk of his armor to this area the French player will be in trouble. This is because French armor cannot effectively operate in the Ardennes. The armored divisions cannot clear an attack by themselves. If the French mechanized divisions become surrounded they become immobilized until the German decides to let them go (he usually doesn’t). Thus, the French player must oppose the armor with his inferior infantry. The German also maintains a constant threat in the direction of the Maginot Line. Also, when the German comes out of the Ardennes he will have almost absolute freedom of movement and can strike out in almost any direction he chooses. The French player must slowly retreat, hex by hex, only when he has units in danger of being surrounded and cut off. This is necessitated by the key role the Ardennes plays in French strategy. The French player will usually begin some sort of strategic withdrawal toward Paris, taking advantage of the fact that the Germans can’t pursue too well due to the movement mechanics of the game. The success of this strategy usually depends upon the ability of the French player to keep his hold on the Ardennes until about turn six (regardless of German strategy in Belgium) so that the French player will have some sort of axis to pivot on. By swinging his left flank back he draws a parallel with Paris. He also has an advantage in holding the Ardennes in that the German cannot bypass the Maginot line until the French player decides to relinquish the Ardennes, and when he does relinquish it he has his armor and other mobile units in position to keep the German from outflanking the French right.

Other French problems come in when dealing with the Maginot Line, whether or not the line is present. Usually I have found the Line to be an invaluable part of my French defensive plans because of the German reluctance to attack the line frontally. As you can see from the sample French set-up shown, it is usually good to put the fortress divisions (2–6’s and 1–6’s) in the fort hexes that can be attacked from three hexes. This is not adequate to stop a German assault of the line, but usually nothing but bad luck can stop a patient German from breaching the Maginot Line. This will be subject to discussion under German strategy.

The presence of the Maginot line acts as an extension of the Ardennes pivot on the French right. Should the Germans breach it with armor (see diagrams of German attacks on the Maginot) the French player will be hard pressed, especially in the historical situation. He must move infantry and motorized units into the south primarily to protect his flank and secondly to protect the then vulnerable Paris. The French player will usually not be able to stop the German armor from getting through, but he can always use his remaining 2–2’s to slow the progress of German infantry through the breach. This can be crucial if the French player wishes to destroy the German armor, hopefully by surrounding it and cutting off supplies, then attacking the isolated units. In the historical situation it is usually a losing battle, but in scenarios using French 5–6’s there usually is quite a mobile battle.

French strategy takes on a complete transformation in the face of the lack of the Maginot Line — and this usually happens in the stronger French Order of Battles. Without the Maginot Line the French should commit the bulk of their armor (5–6’s and 4–6’s) in the south, stopping a German offensive in the south before it gets beyond major proportions. If the Germans decide to attack in the south, the French player is ready for them. If the German attacks through Belgium, the Belgian Army and French infantry can tie the German armor to come up from the south.

The French player will usually try to hold the Germans at first, then drop back to the Meuse River, and later to the Meuse and finally to the rather good defensive line in the Argonne forest area. Since armor will be in the south, there is little problem of a German threat in the north. However, the French will still use their late game strategic withdrawal strategy in order to escape attrition.

In summary, the French strategic withdrawal is the key to a French victory. The French will also back up their main line of resistance with small motorized divisions (2–6’s and 1–6’s) in order to prevent a German breakthrough. Usually the French player is better off having an OoB which includes the heavy armor (5–6’s), a strong airforce, and the Maginot Line. Thus the strongest French OoB is probably No. 4, which includes all of these attributes. OoB No. 9 is probably the weakest, mainly because it lacks the Maginot Line and gains relatively few units to make up for that lack. It also lacks airpower, a crucial aspect of the game.

**THE GENERAL**

**GERMAN STRATEGY**

German strategy usually is aimed at making the game mobile in which the French suffer heavily the effects of attrition. It is to the French player’s advantage to create a stalled game, so the German must avoid getting bogged down. The major difference from 1914 is the presence of armor and airpower — two decisive elements for the German player.

German objectives in the game are as follows:

1. *destroy a maximum number of French units;*
2. *prevent the French from destroying German units;*
3. *take Paris if possible;* and
4. *foil up the French withdrawal strategy.*

Up to this point we have only discussed the French reactions to possible German plans, now we will discuss why the German chooses a given plan and how he will carry it out.

With the Maginot Line the average German will usually attack through Belgium, even though he can also attack the Maginot as a direct effort. If the French player uses any other set-up than the one shown, it will usually have some weakness you can exploit. If he leaves the Belgian northern flank open it is usually best to move through the Netherlands on the first turn and move into Belgium on the second. However, most French players are not that stupid — or they’ll correct their mistake after being burned once or twice. In this case you’ll be best off in moving armor into position to attack the Dutch units on the first turn, attack on the second, and attack into Belgium on the third. The armor would roll into Belgium to attack Antwerp, while infantry moving up behind hexes 428 and 460 would attack hex 560. This would mean killing few units on the first three turns, losing valuable time, and would put the French in a bad strategic posture. The German trades off an advantage of time and material for one of space, and against a strong French OoB the German may not be able to capitalize on his position.

The German can also try an assault up the middle, but if the French player is using the defense shown, he won’t get far. Assault up the middle can be a viable option if the French player uses a poor defensive strategy, but he will usually try to prevent any German use of open terrain for armor.

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**ASSAULT ON THE MAGINOT**

The first illustration shows a German assault on a Maginot hex with a French 2–2, using air support with a 5–1 attack, there is a 50% chance of success. If successful, the German armor will exploit the breakthrough.

This shows a German assault while the French player has strongly re-inforced the Maginot with 6–6 units. At 4–6 with air support there is a 33% chance of success.

This shows a German assault while the French player has strongly re-inforced the Maginot Line with 6–6 units, and the German decides to use his extra units to attrition the French. At 2–1 with air support there is a 28% chance the unit will be eliminated.

Note: All attacks assume maximum air and artillery support.
THE GENERAL

The other option in Belgium is in the Ardennes, an area that usually is well defended. The German can attack immediately on the first turn, or he can further increase his strategic position by invading the Netherlands and Luxembourg on the first turn, getting infantry moved up toward the front. On the second turn the German will then invade Belgium with the bulk of his infantry. Infantry in the north will attack hexes 560 and the Dutch Army, and the units on the Belgian-Luxembourg border will be surrounded by German infantry. On the following turns the German army should try to push the French back as quickly as possible in order to upset their timetable for withdrawal by denying them their crucial Ardennes pivot.

When the German player is attacking through Belgium he should not ignore the Maginot Line, because it yields dividends in terms of additional threats the French must cope with. When the Maginot is garrisoned, as it probably will be, the Germans can use three infantry units and the two artillery units to attack units in the line. When these units are forced to counter-attack it will be at poor odds, which is one way to attrition the French. Also, only a "DX" (defender eliminated) result will destroy the Maginot hex. Thus, when attacking at 4–1 with air support there is a 33% chance of destroying one unit and a 17% chance of destroying two units. The German can destroy hexes of the line and then send units through to threaten the French southern flank and to further complicate his defensive problems.

The German can also pursue a strategy of attacking the Maginot with his armor and sending infantry into Belgium. This can be done at 5–1 with a 2–2 unit in the hex, to be followed by a 4–1 with a 6–6 unit in the hex, or 6–1 if the hex is empty. Usually if the French player has committed a number of 6–6 infantry units to the Maginot the German will do best to attrition these units with infantry and artillery while sending his armor into the Ardennes. Once these units are destroyed the German can pull a move out of the Maginot and continue his attack with his armor and artillery. If the area is garrisoned with 2–2 fortress divisions, then the German can attack the line immediately. If the German does so he will usually use the same arrangement for an Ardennes thrust (minus the armor) so that he can attack Belgium on the second turn. Should he fail to destroy the Maginot hex the German will probably have eliminated the 2–2 unit. He should then disengage his armor and send it into Luxembourg. He should also have a unit next to the empty Maginot hex so the French player won't be able to move another 2–2 into the threatened area. Then the German will have the option of either attacking through the Ardennes or attacking Luxembourg or even trying to push the Maginot hex.

Which one of these strategies are best? Really one must see the French set-up to decide, as the German must try to exploit French weaknesses. I feel that the Maginot strategy is strategically the strongest of all. It uses armor on the first turn to attempt the breach while units are moving into the Netherlands and Luxembourg. If the attempt fails the German can still move through the Ardennes on the second turn, a move which is generally superior to a move across the open area because French armor cannot operate well in the forested area.

German strategy, like the French counter-part, changes when the Maginot Line is not being used. Essentially, it gives the German player a broader front to work with while spreading the French forces thinner. The French will probably place most of their armor in the south for reasons already discussed, so the German will do best to use infantry in an aggressive role in the south and send the armor elsewhere. The German player should at this point try to spread the French out as much as possible to achieve tactical dispersion so that some sort of decisive blow may be struck.

For the most part, after the German commits himself to a given opening strategy the remainder of the game will be a tactical struggle of attrition, with some rare maneuvering for Paris should the German break through.

TACTICS

My tactical discussion of unit to unit battles will be couched in terms of the attacking player (usually the German) and the defending player (usually the French). Tactics involve several factors, including a unit's combat strength and its mobility.

The tactics of attrition involve mobility in surrounding units and the principle of mass in some rather unique manners. Units surrounded by enemy ZOC are usually eliminated when forced to retreat, but in FRANCE '40 they may retreat to a hex which is occupied by friendly units. This allows units to be surrounded as long as they are backed up and placed in that area. Another advantage to surrounding units is that you may cut off their supplies, halving the combat strength of the defending unit.

The French player should plan his attacks carefully, so that should he have to retreat he will not leave any infantry units exposed to enemy fire. He should also be careful not to leave gaps in his line. There should be some sort of defensive screen of weaker 2–6 and 1–6 units to keep the Germans from exploiting any hole they might create in the line.

Other defensive tactics involve placing Belgian 4–6's next to each other on the line, preventing a German attack on both units because the hexes are contiguous with each other. The French should also be careful to make their defensive line as straight as possible to avoid "corners" which expose greater area and upon which the German can get better odds.

The German can try to repeat the classic breakthrough that occurred in the original battle, but this is not likely against a good French player. The German can try, however, by attacking across open terrain with most of his armor in one group. Once the German opens up an area he will send his armor through as far as possible, usually up to the secondary defense line. Then by using aerial interdiction he prevents re-inforcements from moving into the area to seal the breach. On the next turn the Germans can move through the Maginot secondary and exploit his hole on the second movement phase. This situation, however, will not always happen because the French may have re-inforcements nearby or they may have enough airpower to stop the German interdiction.

Usually the only time the German player will get the chance to make a strategic withdrawal when the armor is surrounded is when the armor battles would be if he had breached the Maginot and rushed into the open plain of southern France successfully. This will always stretch the French forces out and allow the Germans to exploit to the utmost the inherent superiority of their armor.

One should note here that the "Designer's Notes" included with the game state: "To make the main effort against the Maginot Line (which can be broken with a combination of armored units and heavy artillery) would be futile, a breakthrough there can be too easily contained."

This, I feel, is wrong. The French player can contain the breakthrough if he sends sufficient force, but this will make the going of the infantry in the north easy.

It is interesting to note combat differences caused by the CRT system in the game. For instance, let us examine 2–1 and 3–1 attacks that could possibly occur in the game. The German player clearly has superiority in infantry attacks. For example, a 2–1 attack with two 7–6's attacking a single 6–6 has a 33% chance of retreating the attacker, 44% chance of both retreating, and in order to get a 2–1 the French player will attack with either three 6–6's or three 4–6's and a 6–6. This will limit his chances of getting even a 2–1 attack, as the German must expose his unit to attack from three hexes. And since the French player only has three 4–6 armored divisions he can only make one 2–1 attack on units with only two hexes exposed. When the French player attacks he will be counter-attacked at 1–1, as opposed to 1–2 when the French counter-attack the Germans. Thus, the French have a 33% chance of attacker retreating, 44% chance of both retreat, 5% chance of defender eliminated, and 11% chance of defender retreat. Note that these figures do not add up to 100% of the possibilities. This is because there are chances of rolling a CA result followed by another CA result, which means the attack simply starts over again. For this reason I have omitted these figures. See the table for comparative purposes.

Probably the biggest tactical problem of the game is pursuit tactics. The French must seek some solution to the problem of keeping the French from disengaging and retreating back to Paris with impunity. There are several possible solutions which I will discuss here, but I must point out that often a detailed tactical problem like this cannot be covered just by new concepts usually, constantly, in the course of play. Therefore, I will simply offer my thoughts on the problem as I have handled it in actual games.

The use of airpower figures strongly in stopping the French withdrawal, and although I will cover the aspects of airpower later I will not discuss the disruptive power of interdiction. Interdiction is the creation of a temporary zone of control by the air units. This single hex ZOC is treated with the same movement restrictions as a normal ZOC. If the German has a strong airforce, then he will probably be able to stop the French strategic withdrawal. By using all eight air units for interdiction, the German player can group one hex and group two hexes of the Maginot line immediately behind the French main line of resistance (MLR). The German armor then attacks this area, or at least moves adjacent to the French units in the area, so that the movement capabilities of the French units are so cut down that they cannot effectively make the strategic withdrawal without leaving a gaping hole in the line which the armor can easily walk through, simultaneously disrupting the French rear areas. Thus, the French player is forced to hold his position and suffer attack on the next turn by the infantry. The infantry, being very close behind, will move in and take the place of the armor. The armor will side-step in order to strike another area. The interdiction will con-
The German 88 anti-tank gun has been creating havoc with the Russian positions in this situation in Panzer Blitz. The Russian commander has amassed this collection of "volunteers" to take the position. You, as the German commander must save your 88 from destruction. It is not necessary that you have a 100% chance of solution. Just get the best odds you can in your favor when the Russian attacks. In order to enter the contest, indicate your fire, move, and/or card for each of the German units by indicating movement on the diagram and attacks on the battle chart.

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THE GENERAL

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time, further hindering the French. The infantry catches up with the armor and attacks, and the French withdrawal plans have been thwarted.

However, if the French player has a strong air force, then this will not work. The French player need only send his air units on interception missions in order to rid himself of the interdiction.

If this is the case, the German must cast around for another solution. If he is using the optional airborne units, then he may be able to displace his reserves into the area. The only areas that can retreat are those further away. The German follows up this initial advantage by sending his armor to the rear areas of the French, and sends infantry to the front. Thus the French units are caught in a tactical vise which is difficult (but not impossible) to escape.

When not using the optional airborne units rule and when the French have a strong airforce, the German player will have a great deal of difficulty in creating a breakthrough or stopping the withdrawal. In this case, about all he can do is to continue attacking with his armor and to send his infantry off the board to the south in order to weaken the French MLR.

AIRPOWER

Airpower in FRANCE '40 is one of the more innovative areas of the game, and proper use of air units is important. We have already discussed close support missions which negate terrain advantage, and interdiction missions which obstruct supply, hold a breakthrough area, and frustrate the French strategic withdrawal. These two areas are the easiest to understand and are essential to the conduct of ground operations.

The other three functions of airpower are combat air patrol, air superiority, and interception. These three involve air-to-air combat, and therefore their implications are not always so obvious.

Air superiority involves flying units over enemy ground support units and trying to eliminate them. In scenarios in which the German has overwhelming air superiority and the French are able to absorb the few losses, the French player will place his air units back out of range so that the German cannot destroy them without moving first, hoping to prevent the German from picking up an easy ten or twenty points.

Should the French and German players both have strong air forces, then the considerations are changed radically. This is because the German player will lose the use of four air units on the turn he invades the Netherlands, giving the French player an 8–4 advantage and placing two German air units in danger of destruction on the first turn. At this rate of attrition the German will quickly lose the war in the air, and with it the game.

The German can usually solve this problem by placing his units out of range. It should be remembered that the Allied player cannot fly over Belgium as long as it is neutral, so if the French player places his units within range and the German does not attack Belgium on the first turn, the German will be able to protect his units while vulnerable and will be able to attack the French with impunity. This gives the German the edge in attrition and will usually result in a German victory. Because these units are so valuable in points they often are decisive in determining victory.

What will usually happen should both players have equal air forces will be the placing of the bulk or the entirety of the air units outside of each other's range. This will prevent any disastrous losses for both sides, although either player may elect to take the risk involved, it being somewhat less for the German due to his superior range.

Combat Air Patrol is defensive air patrols to prevent close support, interdiction, or air superiority attacks. As long as there is a CAP in a hex these attacks may not be carried out. This type of mission is used more often by the French player in order to protect key areas.

Interception is used to turn back enemy CAP or interdiction attacks. In this role it can be very important. It turns back enemy CAP so units remaining may close support, interdict, or make air superiority attacks. This is usually the role the German player will use it in. The French player should use it to turn back interception missions.

OVERVIEW: FRANCE '40

The game poses some unusual strategic and tactical problems which make for an interesting game. However, I must point out that the game itself is not realistic in its attempts to recreate the situation as it was in 1940. For one thing, had the French been as mobile as the designers Jim Dunnigan makes them, there never would have been a Dunkirk or its likes. I do not believe the French could make the strategic withdrawal that is such a necessity in the game.

THE GENERAL

Another thing that irks me about the game was the standardization of the French and German infantry. For instance, take the French. At the time they had ten active divisions, seventeen 'A' reserve divisions, five Alpine divisions, 18 reserve divisions, ten North African active divisions, and seven Colonial divisions. These units varied in quality from very good to very poor, but the game itself gives you the impression that all the French corps are of equal ability. It was precisely because they were not that the Germans had a breakthrough at Sedan and could not get one elsewhere. They simply exploited the weakest area, attacking the weakest corps.

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- **AFRIKA KORPS**
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- **PANZERBLITZ**
- **STALINGRAD**
- **GUADALCANAL**
- **WATERLOO**

*AFRIKA KORPS* is the only kit available for FRANCE '40...
Larry Pinsky continues to take time off from his duties at NASA to lend a hand in the Avalon Hill design picture. With the passing of years, many of Larry's original designs have become somewhat outmoded by present standards of the art of wargame design.

Larry is personally handling the rewrite of the Bulge rules and is taking a hand in the playtesting of the revised Blitzkrieg rules so he's far from out of the design picture. Those of you who have a pet peeve about the Bulge rules regarding an ambiguity might want to drop him a note on the subject.

In the meantime, Larry's explanation of what goes into the basic framework of a mapboard makes required reading for any potential young designer.

The Mapboard in Game Design
by Larry Pinsky

DESIGN CREDITS: Battle of the Bulge, Guadalcanal, Blitzkrieg, D-Day '65

One facet of land battle game design that doesn't receive much public discussion is the design of the gameboard. This is probably because most people consider the gameboard to be simply a map with a hexagonal grid superimposed. Actually the board is the most fundamental element of the design, and it must be the first consideration! Its design affects every aspect of the game, from the general scope, to the movement and combat factors of the units, as well as every important clause of the rules. Let us explore some of the details of board design, which is a decidedly distinct endeavor from the simple act of superimposing a hexagonal grid on some map.

When one has completed the preliminary research into the subject, the first step in the evolution of the game's design is the task of limiting the scope of the campaign to be included in the game. In most cases, this act reduces to deciding where the boundaries of the board will fall on a map of the region where the actual campaign took place.

As an example let us consider the design of the "Bulge." The Ardennes Offensive in December 1944 was the last major German offensive of the war, and it could have been directed at any point on any front. Larry collected his reserves and resources at the expense of the front line troops for months prior to the offensive. It has been called his last desperate gamble. Whether or not it could have succeeded in averting a final German defeat, it did materially effect the course of the final months of the war, and the post-war situation. It is very unlikely that anything short of German nuclear weapons (which incidentally they were not then, nor for that matter had they ever been attempting to develop) would have prevented the inevitable defeat. This inevitable defeat was clear to most of the German generals, and had they been in a position to determine policy, they would most probably have tried to use the Ardennes Offensive to obtain a position from which to ask for terms short of unconditional surrender. Given the Allied frame of mind at the time, I doubt that, as with Japan, anything short of unconditional surrender would have been accepted. Well then, if it was an ultimately fatal situation, why bother trying to design a game based on this campaign? The answer is that although the grand strategic situation may have been hopeless, the tactical situation was far from hopeless, and the range of effects of the possible outcomes from this offensive included dramatic differences in the post-war situation as well as the outcome of the final stage of the war.

Through the Ardennes the Germans hoped to strike for Antwerp, which would cut off and hoped subsequently cause the elimination of over 30 allied divisions. South of the Ardennes, a coordinated offensive (code named Normand) was mounted to help direct the central Allied units along the line of the offense, and was intended to prevent the allies from rolling up the front. It was further hoped that this blow would divide the Allied command (British and Americans) making the Western Front less dangerous, and allowing a concentration of troops against the Russians. In real life the offensive succeeded in eliminating two American divisions, and badly damaged another nine. The effect on the war was to postpone the final Allied assault on Germany from the west for about 5 weeks, and to strip Germany of its last reserves. The effect on the theater situation was to remove the border between the Russian zone, and the British, French, and American zones about 100 miles to the west. At Churchill's request, the Soviets launched their great Winter Offensive of 1944 eleven days early in order to take pressure off the Bulge. This favor was cashed in at the time the dispositions of the troops for the final assault on Germany was determined, allowing the Russians to take Berlin alone.

With this overview let us consider the various game possibilities and their associated boards. The game could have been grand strategy with the board containing all of Central Europe. The units would have been armies and included the troops in Italy, Scandinavia and on both major fronts. This would allow the German player to face the same general situation as Hitler did, and the game could have been played against history (i.e., the German player wins if he survives longer than in real life or does better according to some point scheme). Such a game could not rightly be called the Battle of the Bulge, and was too large a game to work with. The war did not end at the time. Moving on, the game could have been strategic, and confined to the Western Front. The mapboard would have contained the front from Switzerland to the North Sea, and the German player would have been free to mount the offensive(s) at any point, given the historical Allied setup. This game was actually considered, but since D-Day did in some sense allow this kind of simulation already (i.e., with a proper scenario) it was felt that it wasn't worth trying to publish. That narrowed the field to the Ardennes itself. However, we are not quite finished with the scope choice yet. The whole campaign as planned was targeted for Antwerp. Thus one of the seriously considered game designs was based on a board which included the region from Eternach on the South, to Antwerp on the North. This game would have included both phases of the offensive, and included those troops likely to have been engaged in the fight as seen to the Meuse. This design was discarded because of the playing congestion in the Ardennes (i.e., where most of the game was played) which would have had a considerably smaller board area. Thus wearied at the final choice: from the Our to the Meuse, and from Eternach (XX-31 if it were on the board) to Monschau. Smaller scale games were considered, but discarded as less interesting. The game was to encompass the first phase of the offensive, with the goal being for the Germans to cross the Meuse in strength.

With that out of the way one can proceed to design the board, which as mentioned earlier, entails more than just getting a good map of the area and deciding how to project it on a blank hex sheet. It involves a return to the basic research on the original campaign and to the basic rules structure to be employed. The board is the playing surface of the game, not a topographic map. Its features affect the play of the game, and they are intended to accurately represent the effect of the terrain, and not the terrain itself. If so desired, however, a hill, a road, a forest, or whatever, was of no military significance (i.e., either to movement or combat) then its inclusion on the board is superfluous, even if that feature is very apparent on a topographical map of the area.

Okay, now do we grab a hex sheet and get started? Not quite! First you have to decide what size the board will be, what shape it will be, the grain direction, and the scope choice. We will consider all of these on the Bulge board. The grain direction is probably the most important of the three. The game includes congestion in the Ardennes (e.g., 6 km per hex, etc.), and the grain direction! Grain direction? Well, for those of you that haven't noticed, the hex pattern doesn't look the same if you rotate the board 90 degrees either way. Consider the Bulge board, a part of which is shown in Figure 1. To move in the North-South direction there are continuous rows of hexes side-to-side, making it possible to go in a straight line; but to move in the East-West direction one has to zig-zag because the other two grain axes run across the shorter side of the board, giving it a "short side grain." This labeling convention fails if you decide to rotate the hexes on your final board so that none of the grains are parallel to the board edge, but since this doesn't happen very often, let's not make things more complex.

What difference does the grain direction make? It makes a game anyway! One of the most important effects can be seen if you attempt to construct a line of continuous zones of control along the grain from North to South on the Bulge board. This requires a minimum of eleven units. However, to construct a similar line the same linear distance in the East-West direction requires a minimum of thirteen units! Thus, it
requires fewer units to maintain a continuous line across the short side of the Bulge board than it would have had the Bulge board been designed with a long side grain. The grain effects also impact combat as shown in Figure 2. Figure 2a shows a maximum extended defensive line "along the grain" and Figure 2b shows the "across the grain" case. Each defending unit in Figure 2a can be attacked from 4 different squares (and as such can be surrounded) whereas the defending units in Figure 2b can each be attacked from only three squares (and as such cannot be surrounded). Figure 2c depicts an "every other square" defensive line along the grain, and Figure 2d shows the analogous line across the grain. In this case the along the grain situation has the advantage that each defending unit can only be attacked from two squares, where in the across the grain case, at best every other unit can be attacked from three squares! Summing up, in a game situation like Bulge where one side will be faced with defending along a given axis (i.e., basically North-South) a decision had to be made about which grain axis to give the Americans to defend with. It was felt that the ability to use fewer units over a long front and the ability to deny the Germans a three square attack on a flat front was an advantage the Americans needed. So, depending on the tactical situations likely to evolve, the board can be biased at its inception to favor one side or the other.

The next step in the design of the board is to decide, based on the research into the actual campaign, just what types of terrain features should be included. At first this may seem trivial, but beware. I suggest you start with man-made features like towns, roads, railroads, bridges, fords, trails, etc. Not all of these are always included. For example, in Bulge, there are no railroads on the map, even though there were numerous rail lines traversing the area. The reason is obvious. The trains were just not used for troop or supply movements during the battle in the area depicted on the board. Sometimes terrain features are combined, like roads, and trails, or as in Tactics I, roads and railroads. All of these decisions must be made before the first feature is drawn on the board.

Usually, the first of the natural features to be worked on are the rivers, and sometimes these are done in conjunction with the man-made features, especially where bridges or fords are important. There is one very basic decision to be made concerning rivers. Should they be placed "in" the squares, or should they follow the square outlines along the edges? In the first case, units are allowed to be "on" river squares and in the second case, they are always on one side or the other as shown in Figure 3. The edge system has the advantage of being easier to write rules for and being slightly more playable, since there are few interpretation conflicts either about combat or movement. However, at the map scale employed in Bulge, it is sometimes more difficult to depict the rivers as being in squares. Most rivers lie in relative valleys that rise for some distance on either side. This fact, as much as the "water barrier" makes many smaller rivers formidable defensive positions. To execute an attack across a river, the attacking unit must first move "down" to the water and then cross, possibly under fire, and then with no way to easily withdraw to regroup because of the water at their backs, they must attack uphill against prepared positions. Finally, if the attack doesn't succeed, the attacking units are left strung out and vulnerable in the bottom-land regions along the river. So to provide river squares does, in some cases, provide a better representation of the situation. On the other hand, at larger scales, where units are divisions or higher, it sometimes is more realistic to use the edge methods. The final decision on rivers should be made after careful examination of the terrain around the rivers on topographic maps, as well as research into the effects the rivers of the area had on combat and movement during the original campaign. When the man-made and the river decisions, as well as hex scale, board size, and grain effects choices have been made, one can proceed to begin putting features on blank hex sheets. One tool that can aid in the procedure is a slide projector. Slides of appropriate maps can be made and projected onto hex sheets to get an idea of relative locations of towns, the paths of rivers and roads, etc. Be careful to watch for projection distortion. A long focal length lens (on both the camera and the projector) helps as well as projecting at as close to normal incidence as possible. A clear slide that contains a regular rectangular grid can be used to check for distortion. The first sketching should be done without regard to hex outlines, and then, afterwards, the "sliding" of features one way or the other to align with the hexes can be accomplished.

Figure 1. The Bulge board has a "short side grain" that means that a straight row of hexes runs parallel to the short side, with the case of Bulge is the North-South direction.

Figure 2. EXAMPLE OF GRAIN EFFECTS. a. A maximum extended defensive line along the grain can be attacked at each point from 4 squares, allowing the defending units to be surrounded. b. A maximum extended defensive line across the grain can be attacked at each point from only 3 squares and as such cannot be surrounded. c. An every other-square along the grain defensive line can be attacked at every point from only 2 squares. The two possibilities for every-other-square defensive lines across the grain are shown. In the rigging version only every other defensive position can be attacked from 3 squares. The remaining positions can be attacked from only 1 square. In the straight version each position is accessible from 3 squares.

Figure 3. The "edge" system and the in-the-square system of depicting rivers each have their advantages. The designer must select the system that is most appropriate for the combat that occurred in the original campaign.
The following Series Replay WATERLOO game is at once an example of both a well and sloppily played game. Generally speaking, the strategy both players followed was correct given their position and views of the situation. Yet, the PAA player repeatedly makes illegal moves which the French player allows to pass because he doesn’t want to hassle over the rules.

Played in this manner, the French don’t have much of a chance and the French player can hardly be blamed for losing the 2-1 attack on Quatre Bras. Without a bit of luck here, the odds are slanted heavily against the French against a competent Prussian. When the PAA player is allowed to take liberties with the rules as happened here, the French have virtually no chance.

Yet, if nothing else, this game has shown the inadequacies of the current set of rules. A revised edition will soon be printed which will get rid of the present ambiguities and also change the river rules to favor the French a bit more.

In the meantime though, this game is an excellent example of how a good Prussian player defends his advantage and how an equally good French player goes about dealing with a stacked deck..... And lest there be any doubt..... the Prussian method of bringing on reinforcements used below is illegal.

WATERLOO COMMENTARY
FRENCH SET UP:
The majority of French strength is started within reach of the primary roads. A strong left wing is planned to draw the PAA away from Quatre Bras.

PAA SET UP:
The French are apparently concentrating in the center. This may indicate an attack against Quatre Bras or Nivelles. The possibility that the French may deploy a sizable force East of the Gosselies-Quatre Bras road on turns 2 or 3 should not be overlooked. The Prussian Army is being deployed on the Ligny-Quatre Bras road in such a manner as to allow a first turn reaction to any French threat between the Quatre Bras slopes and the east edge of the board. Strategically, the PAA forces will defend the Quatre Bras and Nivelles positions. The Ligny-Quatre Bras-Nivelles road will be used to shift PAA forces back and forth to meet French drives. Counterattacks will be made when and where necessary or profitable.

NEUTRAL COMMENTARY SET UP:
The French set-up is good. One minor flaw is the lack of cavalry soak-offs in the JJJ13 area. If the PAA closes for combat the French may have to do some hurried shuffling of forces. I prefer to put the 3-6's on 0016 and the 2-6's on JJJ13.

The PAA set-up has two illegal positions in that the FF row should not be used on turn one. This is minor as EE23 and EE10 would have served the same strategic purposes. Otherwise it is excellent.

7 A.M. — FRENCH
Fire and II Horse Artillery are stationed to prevent strong PAA assault. I am massing for a 2-1 (Surr) versus Steinmetz on AA27. I feel this gamble is necessary against a competent PAA player as the French are definite underdogs and need success here to win.

7 A.M. — PAA
The French forces advanced rather cautiously on the first turn. There appears to be significant French movement towards the Nivelles front. A possible strong effort in the center should not be overlooked. The overall French strategy appears to be an all fronts advance, possibly with simultaneous attacks near the end of the first day. The PAA strategy is to delay in the East and then gradually withdraw into a strongly defended Quatre Bras position. Forces will be shifted towards Nivelles as French strength on that front increases. The PAA forces will “bloody the nose” of any French forces that advance too boldly but will be content to delay and wait for the French to commit themselves.

The Quatre Bras slopes were strongly defended and no attacks are expected there. The Prussian units on the Ligne River are delaying the French cavalry for another turn. These units are not considered to be in jeopardy because of the lack of French pressure against the Quatre Bras-Ligny road. Delay and/or soak-off units have been moved into position East of Quatre Bras. Other units are in reserve with multiple deployment capabilities.

7 A.M. — NEUTRAL COMMENTARY
The French move has yielded a set-up weakness I failed to catch before. The units at 0016 and PP15 should have been switched. This would have allowed the 6-4's to reach the main road on turn one. The key to crossing the Ligne River is to leave large units on the river. This would have forced the river with the possibility of going either way. As it stands the factors East of St. Amand (GG15) are useless. II Cavalry to dd25 would have eliminated the necessity of exposing Pier.

The PAA move takes advantage of French caution near Ligne. The Quatre Bras heights seem a bit strong and I don’t think the reaction to the Nivelles drive stiff enough. However, it takes the French 1st Corps a long time to get to Nivelles (I often send them up the center and the 2nd Corps toward Nivelles), so the reaction may be OK.

7AM — June 16th: As the players maneuver for position the French show a strong commitment to their left flank and a posture which looks almost offensive in nature along their right. The PAA player reacts strongly, sending Thumen, Schulenburg, Sehr, Perponcher and the I & II Horse Artillery towards Nivelles at W31.
9 A.M.-FRENCH:
Making a strong thrust towards Nivelles and east towards Tilly to entice shifting of PAA forces to flanks. Anticipating placement of Steinmet at AA27.

9 A.M.-PAA:
The French player apparently committed the majority of his forces to an attack East of Quatre Bras. The French have a sizable secondary force on the Nivelles front but it won't become a significant threat for several turns. The French may have had ideas of trapping my 4-4 on FF10 but did not. Whether by plan or chance the French player left 36 factors plus a soakoff unit within range of AA27.

I accomplished three things by attacking the French 2-6 and defending well forward:
1. Maximum delay of the Ligne Front.
2. Elimination of a French unit at no cost.
3. Complete extrication of the 4-4 from FF10.

The particular stacking arrangement on DD16 serves to optimize FR/PAA losses if the French attack the square on their 11 A.M. turn. Perponcher was placed on Z28 to prevent a French 3-1 against AA27, unless the French use a staggering plan to sacrifice 7 factors.

I plan to delay as long as possible near Ligne and then slowly withdraw into the strong Quatre Bras position. It is felt that the French player will not have time to maneuver via the Tilly route. In any event light forces will be dispatched to cover that possibility. The PAA player will have the capability to heavily reinforce the Nivelles front prior to a major attack there. I am willing to accept low odds French attacks at this stage of the game.

9 A.M.-NEUTRAL:
The French 9 A.M. move is a strong one, I think Habert would have been better on 14 and the stack of cavalry on HH20 could have been closer to the front but otherwise it looks good.

The PAA move is also strong but he trades two 6-4 units for a 2-6. This may be okay but it may hurt him later. Pinch 11 and Jagow could have stayed at AA27 as two 6-4's could have done the job at BB20 just as well. I would be tempted to throw a 1-2 on the 8 and on the 7, but probably would not since there are no 4-4's or 3-6's around. The best attack is a 4 vs. 8 and 4 vs. 7. Second best attack 9 (6-4 and 3-6) vs. 15. The PAA player has made common rules misinterpretation in that he has columned his reinforcements. This is not legal, but from my experience I would say at least 40% of the Waterloo players in the United States interpret this rule this way. It tends to give the PAA a slight advantage (3-5%). The PAA retreat at Nivelles was too far in my opinion. A 1-6 sacrifice would have been preferable to giving up 5 squares of territory.

11 A.M.-FRENCH:
Defense of Quatre Bras heights forces change in plans. Chance to attack Steinmet at 2-1 Surr still anticipated. A bolder thrust towards Tilly may lure units away from Quatre Bras Heights. I noticed he used the illegal column method of bringing on reinforcements but don't feel like arguing the point with him. If he wants to play that way, so be it.

11 A.M.-PAA:
I was glad to see the French player get burned with his low odds attacks. The French appear to be making a major effort on both flanks. I will be interested in seeing how many French troops head into the Tilly gap.

I no longer consider the open area East of Quatre Bras to be defendable. I am slowly withdrawing back into the forest Southeast of Quatre Bras. The forces on U-19 and U-25 will slow up a French flanking maneuver, especially an unsupported cavalry sweep. Another turn of delay on the Nivelles front was necessary to allow my reinforcements to get into position. Strong reserves are being kept in the center.

11 A.M.-NEUTRAL:
The French player tried to force an extra 1-6 out of the DD area battle, but only succeeded in losing 3 factors on a bit of poor luck. Hindsight is easier than foresight, but I think a 1-6 with 1V Cavalry would have been better if the attack was to be made at all.

The PAA 11 A.M. move is very strong. He is definitely taking control of the game. I feel the French could still surprise him with a heavy Tilly corridor drive or even more important; a thrust at the Braine Le Comte road.

1 P.M.-FRENCH:
I was badly mauled in the 11 A.M. attacks. The PAA pullback leaves few units exposed. Quatre Bras Heights are still held strongly. Will shift more strength to right flank and force my way through the Quatre Bras Gap.

1 P.M.-PAA:
My French opponent continues his cautious advance. His overall plan appears to be to stretch my line and maneuver my forces out of the Quatre Bras-Nivelles line. I am inviting a French advance towards Nivelles. I should be able to counter-attack any French advance directly towards Nivelles. I'm holding the flanks with light forces as I believe the major battle will be fought in the center.

1 P.M.-NEUTRAL:
The French 1 P.M. move has a glaring weakness. The stack on AA36 is in danger of being surrounded. Otherwise a standard turn.

Once again the PAA player should have wasted 1 factor instead of giving up large amounts of defensible terrain in Tilly. A French sweep aimed at N24 with about 60 factors could...
11 AM - June 18th: The French advance on both flanks eliminating the PAA delay forces. Gey, Ostal, and Triekow. They run into a bit of bad luck however, losing Gey and IV Heran Art'y from the Vichiery stack in 1-2 and 1-3 attacks on Brause & Stulpnagel who immediately retire to new positions. The PAA responds to the French flanking attempts at Ligny by dropping back 7 factors in the Tilly corridor and 3 more behind the Moie de Moiz. Note the tremendous edge given the PAA by their illegal method of bringing in reinforcements. Picton is already at Nivelles.

be devastating. On the other front, the PAA move was cautious, but correct.

3 P.M. - FRENCH:

I am preparing for attacks in forest corridors South of Nivelles and East of Quatre Bras. The Cavalry will exploit the route to Wavre.

3 P.M. - PAA:
The French commander seems overly cautious. I think his plan of gradual development is taking too long to develop, so I'm attacking. My objectives are to inflict casualties, disrupt his timing, and to show an offensive spirit. The odds are in my favor of coming out ahead.

Elsewhere on the front, my troops are containing the French and are preparing to counterattack. The situation at Braine Le Comte is interesting.

3 P.M. - NEUTRAL:

The French player should have sent more factors toward Wavre instead of mess around the woods around CC23. Other than that, a nice turn.

The PAA player, sensing the cautious nature of his opponent, has attacked. The attack is well planned, but I question its usefulness. He clearly has the game won if he plays cautiously. By attacking he can hasten his opponent's demise, but he also gives him a chance to make a comeback.

5 P.M. - FRENCH:

Heavy losses sustained due to my poor handling of French center. Must make up for heavy losses to boost morale. Attacks pressed in Nivelles sector to try to relieve pressure in center.

5 P.M. - PAA:

I'm counterattacking hard this turn. The French should be unable to counter-attack in the center effectively.

I'm holding on the flanks. The stack on P25 can deploy as needed. I can counterattack any French Cavalry advance in the West.

On the whole I think my forces have done well the first day. I'm still holding my primary defense line. Most likely, the French casualties will be heavier than mine. My overall strength permits attrition as long as it isn't too rapid.

5 P.M. - NEUTRAL:

The French movement of Morand was illegal because of the rule which forbids entering and leaving the same units zone of control in one turn. This turn was a mixture of caution and
 portray the French as being hurt at Nivelles.

Pirch—June 16th: The French, stung by the PAA attacks, try some desperate assaults. The Imp. Gd is lost in a 3-1 exchange with Steinmetz while the III Horse Art'y is eliminated in the covering soak-off in front of QB. Elsewhere, the French have better luck, eliminating Chasse and Brunswiki at 2-1 while the III and VI Art'y survive 1-2 soak-offs and are retreated out of action.

The PAA respond with an equally damaging move. The III Horse Art'y and Sandham are lost in soak-offs which allow the elimination of Bachelu & Duhouin at 3-1 (the latter taking the Russian I Art'y in exchange) and the French I Art'y on the left at 5-1 odds. A French cavalry force at 10 factors on the right is not shown—having penetrated as far as 022. However, they pose little threat.

desperation. The results were especially good for the French, making up for a bit of poor luck earlier.

French II ignored the same rule Morand ignored in the first half of this turn. Obviously, both players are unaware of it. The PAA counterattacks this turn are strong. Things continue to look up for the PAA player despite his being hurt at Nivelles last turn. He should dominate the center and the game from now on.

7 A.M — FRENCH:

Heavy losses taken by both sides last turn. My losses slightly higher unfortunately. Must reverse the tide soon or pack it in. I cannot afford even attention. Nivelles sector has been favorable. Pullback in center will leave many targets for PAA counterattacks; however, French units on Y22, Z22 and AA2 are ready to shift South and counterattack.

7 A.M — PAA:

The French player is beginning to lose the strategic initiative. The French Cavalry on the flanks are being checked and the French are on the defensive in the center. Only on the Nivelles front are the French making a significant advance. (This is in large part due to two D-Elim's on 2-1 attacks.)

My strategy at this point is to take maximum advantage of the promising situation on the Quatre Braas front. If the French forces here can be badly mauled and effectively neutralized then the bulk of the Prussian Army can be quickly transferred back to the Nivelles front to stop the French advance there. I think the French player should have sacrificed a 2-6 Cavalry unit in order to prevent my attacks in the center. I'm bringing up a couple of 1-6's from the Dyle and possibly 3 Infantery divisions from the Nivelles front to reinforce my counteroffensive in the center. Note the placement of my delay unit Merlen. In order to attack this unit the French must expose forces to a counterattack from the troops on V-33. Note that the French are running short of soak-off units on the Quatre Bras front and are hard put to reinforce. There is a certain amount of risk in putting units on DD-22 but I believe this is justified at this point.

For the moment I must go on the defensive on the Nivelles front until I can bring up more forces to counterattack from a more favorable position. Of course, the attack on the French Cavalry is a profitable one.

On the Dyle front the III Artillery is being offered as bait. The French Cavalry could waste 2-4 turns going after it. Also, allowing a 4-1 against Kruse is a sort of bait too. I would prefer the French Cavalry to be committed there.
7 A.M. — June 17th — The French eliminate the delaying Schulenberg and Perponcher in a 4-1 attack, losing Peron in a 1-10 soak-off but they are on the run. The PAA watch their forces on the DB front and go on the offensive. Sinner is eliminated at 5-1 surrounded, Morand is pushed back at 3-1, and Soult is eliminated in a 4-1 exchange with the PAA III Horse Arty. On the far left, Jochum is eliminated at 8-1 surrounded while Trip & Krahrer die in the compulsory soak-offs. The forces in the Tilly corridor still neutralize each other as the PAA assumes command of the game. In all fairness to the French player, we should note the extreme pressure he is placed under by the illegally fast arriving PAA reinforcements — the Cav. Batta in this move being a prime example.

This is the beginning of the end for the French. Reduced to desperate measures, they grasp at the chance of evening the game in one big gamble and attack the Stulpnagel stack at 2-1 surrounded with 30 factors. The resulting A-Elim ends the game save for the customary last-gasp volley of 1-1 attacks made by a player finding certain defeat.

9 A.M. — NEUTRAL:
The French gambled and lost. With this loss the game is over. All that remains is the mop-up.

11 A.M. — NEUTRAL:
We have the end. The French suicide attacks go moderately well but the PAA are left in a commanding position. Napoleon surrenders. This was an excellent game. Luck played little or no part in the final outcome. From the very first turn the French player was too cautious. In Waterloo (especially when the PAA can column reinforcements) as was done illegally here, the French must be bold. The French player concentrated too much on the center. Stronger flank drives would have been preferable. Still, an excellent game between two fine players.

THE ATTACKS...

<table>
<thead>
<tr>
<th>TURN</th>
<th>ATTACKERS</th>
<th>DEFENDERS</th>
<th>ODDS</th>
<th>RESULT</th>
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A Fast American Win in Luftwaffe

By Tom Hazlett

The game of Luftwaffe has been somewhat neglected in the pages of the General ever since its release three years ago. Many of the articles which have dealt with the game have concentrated on design and historical background. Those few articles which have discussed actual play of the game have dwelt mainly on the campaign version, giving vague strategical suggestions. While the campaign versions are fine games, worthy of the attention they have received, it is unfortunate that they have overshadowed the basic game, which is a fine exercise in its own right, and one which places emphasis on the tactical consideration often neglected in the larger version.

It is likely that many people who hear only about the campaign versions do not have the time to play them and thus never attempt the game at all. If you are one of these people, I suggest you dust off your game and try the basic version a few times. It is one of the few wargames available that can be played in an hour or less, enabling a series to be played in an afternoon. The tension level runs high, as the outcome of the game often depends on survival of one bomber factor on the last attack. It is a rare game that is decided by more than one or two cities. The game also has much of that quality which has been responsible for the survival of wargames available that can be played in an hour or less, enabling a series to be played in an afternoon. The tension level runs high, as the outcome of the game often depends on survival of one bomber factor on the last attack. It is a rare game that is decided by more than one or two cities. The game also has much of that quality which has been responsible for the survival of wargames available that can be played in an hour or less, enabling a series to be played in an afternoon. The tension level runs high, as the outcome of the game often depends on survival of one bomber factor on the last attack. It is a rare game that is decided by more than one or two cities. The game also has much of that quality which has been responsible for the survival of wargames available that can be played in an hour or less, enabling a series to be played in an afternoon. The tension level runs high, as the outcome of the game often depends on survival of one bomber factor on the last attack. It is a rare game that is decided by more than one or two cities. The game also has much of that quality which has been responsible for the survival of wargames available that can be played in an hour or less, enabling a series to be played in an afternoon. The tension level runs high, as the outcome of the game often depends on survival of one bomber factor on the last attack. It is a rare game that is decided by more than one or two cities. The game also has much of that quality which has been responsible for the survival of wargames available that can be played in an hour or less, enabling a series to be played in an afternoon. The tension level runs high, as the outcome of the game often depends on survival of one bomber factor on the last attack. It is a rare game that is decided by more than one or two cities.

I would guess that there are two basic objections in the minds of many people to playing the basic game. The first is the myth of German invincibility. This reputation has derived from two sources: first it is a spillover from the campaign game, where they do have an edge. More importantly, it comes as a result of opening up the game for the first time, trying to muscle bomber formations through the heart of the defense, and watching them get blown out of existence. The same type of analysis may be, and should be, conducted for any quarter of a campaign game. This article is meant to provide an illustration.

Examining the German units, we see that our opponent has three main forces as his defense, 5 FW-190s, 6 ME-110s, and 8 ME-109s. The three forces will undoubtedly be assigned to separate areas. The key to victory, obviously, is maneuvering the defense. Rather than dividing into three groups and trying to push through the defenders, an attack should divide into several small groups and attempt to slip past the defense. Hopefully the Germans will become confused, try to stop everybody and end up not applying sufficient force anywhere. At worst, a well-timed series of attacks prevents each German force from achieving a victory. Some few factors should take three turns to wipe out in the following manner (we are using average rolls for purposes of illustration): turn 1- The 110s roll a 4, which is adjusted to a 2 because of the E ratings, killing 3 P5s. A P47 attack kills 2 110s with a roll of 3. Turn 2- The 110s kill two more P5s with a roll of 4. The P47s roll 3 again, wiping out 2 more 110s. Turn 3- The 8 110s continue with another 4, killing the last 110 and a bomber. Return fire from the bombers kills a single 110. The P47s are forced to go home. Turn 4- A final 4 kills three more bombers, which saves only 1 of the 3 cities in the center, barring a lucky roll. The 110s are forced to land next turn, thus the counter bomber Budapest is unmolested, while Steyr also falls without opposition. If the Germans go after either of the flank bombers they guarantee the success of the central column, and make it likely that the other flank attack gets through as well. It is to make it difficult to kill both flank units that the Budapest unit splits off so early. If the Germans refuse to attack first turn, so as to have enough fuel to hit the Budapest bomber on turn 5, then a P51 can split off to Steyr, giving that bomber a 2/3 chance of getting through. No matter how the 110s defense this area the Americans will get at least 3, and probably 4 cities.
Bomber group 2 also starts out on turn 1. It could reach Munich a turn earlier if it started out from a different hex, but the extreme southern course is kept in order to prevent the FW190s from attacking both groups 1 and 2. The success of this attack depends on whether the FW190s defend against them or move west to pick off group 3. In any case the FW190s should not be able to hit group 2 until after the second move. This makes it too late for them to assist the 110s. The only way they can attack after 1 move is if their initial placement is near Augsburg. An initial placement this close to Italy leaves the British front unsupported and we should consider an adjustment to make a stronger drive in this area, which we will mention later.

Before leaving this front, it is necessary to mention fighters in general and the P57s in particular. In their first few games American players generally use all their fighters as "hunters" but they soon discover the value of close-escort and use all their fighters this way. Nevertheless "hunters" do have their value even in the basic game. The Italian front in this sample attack is a perfect example. If the P57s were close-escort, the Germans could ignore the stack they were with and they would be wasted. As it is in this example they can protect both groups 1 and 2. If the 110s attack group 1, the P57s should counterattack. In the two turns before they have to break off combat they should destroy 4-6 factors, enough to ensure the success of the bombers. If the 110s hold off from attacking and move to threaten group 2, the P57s can provide adequate protection by maneuvering between the two and making it difficult for the Germans to close without suffering a first strike.

The other areas are not so complicated. Bomber group 3 is designed to co-operate with group 2 to squeeze the FW190s, who can easily eliminate one group but don't have enough firepower to attempt to destroy both. Group 3 should leave one turn later to ensure proper timing, as group 3 is one turn closer to its targets.

Group 4 is meant primarily to tie down the 109s. After the escort is eliminated the bombers should scatter as much as they can in an attempt to occupy the 109s as long as possible. Thus the pattern shown on the map may vary considerably, depending on German reaction and luck. This group should leave at the same time as group 3 to prevent the 109s from attacking both groups.

Group 5, the sneak raiders, enter on turn 3. It should be noted that the fifth bomber unit is not really expected to reach Sorau, and could be reassigned to Berlin if you prefer. It is there primarily to provide added firepower and absorb losses. The balance in this area is extremely sensitive, but this extra unit should tip the scales in the Americans' favor. The Germans should destroy 3 bomber factors in the first attack, while return fire kills 3 Germans. The 3 remaining 410s are insufficient, barring very good luck, to keep the sneak raiders from getting 3 or 4 cities.

Obviously the above plan of attack is only valid against the German defense outlined above. I would like to stress that this defense is the one favored by many German players and is probably the strongest one overall. Any attempt to correct the weakness on the Italian front will leave another weakness elsewhere. For example, suppose the 410s are shifted to Italy. This leaves a sneak raid wide open. The 109s cannot cover two areas. If they try to, a properly timed attack from England will force them to land as the sneak raiders appear. With some minor adjustments in Italy, some cities should still fall there. For example, group 1 is reduced to 4 bombers, going after Steyr, Vienna, and

Continued on page 28
The Professional German

THE UPHILL STRUGGLE

by Dean Miller

Situation 10 is an attempt to recreate the Battle of Prochorovka, often called the largest tank battle in history. As such, it is one of the most appealing Situations, giving promise of a large scale tank v. tank engagement in the open fields. That it doesn't work out that way is due to two factors: (1) The imperfections of the game, which have been the subject of numerous General articles; and (2) the playing techniques of most Russian players, which I will take up in a moment. As a game, this Situation is known as a hopeless cause for the German player. He must fight his way the length of Board 1, opposed in part by some of the most anomalous but effective of delaying units—trucks. He must get across this Board rapidly to begin the herculean task which awaits on Board 3—the destruction of 29 units (assuming he has destroyed or blocked off the 12 on Board 1) in what remains of 10 turns.

The gross imbalance has been recognized officially, first by the game's designer, and now by Avalon Hill, by extending the Situation to 12 turns—hardly an overgenerous concession. Any Russian who permits his opponent to win a decisive victory obviously is in need of help. Thus, if this were the typical Panzerblitz article, this paragraph would be an introduction for a number of variants to provide better balance. But this is not that kind of an article.

The odds against a German decisive victory are a fair reflection of the real battle. When the 4th Panzer Army already decimated it with that inhospitable field between the railway embankment and the river, to be greeted by the fresh hordes of the 5th Guards Tank Army, the only way the "death ride" could have been avoided would have been for one side to turn tail—an unlikely event, either at that turn of the wheel or in a wargame.

But the foregoing is not to say that Situation 10 is unworthy of your time. To the contrary, it can be one of the most challenging tests of the tactical abilities, and the guts, of wargamers. A German tactical victory—which would result in a draw—is not beyond the realm of possibility. All that is required is the destruction or elimination otherwise from Board 3 of 17 units. It is a worthy goal for a "professional German" to see—difficult, but not impossible, when he is playing a "professional Russian."

The two player types are cut of quite dissimilar cloth. The player 1 refer to as the professional German is basically an attacker. He is most in his element facing a situation where he must move aggressively against his opponent at poor odds. Rather than relying on the laws of chance he seeks to circumvent them through innovative tactics and extreme aggressiveness, knowing that it is just as effective to demoralize an opponent into capitulation as it is to do so through reduction of his playing pieces. For such a player, the worst possible position to be in is not the hopeless one, but one where he cannot attack.

The professional Russian, on the other hand, is a counter of games won. Unlike his antithesis, the German, he seeks and relies upon odds heavily in his favor. He attacks only when facing a sure thing. He won't fail to assert any advantage, however unrealistic, which the oft-imperfect rules of wargaming may give him. He avoids—is deathly afraid of—the unconventional. In Situation 10 you will recognize him the moment his vast forces enter Board 3, for he will promptly hide them in the woods, in Opustoschenia, and in Graybosh. No free-for-all in the open—and hence no duplication of the real Prochorovka—for him!

So how does the German cope with the unfriendly Situation, compounded by the cowardly Russian? This is a 2 stage operation—Board 1, and Board 3—actually two very different games. In the first he outnumbers the Russian, and has no armored vehicles or overruns to anticipate. The Russian will make full use of the wooded portions of the road and the easy terrain, simply blocking a fast advance by being there with his trucks, with anti-tank units covering the necessary approaches. It is not impossible to dislodge these forces with minimal risk, if you wish to take the time (and employ Russian tactics) but time is precisely what you don't have. Your primary concern during this phase must be speed. This means that risks must be taken with your panzers, and if you are psychologically unwilling to do so, you are playing the wrong side, Russian!

How does this translate into specific tactics? First, you must plan for this phase. The "10-speed" units figure most importantly—the 5 superb Panthers, and the 11 halftracks. Many of these advance units are going to have to go across most of Board 1 off the road—plan on it! Send at least two Panthers and four halftracks up the right side of the Board from the start, and be prepared to divert more of them in that direction if events so dictate. Put the infantry and the guns on the halftracks, and use the spare one, and the trucks for contingencies and reserve carriers.

Secondly, and frankly, you are going to have to expose your units to the anti-tank guns. These latter units will be in the woods and towns, on hexes like I15, I17, and I1A9, and you're going to have to move next to them to spot. Of course, the best units for this purpose are the infantry, and occasionally you may be able to use them so in the first couple of moves. But to do so, you must also use a transport unit and either drop off the infantry, and move out of harm's way, or risk that unit also in the square next to the guns—almost certain elimination for it. This risk could be accepted for the trucks on the first move if there is an opportunity to move an infantry unit up a road next to a blocking position. The infantry can then be picked up by a halftrack. But by and large, too much time is consumed by the dropoff and pickup process, and you need your infantry dearly when on Board 3.

Thus, you are going to have to risk armored units, both in spotting and attacking, and simply by exposing them to fire while proceeding across the Board, in order not to allow your advance to be fatally slowed. The best units for this brand of spotting are the StuG III's. With their protective factor of 12, they are as strong defensively as any unit you have had with them and with their more limited range and speed they are the most expendable of your "12 defense" units. Next in the order of priority for this purpose are the Tigers, and lastly, the Panthers. Yet you must even risk these last-named matchless instruments occasionally, because with their mobile factor of 10, they may be the only units able to reach a critical spotting position—and you must never decide to wait a turn to bring up a less valuable unit!

This risk, after all, isn't all that great. If you move alongside an anti-tank unit while in clear terrain, the odds are 2-1. If, as is often possible, your spotting unit is in woods or a town hex, there is no possibility of destruction of your unit. Indeed, in pbm, there is a 30% chance of escaping dispersion, even if you are on clear terrain. While a dispersion is a setback, particularly if it happens to a Panther, you can usually catch up by using the road when mobile again. You must, of course, use two units for this function, preferably on separate squares, so that the other can spot and shoot back, if necessary.

For the first few moves of Situation 10 the artillery should be on the commanding hilltops, providing the firepower to eliminate the blocking forces as they become spotted. At least one should be on hill 126, and on hill 104. The remainder of the German units—the PZ IV's and Marders—should follow up, generally following the left road which traverses the Board, with minor ventures off into the boon-
THE GENERAL

docks to circumvent obstacles and move into positions to fire at the Russian units, should their assistance become necessary.

The second phase begins as soon as you can get onto Board 3. It is not to your advantage, on balance, to stop your advance short of the middle board and wait until you have sizeable units in position to enter. As soon as you have units which can go in, do so, even if it means letting some of the Russian Board 1 units escape onto Board 3, although you should extend yourself to avoid that. There may be an overlap between the phases, as certain of your units may have to stay on Board 1 to keep the remaining Russian units there. Remember, you don't have to destroy them, just keep them there. Thus if the trucks are eliminated, you can ignore the remaining anti-tank guns, if they do not threaten your artillery.

As noted above, the Russian is going to move in to Opustoschena, and the woods hexes in force, with a reserve around Graybosh. If you enter the Board with a small force, your first objectives should be to block his way to Zabvenia, and occupy the heights at 3W8, and the gully before Opustoschena. At the same time you enter Board 3 you should move your artillery onto hill 123, and you should time their departure from the hill squares at the other end of the Board with his in mind. The artillery will control most of the ridge and gully hexes (against the unlikely event that the Russian becomes adventurous) and provide a base of fire for the carnage which is about to begin.

The primary battle of this phase — and of this Situation — is for the village of Opustoschena. You are going to have to go out into the open to dislodge the Russians. This will require putting infantry and "12 defense" units next to the village, backed up by "overrun protectors" on the hexes behind. Thus, you will have to put the spotters on hexes 3R5, 3S5, 6, and 7. The backups — PZ IV's, Marders, and pairs of half-tracks if absolutely necessary — go on hexes 3S3 and 4, 3T4, 5, 6, 7, and 8, 3U6 and 7. The Russians are going to see many of your units promptly converted into wrecks! Assuming some spotters survive (you have to have some fair breaks from the gods), you must then utilize your assembled firepower to best advantage — blow the place off the Board! But do not fire all your units — you must save some to enter the town hexes where all defenders have been destroyed. Your greater stacking capability serves you well here.

Hopefully, at the same time, or if not, on the next move, you can mount a similar attack on the wooded hexes at 3M9, 3L9 and 10. By this time you're going to be getting low on units and turns, and the next assault — on the wooded hexes at 3J2 and 3 and 3H3 — may be difficult, yet the work must be done as long as the odds on the spotting units are less than 4-1, even. Count the Russian Board 3 units eliminated. Until you have reached the magic figure of 17, never mind your losses. For a moment remember that you're not Von Manstein and unlike him, will have no use for your tanks after your half of turn 12. They don't count toward victory conditions. Go after just enough of the craven Russians, wherever they may be hiding, to push you over the tactical victory level. If you reach this goal, you will have a draw, in terms of the Situation. But you will really have won! Ask any professional German. Ask me!
Dear Sir:

Your D-Day anniversary is my very first real reference to D-Day and the invasion of France. Again, that is the first General I recollect of the outcome of this one in 1944, but that your main article (indexed) deals with that game that started me off at age 13, 18 years later was great.

I agree wholeheartedly with the comments that the D-Day original was in itself a classic. Although it can be made more realistic with a slightly more robust production, it is a vast improvement over the interim 1977 version. Flies, 1978s, equipped with the interesting innovations and maneuvers, has gone a long way in improving its game to date. They have all been interesting innovations and maneuvers, but they are in no way a complete game. The book has to look at the game and the general quality of the game is now with the book. Panzerblitz rules are better than this, and I am convinced that if the rules of the game are complicated, the game is complicated, and requires reference during the game. Please read the booklet.

I think that the idea of reducing the general control rules is excellent. It might be a bit too big but I have always liked and a little bit could be very good.

The change in Avalon Hill's publications and products of the last year has been truly most dramatic. I must attribute that to you and Randy Reed. You have certainly revitalized the first and look forward to many more developments.

Gary Gekkers

Letter to the Editor

To the Editor:

My sincere congratulations on the latest General (Vol. 10, No. 11). It is another excellent issue.

There is one point I would like to make in regard to the articles on the Battle of Waterloo in the 1976-1777 continental army has more evolved and changed over the years. The 1760-1777 British Army is actually a committee, in the first place, the French soldier cannot be caught.

I think the idea of an idiocy factor rule is nothing more than the general aspect we have said the same thing. It is the shrewd of the players to move the dice. If they may be counted on to do. We must make sure that the troops are enough to the part of the French. We are better than competent, while Napoleon was a genius, this could never really be said. You do not have a special rule to prevent it. No. The player is Napoleon, not the computer or the dice. I hope we can take it too far. For example, in a PanzerBlitz-type game representing Napoleon's campaigns in France, players might not be the standing orders for the French and the Germans coming.

A game commander like Nelson might ignore that. In the Napoleonic campaigns he did not get general, but he did have enough to be how. He always has a rule, we must consider doing that to prevent what we have to do. It is always better.

This has nothing to do with '77. The British would have won. What is your plan for D-Day? Novel in 1976 is no reason other than his mission was in Halix, and reflected in 1951.

There is real reason to mention the idiocy factor. George Phillips

Dear Sir,

My name is George Phillips, a life-long Avalon Hill employee.

I especially like the Series-Reply columns. They have vacated the quality of game play but all have been interesting and thought provoking. I admire the players who are willing to examine the issues and the wisdom of their moves and the sort of casualties they are subject to under artistic.

The change in AVALON HILL booklets has been a blessing to this long time member. Please accept the compliments for the interesting innovations and maneuvers, but they are in no way a complete game. The book has to look at the game and the general quality of the game is now with the book. Panzerblitz rules are better than this, and I am convinced that if the rules of the game are complicated, the game is complicated, and requires reference during the game. Please read the booklet.

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I especially like the Series-Reply columns. They have vacated the quality of game play but all have been interesting and thought provoking. I admire the players who are willing to examine the issues and the wisdom of their moves and the sort of casualties they are subject to under artistic.
GETTYSBURG is the 11th game to undergo analysis in the RBG, and not unexpectedly, it receives the worst cumulative rating (3.88) thus far polled. Although this still rates as above average, the game was not, comparatively well received by raters. This was to be expected as GETTYSBURG is not a "hard core" game. It is as much aimed at the beginner as it is at the wargame enthusiast, and is listed as such on our Complexity Scale. The fact that the "hard core" wargamers of the GETTYSBURG era would see this would be a serious error.

GETTYSBURG should probably be revised into something more suitable for the "hard core" but after 3 previous editions one begins to doubt the worth of it all. It serves its purpose as an introductory game quite well and will probably be restricted to that role in the future.

WHAT THE NUMBERS MEAN: Put simply, the results can be considered like this. Anything under 2.00 is pretty damn fantastic. Scores ranging from 2.0 to 3.5 are excellent while 3.5 to 4.5 indicates a dire deficiency and should merit immediate attention at redesign or dropping from the line. As you can see, what happens after the game is published is of equal importance to what happens before the game is released in that large part to you. If there are dire deficiencies we are relying on the RBG to put them.

1. Physical Quality 3.59
2. Mapboard 3.54
3. Components 3.45
4. Ease of Understanding 3.38
5. Game Balance 5.08
6. Realism 5.41
7. Excitement Level 5.90
8. Game Length 2 hours, 5 minutes
9. Educational Value 4.89

DIVISIONAL LEVEL CIVIL WAR BATTLE

This is a three player version of a game written by (you guessed it) an "Assembly Movement Effects Table" (AME). AME would be interesting as a five player version. AFAIK, there are no plans for this five player version.}{_LITERAL}
Probably the most esteemed wargame to take place during the last 20 years occurred recently in London where the Daily Telegraph and the Dept. of War Studies at the Royal Military Academy in Sandhurst organized a grand scale wargame on Operation Sealion—the planned German invasion of England in 1940.

A panel of German umpires, all of general’s rank, flew in from Germany. Among the air umpires were General Adolf Galland, the Luftwaffe ace who in the autumn of 1940 was commanding a wing of ME 109 fighters on the French coast and Air Chief Marshal Sir Christopher Foxley-Norris. The German army umpire was General Heinz Trettner, postwar Inspector General of the Bundeswehr and in 1940 on the staff of General Student, the German airborne commander. The German navy command was held by Admiral Frederich Ruge, who in 1940 was Commodore of the Kriegsmarine’s minesweeping flotilla in the Channel and involved in the day to day Sealion preparations.

The players of each side, firmly kept apart in different rooms, had to decide on their moves and relay their orders to a team of umpires. In practise, this meant that the Germans had to decide on just the right moment to launch Operation Sealion. On September 22, the Germans strike and achieve partial surprise. 8,000 paratroopers are dropped in Kent and despite determined attacks by British patrol boats which sink 20 barges, the 1st German wave of 90,000 men is successfully landed. A small British naval force consisting of the cruiser Manchester and 4 destroyers is overwhelmed by the Kriegsmarine. The initial landings go well and the Germans fight their way inland.

The Luftwaffe, however, is unable to establish air superiority. The RAF downs 281 aircraft while losing only 13. In addition, the weather takes a turn for the worse and supply of the landed forces proves difficult. As the British Home Fleet moves to the invasion site, the German position becomes tenuous. 9 German destroyers are sunk and heavier elements of the British fleet are on their way. Despite considerable successes ashore, the Germans have already lost a third of their landing force, and are running short of supplies and heavy artillery. SEALION is a failure—the Germans must withdraw but due to the presence of the British home fleet they are unable to pull a Dunkirk in reverse. Only 9400 men are safely evacuated with the remnants of the invasion fleet. A further 6600 are taken off by E-Boats and minesweepers during the next two nights. By September 25th, all resistance ceases. The British take 32,000 prisoners and the battle is over.

Not to be put down so easily, the good humoured Admiral Ruge left the British with an interesting thought. “Perhaps now we should do one on your D-Day landings to see if they succeeded.”

Readers may take interest in the fact that a full length fictional narrative of the battle, based on this wargame, will soon be published in the United States. Called Sealion, this novel by Richard Cox follows the battle through the eyes of the pilots, sailors, and soldiers involved. Although the narrative is fictional, the orders and plans which determine the fate of the characters are real.

NORTHEASTER III (formerly EAST COAST II) will be held August 16-18, 9AM to Midnight, at the Gilbert School in Winsted, Conn., under the auspices of the American Wargaming Association. Events scheduled thus far include an Avalon Hill tournament, a Diplomacy tournament, and naval and armor miniatures. For further information we suggest you contact Lee Atwood at his 40 Coe St., Winsted, CT 06098 address.

History repeated itself in Contest No. 60 wherein contestants were required to initiate an attack against the weakest of two beaches. Normandy proved to be the weakest beach due to the fact that the holes in the Le Havre para-screen were practically unexploitable. Indeed, it is the porosity of the Normandy para-screen that permits a good shot at a game busting first invasion.

Three ground attacks and two SAC’s are required for success, but the failure of the 2-1 attack against the 5th Para will doom this invasion unless the other attacks are completely successful. Indeed, para units and air power are very crucial to the success of this invasion:

Attack #1 — two infantry division vs. 711 Static at 1:1. This is a gift attack, combined with the SAC attack against that 2 Panzer almost certainly assures that powerful unit’s elimination. Only the possibility of an exchange weakens its chances.

Attack #2 — two infantry units vs 21st Panzer at 1-1 surrounded. Why not? At the price of two infantry divisions, a 50% chance of elimination here is well worth it.

Grant #3 — two infantry divisions and two paratroop divisions vs 5th Para at 2-1. This is the big one! If the Allied player loses this one, he might as well start planning his second invasion. Unfortunately, the defender is not surrounded.