Dear Sir,

I’m sorry that I’m writing to you so late. But nevertheless I would like to thank you very much for publishing T. Machowski’s article about his visit to “Groteka”. American war gamers reacted to our appeal quickly and effectively. Efficient organization of the parcels brought unexpectedly marvelous results.

I am pleasantly surprised by the Americans’ generosity and sympathy. We always appreciate very highly the American help in all possible fields, but I did not expect that we could count on you in such a common and prosaic matter as these games. Your substantial help distinctly enlivened the interest in war games here.

Many people and many clubs who had suspended their activities because of the lack of war games have lately restarted with them. New clubs have been formed in various cities. If we use these games correctly, they will last for a long period of time. We all agree that all these games should be kept in one place, that is in “Groteka” in Warsaw. It is also our common belief that we should create a central library to which all the players in Poland will have an easy access, and we would like someday to have facilities to copy the games. Later on we would like to re-supply the library if we can.

We know that we can’t count on a steady and constant flow of games being sent to us by our contributors. But we think that a growing interest in war games published in the USA will result in personal imports, as is the case with the computers.

A language barrier constitutes a substantial obstacle. We have decided to overcome it by producing an appeal in our press and in TV in which we will ask people knowing English well to help us.

Continued on Page 27, Column 1
May 11th, 1944 . . . The Germans had exacted a heavy toll for American advances in Italy. Night attacks were now deemed necessary to break the stalemate. The moon was new, but the lack of cloud cover made it seem incredibly bright, or so it seemed to the men of Company F as they stepped off into the darkness towards Hill 103.

June 6th, 1944 . . . They had scaled the cliffs and taken the lightly-defended coastal battery position with relative ease, but they lacked heavy weapons and their backs were to the sea. Each Ranger now anxiously looked inland for the German response which was sure to come across the cratered landscape of Pointe-du-Hoc.

September 20th, 1944 . . . British paratroops were being slaughtered in Arnhem. There was no time for more frontal assaults on the Waal River bridge. Gavin would hurl his paratroopers across the river in a daring, daylight river assault to outflank the German defenses. How many of the flimsy boats with their cargo of heavily-laden fighting men would make it across against the swift current?

January 3rd, 1945 . . . Hitler’s last gamble was just about spent as the Battle of the Bulge drew to its inevitable conclusion, but the embattled defenders of Bastogne knew they would have to endure the fury of yet another armored assault as they watched tanks of the 9th SS Panzer Division deploy for one last desperate attempt to crack the American lines.

This is YANKS . . . the long-awaited American extension to the ASL game system. An extensive U.S. Army counter-mix is presented so that you can command every major vehicle, weapon and troop type that saw action in the European Theater. Whether you play the eight historical scenarios or use the Point Values to design endless situations of your own, you’ll find countless hours of exciting entertainment in the game system that GENERAL readers have proclaimed to be the best ever by a wide margin in that magazine’s game rating survey.

While you will be able to play some scenarios without learning a single new rule, YANKS also includes Chapter E for insertion into your ASL binder. Composed entirely of optional rules, Chapter E allows the avid player to add Night, Interrogation, Weather, Ski Troops, Boats, Swimming, Air Support, Gliders, Paratroop Landings, Ammo Vehicles, Convoys and Artillery Barrage rules to his ASL repertoire. Four new geomorphic boards (16-19) depicting a variety of rural settings complement the varied assortment of playing surfaces available for this acclaimed game system. Relatively new SQUAD LEADER enthusiasts should note that boards 7 and 12 are necessary to play three of the scenarios included herein.

YANKS is now available for $35.00 from The Avalon Hill Game Company, 4517 Harford Road, Baltimore, Maryland 21214. Yanks contains no rules; ownership of the ASL Rulebook and BEYOND VALOR is required. Please add 10% for shipping and handling per order (20% for Canadian orders; 30% for overseas orders). Maryland residents please add 5% state sales tax.
During World War II the British proudly proclaimed that their island had not been (successfully) invaded since the Norman Conquest of 1066. Yet before this famous invasion of William the Conqueror, the island of Britain was the battleground for dozens of invading tribes whose great movements caught up entire peoples, sweeping them into the highlands or into oblivion.

The Roman legions of the Emperor Claudius arrived to conquer Britain in 43 AD, and held sway over most of the island for almost 400 years. After the withdrawal of the Roman legions, new invasions began by Angles, Saxons, Jutes, Scots and Irish. For a while the remnants of Roman civilization held out under the leadership of the legendary King Arthur, but were eventually overwhelmed. The Saxons and Angles vied with each other for dominance until both became the target of a new threat from Scandinavia—the Vikings. Danish and Norse invasions of Britain began around 800 and continued into the 11th century. In that climactic year of 1066, Harold the Saxon defeated the last great Norse invader, Harald Hardrada, but was in turn defeated by William.
Just why an airplane behaves the way that it does may surprise many uninstructed in the mysteries of aerodynamics. It certainly fooled me. I had carelessly supposed that one operated an airplane rather like a car, except for the need of an additional control to regulate diving and climbing. I was absolutely wrong. Because an airplane must be able to create a counter-force to gravity, something the ground handles at no cost for a car, its controls give responses very different from what one might expect. For example, what happens when a car driver steps on the gas pedal? Our experience tells that the car will speed up. But what happens when a pilot pushes forward on his throttle, the airplane's equivalent to the gas pedal? The airplane doesn't accelerate; it climbs. This paradox can be easily explained once the principles of flight control are understood; and, because they were of great influence in my design of KNIGHTS OF THE AIR, let's look at these principles.

THE BASICS
An airplane must obey the same laws of physics that govern every body with mass in the universe. Try to remember those rules and formulate about energy and motion that you assiduously memorized in school. Do you recall the law that described the relationship between force and acceleration? It is perhaps, next to Einstein's $E=mc^2$, the most famous equation in physics--force = mass times acceleration (usually abbreviated as $f=ma$) -- and it serves as the foundation to the understanding of motion. To translate, it says that in order to change the speed or direction of a body with mass, a force must be exerted upon it. It is important to note that the term, "acceleration", is used here in its scientific meaning of "change of velocity". This encompasses changes of direction as well as changes to speed since velocity, because it is a vector, has a measured speed and a measured direction.

When no force is exerted on a body, no acceleration can occur and, ergo, the body must remain in a state of constant velocity. In other words, it must continue to move at a uniform speed and in a uniform direction until such time as another force is exerted upon it. Physicists describe this condition as a state of inertia. An important corollary of the $f=ma$ equation states that, upon entering an inertial state, a body continues to move at the same speed and in the same direction it was traveling at the moment the operating force was removed.

Controlling an airplane then becomes a matter of creating a way to direct a force upon the airplane when a change of speed or direction is wanted and then removing or cancelling the force when a fixed course is wanted. Studies show, however, that not one but four different kinds of forces impinge upon an airplane:

1. Thrust—a force produced by the airplane's engine to propel it forward.
2. Drag—the resisting force of the air to the passage of the airplane.
3. Lift—a part of the drag force re-directed by the wings to counteract gravity.

How does an airplane respond to four distinct forces? It simply treats them as if they were one force with a magnitude and direction equal to their sum. This accumulative effect is a consequence of the vector nature of force. It's easy to visualize how it works in simple situations. To give just one example, when two equally strong forces press upon a body from opposite sides, the body doesn't react at all and continues unconcernedly along its current course as if there are no forces acting upon it at all. More complicated force patterns are illustrated in the diagram.

Often the true reasons for a physical action are at great variance with our intuitive ideas of the laws of nature. Suppose, for instance, that an airplane is in a steep dive at a high speed. Again, by referring to $f=ma$, we know that if the speed isn't changing and if the dive is in a straight line then no force can be acting on the airplane. Yet someone will surely protest that gravity must be pulling on the airplane; otherwise why would it be diving? Admittedly, gravity does play a role in the acceleration process. However, once the acceleration ceases, the sum of the four forces acting on the airplane must reach a total of zero. What nullifies the force of gravity? The drag must be blamed. It has been blisteringly increasing right along with the airplane's speed. Eventually, it reaches a strength to neutralize the gravity and thereby stop the acceleration process. The airplane continues to dive only because that was the course it was travelling at the moment the acceleration ceased.

I hope that you're beginning to see how force and inertia affect flight. When an airplane is flying a steady course, say 250 mph at 20000 feet, it needs only provide enough forward thrust to nullify the amount of drag at that speed. Gravity is cancelled by the portion of the drag the wing redirects to lift. The four forces are in balance and their sum force is zero. If either the thrust or drag suddenly changes, so that one no longer matches the other, the forces are out of balance and the airplane will accelerate until thrust and drag are again equal.

THE CONTROLS
We've all seen airplanes taking off, performing all sorts of intricate maneuvers, and then landing safely. Somewhere the pilot manages, through his controls, to regulate enough of the thrust and drag to permit all of these activities. What does he use? Only two—a throttle which regulates the engine's forward thrust; and a joystick (or control stick) which, when moved forward and back regulates the elevator vanes on the airplane's tail. The elevator sets the angle of the wings to the flight path and, thus, the amount of lift generated at any speed. The same joystick when moved from side to side tilts the airplane's wings; in this altitude, part of the wing's lift force is brought into a horizontal direc-
tion and pushes the airplane into a turn. These two controls are sufficient to put an airplane anywhere wanted.

Let’s examine more closely how the elevator functions. Consider, first, what would happen if there were no way to adjust the wing angle. The wing could only develop as much lift as the speed of the airplane allowed it. At each speed, it would produce a different amount of lift. Consequently, there would be just one speed, and one speed alone, at which the lift matched exactly the force of gravity and let the airplane stay on a level course. At any other speed, lift and gravity would be out of balance and the airplane would be forced into a dive or climb. Certainly, no pilot would tolerate such a lack of freedom in his craft.

What is needed is a control which permits a pilot to adjust his airplane’s wing angle. Then, if he wished to fly on a level course at another speed, he could merely adjust the wing’s altitude to whatever angle provided, at that speed, the exact amount of lift force to cancel the pull of gravity. This is precisely what the elevator does. Placed out at the end of the airplane’s tail, it transforms the craft into a moving weathervane. Like a weather-vane, it will force the airplane to rotate whenever the four forces are put out of balance. It will stop rotating only when the combination of wing angle and speed produce the lift force needed to cancel the force of gravity. The four forces will then be back in balance.

In effect, the joystick has become the speed control for, at each of its elevator settings, there is only one speed at which lift and gravity are in balance and the airplane in stable flight. An attempt to change the airplane’s speed without a commensurate adjustment of the joystick, or vice versa, will only force the tail to swing around, putting the airplane into a steeper and steeper climb or dive until the proper speed is recovered and the equilibrium of forces restored.

The elevator, then, is to blame for the airplane climbing at the increase of engine power. The control stick has dictated at which speed the airplane will fly and the sudden increase of thrust only forces the tail down and the nose up until enough of the force of gravity becomes available to cancel the change of thrust. The airplane then continues at this rate of climb in an inertial state of balanced forces. If the pilot does wish to increase his airplane’s speed, he will need to change his control stick setting first to the position where the wing angle will provide the proper balance of lift and gravity at the desired speed. Now that everything has been made clear, I can proceed to the design analysis.

**THE DESIGN**

One may justly wonder why I should have recommended that The Avalon Hill Game Company produce a second World War I air game when RICHTHOFEN’S WAR has given such exemplary service so far. I took this daring step because I felt convinced that I could combine the simple mechanics of a game like RICHTHOFEN’S WAR with aerodynamically accurate profiles of airplane performance. My conviction grew out of my studies of flight and aerodynamics, some of which I have just touched upon. I believe that such important performance characteristics as acceleration, dive and climb rates, and turn radius could all be accurately incorporated into a single game mechanic.

I admit that I was very cocksure that I would succeed and quickly devised a system which I thought answered perfectly. Such smugness rarely goes unpunished, and this would be no exception. A small but fatal flaw inevitably doomed it. (Even though this approach hasn’t worked here, I still retain enough faith in the underlying procedure to cherish a hope that I may be able to adapt it to another design sometime in the future.) I called this system the
I divided an airplane's activities into two groups—those that convert potential energy to kinetic energy, and those that convert kinetic energy into potential energy. A player of one of the planes was allowed to perform whatever activities he wished from one group so long as he performed activities of an equal energy "value" from the other group and, thereby, maintain thermodynamic conservation. For instance, if a player wanted to dive his airplane 20 feet, an action which converts potential energy to kinetic energy, he would be required to do something that converted kinetic energy to potential energy, release his airplane's nose or reduce his engine power by 20 horsepower. Pretty clever, huh?

To work, energy scales were needed for the various activities. I proceeded to calculate the energy values for each type of activity. I vaguely remember deciding that one second was equivalent to the energy of a drop of 14 feet in a ten-second turn—but then, the 14 feet could also be just the last two digits of my social security number. But that's not what is important. Has anyone guessed yet where my mistake lay? I neglected to consider that the scale would vary from the same through an airplane's performance or range, and indeed they are. The energy needed to increase an airplane's speed by one mph depends upon the amount of drag force it must overcome to make the change, and this amount of drag force is not fixed but increases with the speed as has already been discussed. So, if an airplane travelling at 70 mph needs to dive at a rate of two feet per second to increase its speed by one mph, when travelling at 150 mph it may be forced to dive at a rate of four feet per second to accomplish the same increase of one mph. To include a table of energy requirements for different speeds would ruin the simplicity of the energy exchange system, so I had no alternative but to discard it.

After picking up my shattered ego, I contritely proceeded to search for another method that could relate speed, horsepower, and altitude changes. I remembered then the vector nature of forces. If I were able to calculate the precise amounts of force needed to overcome an airplane's drag at different airspeeds, and the amounts of force that gravity contributes or deducts from airspeed when at various rates of dive and climb, then relating the two would be a simple matter of addition. This was the inspiration for the system finally used.

When a player sets the rate of his airplane's dive or climb in KNIGHTS OF THE AIR, he is also showing the amount of force gravity is contributing to the airspeed. That's why "climbs" are given a negative value and "dives" a positive value. In a climb, gravity decreases the airplane's speed; in a dive, gravity increases speed. Add to this force the amount of thrust the engine is producing and the player has obtained the total force pushing the airplane forward. Then all he needs to do is find which of his airplane's speeds requires the same amount of force and he has determined how fast his airplane must now be travelling.

I realized that this approach demanded a great deal of mathematical calculation on my part but I sincerely believe that, in this case, the end did justify the means. All of the work has been built into the game design. A player is never asked to do more than make a simple addition or subtraction during play.

The job became a time-consuming chore as I decided to calculate the speed/force relationship purely by mathematical formulae—of which many were required. (Airplane drag is more complicated than one might suppose, being the result of two distinct kinds of drag at work at all times.) Adding to the workload, I was forced to adjust the drag requirements to changes in altitude in order to reflect the reduction of drag in the thinning air of the upper atmosphere. If that weren't enough, I had to repeat the entire set of calculations for each different model of airplane I conceived of—each varying with an airplane's size and wing area. It was a monumental chore, to say the least, but it guaranteed especially accurate airplane performances at no cost in complexity.

As I continue in this vein of soul-sifting, I must make a small confession. For the sake of the gameplay, I resorted to a small deceit in the game description. What I've labelled as the "Control Stick Track" hasn't really anything to do with that control. The control stick sets speed and would be better served labelling the power tracks. However, I felt that if I had done it that way, I would have doomed players that were already calculating their rate of dive or climb from it. It is better practice to set the rate of dive or climb first. Hence, to emphasize the latter order of operations, I resorted to the misappellation. I only bring it up here to assure my conscience.

In accomplishing its task of calculating air speeds, the "Power Track" is eminently successful. Nevertheless, it amounts to the potential energy an airplane accumulates with the gain in altitude and how it, too, influences dive and climb. Let me illustrate with an example. Suppose a pilot, flying a level course, thaws forward his control stick (joystick), lets his airplane dive for a certain amount of time, and then returns his stick to its former position. What should happen? Using the KNIGHTS OF THE AIR basic rules, the airplane would level off at the new, lower altitude and immediately discard the speed gained in the dive. In reality, the airplane would not level off but would discard its speed by climbing back to almost the same altitude it occupied upon entering the dive. Why doesn't the KOTA airplane climb back too?

The Power Track can concern itself only with the current course an airplane is flying. It can show us only the fact that two identical airplanes experiencing the same forces must fly the same course. It cannot tell us whether the airplanes are at the same or at different altitudes. It, therefore, cannot account for gains and losses of energy an airplane experiences when changing altitude. Of course, it is these very energies that force an airplane, undergoing the just described series of operations, to climb rather than dive.

It became necessary then to create another system to cover the influence of potential energy. My Potential/Kinetic Energy Exchange system was thus born. Its inclusion with the basic power track system now allows our airplane to accurately respond to all changes in engine power, control stick settings, and altitude at all times. I, personally, consider its use to be essential for the success of KNIGHTS OF THE AIR and recommend that this always be a part of the play. So why did I relabel such an important set of rules to the optional section? I wasn't that I thought it trivial but that I thought it too complicated in its application— that's all.

Another area of airplane performance that I thought could handle a more realistic treatment involved turns. It is not possible to prepare one set of turn requirements for an airplane because the radius of turning depends not upon one factor but upon a combination of items—speed and angle of bank. At any one turn radius, an airplane may increase its speed only by increasing the severity of its bank angle. If the angle of bank remains the same, an increase of speed will only widen the severity of the turn. After some thought, I again decided to adopt a track approach to the problem.

I calculated for each type of airplane the range of speeds at which it could successfully negotiate each turn radius. The fastest speed in a range indicates the maximum steepness of bank angle the airplane can tolerate without its wings buckling; the slowest speed marks the minimum speed the airplane is capable of turning the turn without stalling. The tightest turn radius always has the smallest range of speeds since it requires the steepest angle of bank to accomplish. The wide turns demand far less steepness of angle, and so may be completed at a much greater range of speeds.

The variations in speed ranges among the different models of airplanes stems from the difference in their stall speeds and their maximum safe angles of bank. It is interesting to note that the reason why the Fokker triplane and Sopwith Camel are the only two airplanes that succeed in executing IT turns arises not so much out of their abilities to withstand the forces required to perform them, but rather because they produce slow stall speeds. Generally, the larger airplanes were unable to make the tightest turns because of the inability of their relatively longer wings to withstand the increased forces of the more severe bank angles. The Fokker Dr. 1 was a popular fighter with German fliers since its three wings permitted a large amount of lift without having to extend their length. The triplane could quickly bank and hold very tight turns, very desirable qualities in a dogfight.

Some airplanes cannot make left turns at the same speeds that they can make equivalent right turns. They all share in common the use of the rotary engine. How could they possibly manage to lose, these engines were very popular during World War I by designers for their great power-to-weight ratios. These all did one very peculiar thing: all rotary engines rotated around with the propeller! Only the propeller shaft was attached to the airplane itself. When objects of great weight are rotated at great velocities, they produce large amounts of torque. Rotary engines were no exceptions. The torque developed tended to pull the airplane to the right when making turns in that direction much quicker than ordinary. It also had the opposite effect on turns to the left, making them more difficult than ordinary.

Before quitting the subject of different game systems employed in KNIGHTS OF THE AIR, I would like to make a few brief remarks about the "Reaction Distance" rule. Rarely, in other air combat games, is a distinction made in the handling of aircrafts. Each machine is given precise capabilities which never vary. The more the merrier is completely ignored. Now I do not mean this as a criticism because I realize the extreme difficulty involved in introducing such an unpredictable element as human foibles and expertise into a game, especially when the effort needed to implement it might far exceed any benefits derived from its use. Yet I find it very hard to ignore an element of air combat that is acknowledged by the participants to be just as important as the capabilities of the aircraft being flown.

I decided at the very start of my designing of KNIGHTS OF THE AIR not to neglect the importance of pilot experience relating to the handling of the aircraft and, after spending tedious hours wrestling with the problem, I eventually arrived at the "Reaction Distance" rules. Like the "Potential/Kinetic Energy" rule, I sentenced it to the optional rules section for crimes against simplicity. And, like the "Potential/Kinetic Energy" rule, I'd ask that it not be discarded too quickly before given a fair chance to reappear in its own playings.

THE CONCLUSION

I would hope that this all too brief explanation of some of the design considerations and rules will bring readers understanding, and perhaps enjoyment, when they approach KNIGHTS OF THE AIR. Two years of research and design were devoted to this game system, one that accurately reflects—as near as paper and ink yet has—the dynamics of aerial combat.
With that last shell fired on 11 November 1918, the end came to the "war to end all wars"—known by modern historians with their marvelous hindsight as the First World War. But the outcome of the final offensive by Ludendorff against the British under Gough on March 21st, and its aftermath through the bitter summer months and the Allied offensive of the autumn, were certainly not pre-ordained by conditions. Rather, economic exhaustion and low national morale finally brought the war to an end; it is perfectly easy to envision the situation where four more weeks or perhaps four more months of fighting, the participants would have fought on. From reading German and Allied military memoirs, it is certainly apparent that the soldiers themselves were prepared to. And expected to.

The air war had been transformed over the years since those first observers were so ungentlemanly as to fire a rifle or pistol at an enemy plane passing nearby. For the final German offensive in the west, no fewer than 51 Jasta stood arrayed against the British airmen protecting Gough's Fifth Army. Despite the prevailing cloud, fog and rain in March during the opening rounds of the final battle, the RFC launched counterattacks from the air almost immediately, premiering the effective ground support role that would characterize much of future air warfare. The days of the "roving freebooters" and "lone wolves" among combat pilots were ending, and the air combat of 1918 was dominated by the true tacticians of this new era of war. The rest of the war would be exemplified by the massive St. Mihiel aerial offensive (in which at least 48 Allied airplanes participated under the overall command of Colonel Billy Mitchell, America's flamboyant genius); the American and British planes served in the roles that the RFC had pioneered—trench-strafing and interdiction behind the front.

Lessons learned from air combat in the First World War were many and varied. Most will now seem merely common sense, but the fact that they were first developed in the confusion of that period serves to demonstrate just how complex and unprecedented that struggle was. Common military mythology holds that air operations of 1914-1918 were casual and irrelevant on the outcome. Yet in 1918, the hard won lessons were finally being applied by both sides to their operations. These rules fall into two main areas: development and operations. Let us take a moment to review them.

**Fighter Development**

Sophistication should not be sacrificed to numbers. It is difficult to argue against the fact that sophisticated aircraft constantly outperformed or contributed more than unsophisticated ones. These had longer service lives (the fourth generation Sopwith, for example, remained in service until well into the 1930s). And they could do more (again, the Sopwith). The mix of types, for instance, made it possible for adversary combat planes to suffer losses, but that certainly made more work for the pilots and resulted in a reluctance to exploit their "edge of performance".

Designers must understand the operational needs of the military. By 1918, both Germany and Great Britain (and even the French and Americans) understood what the desirable attributes of a fighter plane should be. But implementation of this knowledge was often tardy (a perfect example is the British planes; a more serious example is the armament of the Sopwith Pup in 1917). Questions on speed versus agility, pilot environment, vision requirements, armament, and others first were seriously considered in the final years of the war. By war's end, for example, the Sopwith Snipe offered its pilots excellent visibility from a raised cockpit, and had provisions for an electrically heated flying suit and oxygen. In 1918, the Fokker D.VII and Junkers D.I control sticks combined not only the plane's two gun triggers, but its throttle as well—giving the pilot his flight, engine and armament controls all in one stick. At last, aircraft designers were designing planes with the sole purpose of war in mind.

**Fighter Operations**

Flies when fit. Again, this is a truism in today's jet age. But no conflict in this century better illustrates the wastage of skilled airmen who were unfit and untrained for the role of the First World War. On the day that von Richthofen died, neither he nor Brown should have been flying (Richthofen had not fully recovered from the head wound he had suffered months previously, and Brown was suffering from severe stomach ulcers). The unexpected psychological strain of constant combat flying caused numerous needless losses. There was no magic number of missions flown to release one from combat (as in later years). Being shot down usually meant, at best, being wounded; at worse, going down in flames without a parachute. Added to the mental strain was the physical strain: flying unheated open-cockpit planes at 12000 feet without benefit of oxygen (hypoxia, frostbite and hypothermia were endemic). Only in the last months of the fighting were guidelines being drafted to address these problems.

You can only make one error. Voss's death perfectly illustrates the mercenary nature of the air war. Complacency, overconfidence, and forgetfulness spell defeat. It is truly amazing how many skilled aces perished before the end of the war because of elementary mistakes. Many of these errors stemmed, of course, from the strains of flying alluded to above. Other errors are equally understandable, if unmistakably foolish. Many pilots developed target fixation, concentrating on shooting down the plane in front of them to the exclusion of all else—and in turn being shot down. For the ground attack planes, the type of medicine mistaken threatened. Multiple passes at the same target, then as now, were a virtual guarantee of being shot down.

Avoid the "furball." It proved equally difficult in 1918 as in 1978 to keep track of multiple threats. Dogfights evolved from solitary engagements between two planes in 1915 to battles between several dozen (sometimes as many as 80 to 100 aircraft) in 1918. The most successful aces, and the ones who survived the longest, were the ones who did not stay around and "mix it up"; they dove in and got a kill, flying through to swing round, while constantly checking for threats. It is commonly held that in 60% of all kills in all air wars to date, the victims were unaware of any threat until they were shot down. In a dogfight, keeping track of two enemy planes—let alone five or ten—is almost impossible. And, then as now, the most common error was forgetting to "check six". For those who believe themselves beyond ever making this elemental mistake, remember that even the Baron himself did, and he paid for it with his life. If you have an enemy plane in front, assume that there is one behind; there usually is.

No guts, no glory. Except on the other hand, it is impossible to claim a victory if you do not "mix it up" with the enemy. Excessive caution does nothing more than make of your craft a target to the foe and a liability to friends. Except at extreme ranges, always turn into the attack when surprised. A few maxims when facing trouble: Don't ever reverse a turn unless you have your attacker sliding to the outside of the radius of your turn. When in trouble in a dogfight, try to fly straight and level. Know the performance of all aircraft you are apt to be fighting—and be intimate with the abilities of your own. Have a "last ditch" maneuver to get you out of the enemy's path, and practice it until you are comfortable. With these, and other maxims the pilots of the First World War perfected, you are ready to fly in the skies of KNIGHTS OF THE AIR. Remember that guts will do for skill, but not consistently.

**Beyond the End**

Given that the war had continued unabated, we can hypothesize about the course of it in the air. After all, the "groundwork" in design and strategy/tactics had already been laid. The best of the aircraft of 1918 would have seen extended service (after all, it took a quantum leap in fuselage design and manufacture for the next generation of fighters to be developed); those shown here would have been the main participants for the next year or so. Of course, some of the new models destined for the front were not represented in the game—the Nieuport 29, the Morane S-4C, the Pfalz D.XII, the J.1—but they would have been merely uppowered examples of current design philosophies. Inevitably, there would have been quite a few older models still fighting as well, especially in the German estab-
lishment, where everything was thrown into the air as the Allies advanced into Belgium.

Typical missions, as the concepts of gaining "air superiority" and providing "ground support" took firm hold in the minds of higher command, would range from bombing to airfield attack. Of course, patrols would still be flown. And air reconnaissance, then as now, would be a vital mission. But many attacks on transportation and communication targets behind the front would take place. And strafing/bombing of enemy troops would no longer be the exception and become commonplace. Most of these might involve 30 to 40 aircraft, yet occasional small (two plane?) raids would seek to slip in past the enemy patrols. Dogfights would grow in scope until they came to resemble those over England and Germany in a later war. And all would be much more coordinated and carefully planned by commanders behind the front. Already Great Britain had unified its various air commands into a centralized military organization-the Royal Air Force. Likely the other participants on the Western Front would have followed suit after its efficiency had been proved.

The following scenarios are indicative of these operations. All are patterned on the presentation of scenarios in the KNIGHTS OF THE AIR rulebook, and all rules for play and victory resolution are in force. While the best game on the market in depicting the actual performance of these planes, its resultant complexity makes larger operations than these difficult to recreate. For those who may be wishing to involve more players (extra copies of KOTA will be necessary), I might recommend adding opposing planes to Scenarios 11, 14 and 15 in equal numbers. I have found that even the most experienced player cannot operate more than three planes at one time.

So, if like me you enjoy the state-of-the-art when taking on a role in a wargame—capturing the Bismarck, commanding the Imperial Guard, running a PzKw VI, or flying a F-14—these scenarios let you indulge yourself. See what it was like to fly the best available in 1918, and best of luck with this most fascinating recreation of those days of glory.

11. The Railroad Raid

The Allied command had found that ground support meant more than merely strafing trenches and harmless road columns. The airmen had proved in mid-1918 that with daring and the proper aircraft they could interdict troop and supply movements far to the rear from the front. The "Brisfit" was the perfect multi-purpose craft for these missions. In early December, in a last effort to halt the flow of German reinforcements, a four-day operation was laid on to destroy the rail net behind the front lines. Here, three British Brisfits are intercepted on their way to strike a railyard.

a. Use the victory point awards listed under Victory Resolution (page 15 of the rulebook). Further, the Allied side receives, in addition, 10 victory points for each Brisfit exited off the north edge of the mapboard.

b. The scenario ends when all aircraft of either side have exited the mapboard or been removed from play.

c. Lineup

1. Allied Side:
   Bristol Fighter—starting hex 0936, nose pointing north, altitude 10605 ft., ace pilot, experienced observer
   Bristol Fighter—starting hex 1137, nose pointing north, altitude 10605 ft., experienced pilot, experienced observer
   Bristol Fighter—starting hex 0936, nose pointing north, altitude 10605 ft., experienced pilot, novice observer

2. German Side:
   Fokker D.VIII—starting hex 2310, nose pointing south, altitude 11076 ft., ace pilot
   Fokker D.VII—starting hex 0404, nose pointing southeast, altitude 8889 ft., ace pilot
   Fokker D.VII—starting hex 0205, nose pointing southeast, altitude 8889 ft., experienced pilot

12. The Last of the Lone Wolves

The days of the "lone wolves" had been eclipsed by the mass formations and tactics of the new breed of air aces and commanders. Only a few of those who fought for glory remained, looked upon by their fellows as curious anachronisms. It is not surprising that none of these "knights of the air" would survive the end of the war. Indeed, the bitter fighting of the spring of 1919 saw the last of them fall from the skies, even though they were often given the best of the new models, battling overwhelming odds. In this scenario, one of the last great German aces, Goring, tangles with a pair of patrolling American airmen during his final flight.

a. Use the victory point awards listed under Victory Resolution (page 15 of the rulebook). To insure that some action occurs, the German player receives 1 victory point if his plane passes through hex 2336.

Sopwith 7F.1 Snipe

The Snipe, intended as a replacement for the aging Camel, became operational only in September 1918. Electrical heating and oxygen equipment were standard, and this design was intended to replace all Camels in home-defence squadrons and RFC duties if the war had continued.

- Wingspan: 30 ft.
- Length: 19 ft., 2 inches
- Height: 9 ft., 6 inches
- Weight (loaded): 2015 lbs.
- Crew: One
- Armament: twin fixed, forward-firing Brownings
- Speed: 119 mph.
- Engine: 200 hp Bentley B.2 R.2 rotary
- Game Value: 18 pts.

Siemens-Schuckert D.IV

This tough, maneuverable bird with a very high power-to-weight ratio had a truly incredible rate of climb. But the D.IV arrived too late at the front and in too few numbers to restore Germany's declining fortunes in the air.

- Wingspan: 27 ft., 3 inches
- Length: 18 ft., 8.5 inches
- Height: 9 ft., 2.25 inches
- Weight (loaded): 1620 lbs.
- Crew: One
- Armament: twin fixed, forward-firing Spandau MGs
- Maximum Speed: 119 mph.
- Engine: 200 hp Siemens-Schuckert 8h 11a rotary
- Game Value: 18 pts.

Fokker D.VII

A prototype was the design competition for single-seat fighter in January 1918 and reached the front only four months later. Advanced features included a thick-section cantilever wing, fuselage of welded steel tubing, and automobile radiator. These combined to give the D VII excellent high-altitude maneuverability and strong resistance to damage combined with a docile handling quality.

- Wingspan: 29 ft., 3.5 inches
- Length: 22 ft., 11.5 inches
- Height: 9 ft., 2.25 inches
- Weight (loaded): 2112 lbs.
- Crew: One
- Armament: twin fixed, forward-firing Spandau MGs
- Maximum Speed: 125 mph.
- Engine: 185 hp BMW 11a inline
- Game Value: 17 pts.

Bristol F.2B

The two-seater "Brisfit" was fitted with a Rolls-Royce Falcon, conferring a performance superior to that of many single-seat contemporaries. It had been designed as a conventional fighter with the addition of a sting in the tail. Judged the best general-purpose aircraft of the First World War, the type remained in RAF service until 1932.

- Wingspan: 39 ft., 3 inches
- Length: 25 ft., 10 inches
- Height: 9 ft., 9 inches
- Weight (loaded): 2848 lbs.
- Crew: Two
- Armament: one fixed, forward-firing Vickers MGs and one or two Lewis free-firing MGs plus up to 12 25-lb bombs
- Maximum Speed: 123 mph.
- Engine: 200 hp Hispano-Suiza 12 inline
- Game Value: 18 pts.

Spad S.13

By 1918, the Spad 13 was the standard French fighter, having succeeded the smaller and less powerful S.7. It was strong and fast, although less maneuverable at heights than its German contemporaries. It was to be built in large numbers under American license had the war continued for the flighting U.S. Air Corps.

- Wingspan: 26 ft., 5 inches
- Length: 22 ft., 11 inches
- Height: 9 ft., 10 inches
- Weight (loaded): 2665 lbs.
- Crew: One
- Armament: twin fixed, forward-firing Vickers MGs
- Maximum Speed: 130 mph.
- Engine: 200 hp Hispano-Suiza inline
- Game Value: 18 pts.
**Nieuport 28**

The Type 28 reverted to a conventional arrangement of interplane struts, following the early designs'/V-struts. It was used to equip the AEF's first fighter squadrons. The French themselves used few in their front-line squadrons. Wingspan: 26 ft., 9 inches
Length: 21 ft.
Height: 8 ft., 1.75 inches
Weight (loaded): 1342 lbs.
Crew: One
Armament: twin fixed, forward-firing Vickers MGs
Maximum Speed: 128 mph.
Engine: 160-hp Gnome Monosoupape rotary
Game Value: 17 pts.

**Fokker D.VIII**

A prototype emerged victorious from the second German fighter trials in April 1918. The high cantilever wing gave excellent downward visibility and overall performance was sufficiently impressive for the type to be ordered into production immediately. By the time it reached the front lines, however, the war was almost over.

Wingspan: 27 ft., 3 inches
Length: 19 ft., 5 inches
Height: 9 ft., 4 inches
Weight (loaded): 1331 lbs.
Crew: One
Armament: twin fixed, forward-firing Spandau MGs
Maximum Speed: 125 mph.
Engine: 110-hp Le Rhone rotary
Game Value: 18 pts.

**Sopwith F.1 Camel**

The Camel was the first British fighter fitted with twin synchronized Vickers MGs, and the hump enclosing the breeches gave the plane its popular name. The plane demanded careful handling, but it was a formidable weapon and accounted for more kills than any other type in the First World War.

Wingspan: 28 ft.
Length: 18 ft., 9 inches
Height: 8 ft., 6 inches
Weight (loaded): 1482 lbs.
Crew: One
Armament: twin fixed, forward-firing Vickers MGs and four 25-lb bombs
Maximum Speed: 104 mph.
Engine: 130-hp Clerget rotary
Game Value: 17 pts.

**Fokker DR.I Triplane**

The success of the Sopwith triplane led to rash of German imitations. In the hands of skilled pilots such as von Richthofen, the DR.I was initially very successful, but two fatal accidents resulting from structural failure led to a loss of confidence in the plane.

Wingspan: 23 ft., 7 inches
Length: 18 ft., 11.2 inches
Weight (loaded): 1250 lbs.
Crew: One
Armament: twin fixed, forward-firing Spandau MGs
Maximum Speed: 97 mph.
Engine: 110-hp Le Rhone rotary
Game Value: 17 pts.

b. The scenario ends when all aircraft of either side have exited the mapboard or been removed from play.

c. **Lineup**

1. **Allied Side:**
   - Spad 13—starting hex 2229, nose pointing north, altitude 9530 ft., experienced pilot
   - Spad 13—starting hex 0937, nose pointing northeast, altitude 10133 ft., novice pilot

2. **German Side:**
   - Siemans-Suchert D.IV—starting hex 1610, nose pointing south, altitude 10000 ft., ace pilot

13. **Artillery Spotting**

As artillery became ever more an important factor of the war, as both sides tried by brute force to blow a hole in the enemy lines during 1919, many artillery spotting missions were laid on. Indeed, during the autumn of 1919, the greatest artillery concentration in history was undertaken by the British Fifth Army in an attempt to end the stalemate in Belgium. As so often, here one of ubiquitous Brisfits, escorted by an aging Camel, meet with resistance over the front near Mons. Of course, the German air corps by this time had been driven to such extremes as to put up even outdated aircraft by novice pilots.

a. Use the victory point awards listed under Victory Resolution (page 15 of the rulebook). The Allied side, in addition, receives 2 victory points each turn the Brisfits pass through either hex 1805 or hex 0615.

b. The scenario ends when all aircraft of either side have exited the mapboard or been removed from play.

c. **Lineup**

1. **Allied Side:**
   - Bristol Fighter—starting hex 1925, nose pointing north, altitude 15643 ft., experienced pilot, ace observer
   - Sopwith Camel—starting hex 2128, nose pointing north, altitude 15152 ft., experienced pilot

2. **German Side:**
   - Fokker Dr.I—starting hex 2307, nose pointing south, altitude 13964 ft., experienced pilot
   - Fokker Dr.I—starting hex 2305, nose pointing south, altitude 13964 ft., novice pilot
   - Fokker D.VII—starting hex 0213, nose pointing southeast, altitude 21114 ft., experienced pilot

14. **Bombing Mission**

In the wake of the American offensives of the summer, the German command launched virtually every two-seater available to interdict the transport lines. Their successes helped prolong the war. Nowhere was their operation more dramatic than against the bases and supply dumps of the AEF. Flying round-the-clock raids, the Germans, with the heavy two-seaters of the Schlachtstaffeln, also scored impressive victories in the air against the Americans. Flying a Halberstadt CL.II, Vizefeldwebel Friedrich Hufzky and Gottfried Eisenmenger of Schlasta 15 shot down nine enemy aircraft in July and August; while Georg Grund and Karl Regen claimed four in one mission on 6 August! This scenario depicts one of Hufzky and Eisenmeyer's many brushes with the Americans.

a. Use the victory point awards listed under Victory Resolution (page 15 of the rulebook). In addition, the German side receives 7 victory points for each Halberstadt that passes through hex 2736 at an altitude 10000 feet or lower.

b. The scenario ends when all aircraft of either side have exited the mapboard or been removed from play.

c. **Lineup**

1. **Allied Side:**
   - Nieuport 28—starting hex 0434, nose pointing northeast, altitude 8700 ft., experienced pilot
   - Nieuport 28—starting hex 0535, nose pointing northeast, altitude 8700 ft., experienced pilot

2. **German Side:**
   - Halberstadt CL.II—starting hex 0909, nose pointing south, altitude 12586 ft., ace pilot, ace observer
   - Halberstadt CL.II—starting hex 0909, nose pointing south, altitude 12586 ft., experienced pilot, novice observer

Continued on Page 22, Column 2
For more than two decades, wargamers have been making the journey back a century and a half to that fateful week in June of 1815. In one hundred days leading up to that week, Napoleon Bonaparte had electrified the civilized world. Returning from presumed oblivion, he resurrected his Empire in one short springtime. By summer, he actually was on the offensive again with an army of more than a hundred thousand veteran soldiers.

Time after time, we have joined the combatants for the climactic last three days of this amazing bid for an imperial comeback by playing Avalon Hill's WATERLOO. Three of these early releases which today are labelled “classics.” To me, this label means that the game treats a supremely famous moment in history, when the fates of nations hung by a thread on a single battlefield. Such moments possess an intrinsic fascination. No game becomes a “classic” without such a focus. But a game like WATERLOO is more than a focus on a critical moment in military history. To this are joined the other hallmarks of the “classics” simplicity of rules, clarity of basic strategies, and victory conditions designed to force players into immediate, head-on conflict. These basic concepts laid the foundations for a whole generation of simple, fast-moving and well-balanced games.

However, there is another meaning which also goes along with the “classic” label. The classics often distorted the events they tried to capture in the interests of one or more of their hallmark features. Some games had more such problems than others. In WATERLOO there are all several addiddles. People have complained over the years about inaccurate starting positions, inconsistent representations of different units’ combat strengths, awkward categories of combat results, roads and towns missing from the mapboard, forests in the wrong places, hills of the wrong shape and size, and a whole host of others.

Still, the single most important ingredient of all the Avalon Hill classics is the excellent choice of focus, the “supremely famous moments” on which they center. It is the selection of a topic which makes “classics” such as WATERLOO. The actual historical events traced the French offensive in terms of what may have been a “Y-shaped” advance. On the 16th, the forces at hand to begin a gradual withdrawal there. The British division led by General Alten and the troops of the slain Duke of Brunswick acted as rearguard, the last forces to withdraw northward along the high road.

It was at about this time that Napoleon was telling Marshal Grouchy to take 3000 men out of the Grande Armee and set off on his wild goose chase along a mistaken course in pursuit of the Prussians. Finally, about noon, Wellington saw the sun glittering on a massed formation of advancing French. This heavy cavalry soon engaged British cavalry. The pursuit was on. More French units could be discerned advancing from the east as well as from the south, but the main body of Wellington’s infantry already was across the Genappe and still moving north. A screen of cavalry commanded by the Earl of Uxbridge protected the rear.

This covering action has gone down in history as a model for withdrawal in the face of an enemy. The cavalry regiments leap-frogged past each other in short steps, pausing to confound the French advance whenever an opportunity presented itself. Owing to the heavy rains which drenched the area beginning in the early afternoon, the main bodies of the two armies were limited to marching north along the turnpike heading for Brussels.

Midway through the afternoon, the French cavalry in the vanguard of the pursuit had chased the last Anglo-Allied forces across the Genappe and had occupied the town itself. There they were stymied in their advance by a thundering charge of Somerset’s heavy Guards cavalry; so the French advance north of the river proceeded even more cautiously.

By nightfall, most of Wellington’s available forces had converged on the low ridge in front of Mont Saint Jean, and the Duke went to sleep at Waterloo. The head of the French columns came up to the positions that evening. More and more French regiments arrived on the scene as night fell, but some bivouacked as far away as Genappe. Napoleon spent the night in a farmhouse at Caillou, north of Genappe toward the battlefield. The soldiers in the ranks on both sides bedded down as best they could in the mud and pouring rain, knowing that the next day would bring a battle of immense proportions.

Since the battle of Waterloo itself (which took place the next day) is recreated in detail in a later section of this article, this brief narrative may cut off with nightfall on the 17th. Actual play of this scenario will probably not follow the historical events. Several major reasons for this can be spotted easily. As Napoleon, you are not likely to daily for an instant in attacking half the forces of Wellington with two-thirds of your own army. As the day
wears on the British only get stronger, while the French get no reinforcements. As Wellington, you will not be confined by a downpour of rain to slog north along the one decent road. You will be able to fan out your army and defend forward river lines such as the Genappe, which was out of the question given the actual weather on that day.

Indeed both players will see for themselves just how crucial weather could be in battles of this era. The contrast between the free-wheeling maneuvers you execute on the game board and the dull plodding on the Brussels high road which actually took place will be very great.

In Napoleon and the Iron Duke then, the most likely evolution of play might be an early thrust forward by the French, seizing the Quatre Bras crossroads from a smaller British force. Next might come a swing to the west, flanking the Genappe River to force the British army out of its fortress-like position centered on Genappe. This presents the French player with something of a dilemma. In swinging around this nasty terrain, one advances straight into British reinforcements, thereby coming against them earlier in the day. Two steps forward; one step back. You will have to weigh the tactical advantages yourself.

If play is successfully maneuvered into the great open expanse between Nivelles and the north board edge, the French player will have a better chance of pushing back the British army and winning the game. To win this scenario, the French player must exit five infantry divisions and one artillery battalion off the board through either the Brussels road or the town of Hal. Brussels was not the only possible French target, as anyone who has played Napoleon is acutely aware. The Grande Armee could also strike for Antwerp. A successful march through Hal would be the first step in that direction. To win, Wellington must hold both Hal and Mont Saint Jean at the end of the game, and must outnumber the French in combat factors on the board. If neither player meets their victory conditions, the game is a draw. (If the French meet their victory conditions, the British conditions are disregarded.) The scenarios ends with darkness on June 18th.

Like the two earlier articles, this third scenario offers a fresh approach to one major segment of Napoleon's final campaign. As noted, gamers probably will not recreate the actual events of June 17th and 18th. As a peace offering to the historical simulation fanatics out there, three short encounters or “mini-scenarios” are presented here also. The first of these recreates the battles of Quatre Bras and Ligny, fought simultaneously on June 16th; either “half” of this mini-scenario also might be fought separately for a yet more compact game. The second mini-scenario allows players to re-live Wellington's famous withdrawal, screened by his cavalry, from Quatre Bras to Mont Saint Jean on June 17th. The third and most dramatic mini-scenario is a recreation of the set-piece battle of Waterloo. For a fan of the Napoleonic era who hasn't got all day to play a game, these short re-enactments offer a challenging, enlightening glimpse of military history as it was made.

**Driving the Prussians Back**

In some respects, this first mini-scenario overlaps my previous article, “East of Waterloo”. However, the mini-scenario exclusively on the battles of June 16th and is meant to conclude at the end of that day. As a result of playing this scenario, the Prussian army and the main body of the French will likely be in slightly different positions than those specified in “East of Waterloo”. However, if players are running all the mini-scenarios together in a Campaign Game, you may wish to use the positions of the forces at the end of this mini-scenario of June 16th for the starting positions for “East of Waterloo” instead of those published in my original article. If so, be sure to remove all units except those specified in that order of battle. The scenario may then be played normally, without any changes in victory conditions. (Note that the optional rules and unit designations changes in that article have been superseded here.)

In the same way, ending positions in “Driving the Prussians Back” can be used as a starting point for “Wellington Withdraws”, the second mini-scenario presented below, or for “Napoleon and the Iron Duke” above. In the latter case, however, the 1 Corps will need to be added to the board within two hexes of Gosselies at the same time as the French units from "East of Waterloo" are removed from play. Again, play "Napoleon and the Iron Duke" as described except for these altered positions.

Ney's left wing of the French army was assigned to drive forward along the Brussels road on the 16th, taking the crossroads at Quatre Bras and cutting lines of communication between Blucher and Wellington. At his disposal were Kellermann's III Corps of reserve cavalry and Reille's crack corps of veterans. D'Erlon's corps, suffering from unacquainted officers and other problems, had gotten hopelessly delayed and took no part in the actions of the June 16. Girard's division had been detached from Reille and saw no action at Quatre Bras. The Anglo-Allied forces begin with a motley crew of Dutch and Belgian units, including Chasse's troops whose basic tactic was to run away at the first sight of French regulars. By the time the battle got underway in the afternoon, however, British regulars including Cooke's guards were on the scene and made it a very tough day for Ney.

Further to the east, Napoleon also launched an afternoon battle against Blucher, who had been forced to form up and give battle or be pushed further and further away from his Anglo-Allied allies. This was the scene of the main action of that day, in which Napoleon had to apply a heavy dash of Imperial Guards in the late evening to finally drive the Prussians back from their positions around Ligny.

For starting positions in this scenario, Wellington should be placed in W31 along with Alten, Williamson and Wissel. Chasse, Lux and Krahmer are placed in X27, and should be routed at the beginning of the game. (A rally attempt must be made to keep them in the game at the start of the first PAA turn.) Cooke, Sandham and Williamson

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**Orders of Battle and Appearance for NAPOLEON & THE IRON DUKE**

**SITUATION—7 am on June 17, 1815**

This chart lists all the units that are in play at the start of the scenario, and all the Anglo-Allied units that enter as reinforcements. Players must place these units as indicated.

### French Army

<table>
<thead>
<tr>
<th>At Start:</th>
<th>Notation</th>
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<tbody>
<tr>
<td>Reille, Jerome, Roussel, II Artillery</td>
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<td>Kellermann HQ, Foy, L'Hertier, II Horse Artillery</td>
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<td>Ney HQ, Bachelu, Fere</td>
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<td>Girard</td>
<td>GG19</td>
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<tr>
<td>D'Erlon HQ, Aizy, I Artillery</td>
<td>FF22</td>
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<td>Donzelot</td>
<td>GG21</td>
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<tr>
<td>Napoleon</td>
<td>HH21</td>
</tr>
<tr>
<td>Durette</td>
<td>EE21</td>
</tr>
<tr>
<td>Jacquinot, I Horse Artillery</td>
<td>EE21</td>
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<tr>
<td>Duhesme, I Guard Horse Artillery</td>
<td>GG17</td>
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<tr>
<td>Morand, Desouquettes, III Cav Artillery</td>
<td>EE15</td>
</tr>
<tr>
<td>Mortier HQ, Napoleon HQ, Frient, I Guard Artillery, Guyot</td>
<td>EE14</td>
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<tr>
<td>Lobau HQ, Simon, VI Artillery</td>
<td>GG13</td>
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<tr>
<td>Jeanin, VI Horse Artillery</td>
<td>HH13</td>
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<tr>
<td>Mihaud HQ, Wathier, IV Cav Artillery</td>
<td>DD13</td>
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<tr>
<td>Delort</td>
<td>DD12</td>
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### Anglo-Allied Army

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<td>Cooke, Sandham, Kulhman</td>
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<td>Orange HQ, Picton, Heise</td>
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<tr>
<td>Allen, Williamson</td>
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<td>Brunswick, Moll, Heinemann, Brunswick Cav</td>
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<td>Perponcher, Opstal, Gey, Trip, Ghigny</td>
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<tr>
<td>Chasse, Lux, Krahmer, Merlen</td>
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<td>Wellington HQ, Uxbridge HQ, CavBatts, Somerset, Ponsonby</td>
<td>Quatre Bras</td>
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<tr>
<td>Vivian, Vandaleur</td>
<td>X25</td>
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<tr>
<td>Grant, Dornberg</td>
<td>X29</td>
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<td>Estorff, Arenschild</td>
<td>V28</td>
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<td>Wissel</td>
<td>S11</td>
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<tr>
<td>Clinton, Balton, Sympher</td>
<td>Nivelles</td>
</tr>
</tbody>
</table>

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1 pm, June 17:
- Hill HQ, Anthing, Steedman, 1st DB Artillery | C57 |
- Cooke, Bruckmann | U48 |

5 pm, June 17:
- Colville, Hawker | C57 |
- Bennigsen, Beaulieu, Bodecken | A45 |
are at Z28. Perponcher, Opstal, Gey, Trip and Ghigny stand at A27; and the Duke of Brunswick holds A26 with Moll. Heinemann and the Brunswick cavalry. Finally, Picton and Heise are in A25. All these units should be facing south at the start of play.

The Prussians' nearest units were Marwitz in DD20 and Thumen in EE19. Then follow Langen in DD18, Brossa in CC18, and Tipplerskirchen, II horse artillery and Sohr in FF17. Pirch HQ, Krait, II artillery and Schellenburg are in FF16. This marked the edge of the II Prussian Corps. Immediately on their left, the I Corps begins with Buccher's HH3, Zeitner's HQ, Jagow, I artillery and Treskows cavalry in FF15. Henkel and Lutzow stand in EE15. Pirch II and the I horse artillery are in EE14.

Steinmetz alone holds DD16. Finally the III Prussian Corps begins with Stulpnagel in DD13, then Thieleman's HH with Borcke and III artillery in DD12. Put Luck, the III horse artillery and Lottum in FF10. Poor Kämpfen was left with the unequal task of anchoring the eastern flank of the Prussian army all by himself. All the Prussian units are facing south at the start of play (except Marwitz, Thumen and Luck who are facing southwest).

Ney's left wing begins in CC20 between the Ney HQ, Jerome, II artillery and Pire's cavalry. Reille's HQ is on the march along with Foy, II reserve horse artillery and Roussel in CC25; followed by Kellermann's HQ, Bache and L'Heritier in CC24. The II corps horse artillery is in EE21, and Girard (detached) in GG18. Girard and the horse artillery should be facing northeast, and the rest of Ney's forces facing north.

The Imperial Guard begins with Duhamel and the Guard horse artillery in JJ16. Then the III Corps intervenes: Berthelot and the III Corps artillery in HH15; Vandamme's HQ, Habert, the III horse artillery and the reserve horse artillery in HH14. The placement of the IV Corps puts Vichery and the IV horse artillery in HH13 and Holot in HH12. Then comes Gerard's HQ, Pechoux, the IV artillery and Morin in GG13. Next in line stood Lobou's HQ, Simmer and the VI artillery in JJ12; Jeanine and the VI horse artillery in JJ11; Teste in JJ10. At last we encounter the rest of the Imperial Guard, with the Mortier HQ, Friant's Old Guard, the Guard cavalry of Guyot, and the Guard artillery in GG11. Put Desoumets's cavalry in GG11, and Napoleon himself in HH11 with Morand's middle guard.

Out on the eastern flank of the French army, Str吊lz forced an assembly of two squadrons of horse and cavalry of the 18th, which had been formed at the mouth of the Genappe River. On top of the Prussian corps in HH12 stood the French corps of L Blakeney, which had been detached from the IV Corps and was facing south. It was the strongest unit in the Prussian line, and it held the French in check.

The night of June 17/18 was miserable. For a few minutes, the sky was overcast with great masses of drifting cloud. These two vast assemblages of men began to form up and prepare for their final showdown.

The lines of the two armies were only about a thousand yards apart, within cannon-shot of one another. Getting everything into position over the soft and mire ground took the French the better part of the morning. As Napoleon's inspection of the whole line—drawn up and ready for battle. Here we are at last. Probably in all the times anyone has played the game, the historic battle of Waterloo has hardly ever occurred. Under the old rules, this was because the appalling slaughter which inevitably happened at the natural "Magnet Line" of forests, fields and ditches killed off most of the divisions in all three armies. Together with my new rules, this mini-scenario allows you to choose your side and slug it out, face-to-face, just as the most famous generals of their nationalities did.

The French army was drawn up in three main lines, one behind another. The first two have been stacked together in this setup, since they were so close they would have been in the same hexes. It is very enlightening to observe that the resulting stacks of units correspond not only with the actual arrangements Napoleon's army faced but actually perfectly with the new, revised rules on stacking.

The left wing of the French army begins with Jerome, Pire and II horse artillery at L41. Then follows Foy, Roussel, III cavalry and Reille's II Corps headquarters in L40; and Bachelu, L'Hertier and Delort in L39. Next come Advoy, Tarte's division from the VI Corps was with Donzelot, Delort, I artillery and Eron's HQ in L38; Aix, Wathier and IV cavalry in L37; Margocet and I horse artillery in L36; and Durette and Jaquotin in L35. Behind this imposing line-up, the French reserve includes Friant, Guyot, I Guard artillery and the Guard cavalry in H33, Morand, Desoumets and I Guard horse artillery in N37; Duhamel in N38; Napoleon himself in M37; Simmer, VI artillery and the VI Corps HQ in N36; and Jeanin and the VI horse artillery in O35. Note that Gerard's division of the II Corps was left behind to recover from being mauled at Quatre Bras, and Tarte's division from the VI Corps was with Grouchy in his ill-starred pursuit of the Prussians.

Opposing this Imperial steamroller is an equally bristling-looking line of Anglo-Allemand units. In the front line we find Perponcher, Opstal, Gey, Vivian and Vandaleur in J37; Cole, Bruckmann, Ponsomy and Pire in J38; Tannin and Foy in J39; Alten, Williamson, Grant and Donrberg in J40; Cooke's guards, Sandham, Kuhlman and Arnschidt in J41; and Chasse, Lux, Krahmer, Trip and Merlon in J42. Behind them, the Prince of Orange's HQ is in H40. Wellington, Uxbridge, Wissel, Kruse, the Cavalry Batt and Eonfort are in H40. Brunswick, Moll, Heinemann and Brunswick Cavalry are in H42; Clinton, Balton and Sympor are in J42. In addition, Theding, Stedmann and the 1st Dutch-Belgian artillery are waiting in the wings at H50 in case the French try to go round that flank. Once these units are in place, it only remains for you to set them in motion and watch the clouds of smoke obscure that part of the mapboard. In the actual battle, the left wing of the French rolled forward and got bogged down. The right wing followed up with a second attack as the afternoon progressed, and also fought to a standstill. With the whole battle thus onus engorged, Napoleon was prepared to send the Imperial Guard straight up the middle and crack the whole British position wide open. This play usually worked.

But then the Prussians began showing up off to the right, forcing the French reserves to block them. The Guards, already of the morning, fought down the road and striking the center of the Anglo-Allied line, veered off on a diagonal towards the left (all sorts of reasons for this have been suggested). Their march across to the enemy thus took far longer than it should have, and also allowed British artillery partial
COMBAT RESULTS TABLE

Roll two dice. Apply all appropriate combat modifiers. Cross-referencing the combat value odds (shown attacker/defender) with the modified die roll, find the result of the combat, shown as Attacker/Defender (A/D). Apply these results to each participant in the combat.

<table>
<thead>
<tr>
<th>ODDS</th>
<th>DICE ROLL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-6</td>
<td>B/C</td>
</tr>
<tr>
<td>1-5</td>
<td>B/C</td>
</tr>
<tr>
<td>1-4</td>
<td>B/C</td>
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<tr>
<td>1-3</td>
<td>B/C</td>
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<tr>
<td>1-2</td>
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<tr>
<td>1-1</td>
<td>R</td>
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<tr>
<td>2-3</td>
<td>R</td>
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<tr>
<td>2-2</td>
<td>W</td>
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<tr>
<td>2-1</td>
<td>W</td>
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<td>3-3</td>
<td>W/S</td>
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<td>3-2</td>
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<td>3-1</td>
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<td>4-4</td>
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<td>4-3</td>
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<td>5-5</td>
<td>W/S/S</td>
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<td>5-4</td>
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<td>W/S/S</td>
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<td>7-7</td>
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<td>8-8</td>
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<td>8-7</td>
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<td>8-2</td>
<td>W/S/S/S/S</td>
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<tr>
<td>8-1</td>
<td>W/S/S/S/S</td>
</tr>
</tbody>
</table>

Results:
C = Contact (No Effect)
S = Shaken (Check Morale)
W = Withdraw (one hex)
R = Retreat (Withdraw two hexes and Check Morale)
B = Break (Withdraw two hexes and Full Morale)

Note: Results of modification to the die roll may never result in a die roll greater than "12" or less than "2". Odd die rolls are taken automatically in a "B" for the attacker. Odd die rolls greater than 8-1 result produce overrun elimination of the defender during movement. Pay one extra movement point from each unit attacking and simply remove the defenders; movement may be continued.

1. Unit Counters

Unit types are more completely identified in this version of the rules. The basic distinctions between infantry, cavalry, headquarters, horse and foot artillery are preserved unchanged. In addition, units are now classed as Guards, Regular Line and Landwehr (militia). The "Landwehr" designation will be used in these rules rather than "militia" since the majority of those units are found in the Prussian army.

French Guards include all units in the Imperial Guards Corps (only infantry and cavalry units count as "Guards") for jockeying combat, but all units designated as "Guards" for morale checks. The French have no militia units; all others are considered Regular Line. The British Guards include Cooke (infantry), Sandham (artillery) and Somers (cavalry). The only Landwehr in Wellington's army are the three Hanoverian brigades: Bennigsen, Bodecker and Estorff. On the other hand, the Prussian army has no Guard units. The Prussian Landwehr units number Luck and Stulpnagel (infantry), and Lutzow, Lottum, Sohr, Schwerin and Watzdorf (cavalry). Militia regiments also were mixed in with regiments in several British divisions, to "fortify" the militia and place them under close control of regular commanders. Instead of labeling the whole division as Landwehr in such cases, basic morale was lowered one point in these. As in War & Peace, all the different unit types are treated differently in both combat and morale situations.

These changes restore a key aspect of the real campaign to the game, and also resolve the often-cited problem of "under-valued" combat factors for the Guards. Now a combat point simply represents about a thousand men or a battery of cannon. Unit type differences now appear as modifiers to the dice roll in combat resolution and morale checks, instead of in the combat factor on a particular factor. Guards units cited should be indentified with a small "G" placed on the counter; Landwehr should be marked with an "L". This facilitates identification greatly.

2. Stacking

Under the old rules, you always knew what you were going to find in a stack. Fifteen strength points! Unit types made no difference. The number of commands required to operate together in a confined space made no difference. A dozen infantry divisions, totalling perhaps sixty thousand men, often could be found brawling over the Quatre Bras heights or some other battlefield on a front of barely three or four hexes, with no apparent crowding or indistinction.

This is absurd. In fact, Reille's II Corps had only three of its four divisions engaged there on the 16th, with some support from artillery and Kellerman's cavalry; they stretched across this whole front and filled the very air with violence the whole way. These new rules (based on stacking unit types rather than combat factors) do much to take advantage of all the information Avalon Hill has provided on the counters and to increase the realism in the way forces are combined, deployed and used. Based on those "X"s and "1"s above the unit type designation, my rules essentially limit players to having two infantry Xs, two cavalry Xs and two artillery Is per hex. The largest possible Anglo-Allied stack would total 17 factors (e.g., Picton, Esterof, Ponsoby and the Cav Batteries). The largest possible Prussian stack would have 18 combat strength points (Steinmetz, the I Corps artillery, and Thumen and Sohr for cavalry). The best possible French stack would total 17 factors (Frient, the Guards artillery and Guayot). However, these maximums only will be found in a few stacks. Most will be decidedly smaller.

Besides bringing a wonderful dose of realism to resulting formations, these rules mean the only way to "pack more punch" into a given space on the line is through combined arms tactics, on which Napoleon based a great measure of his own success. To help reflect this, one set of combat modi-
### COMBAT RESULTS MODIFIERS

#### 1. Combined Arms Effects
Attacker chooses column; defender chooses row:

<table>
<thead>
<tr>
<th>ATTACKING UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFENDING UNITS</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>O</td>
</tr>
<tr>
<td>H</td>
</tr>
<tr>
<td>S</td>
</tr>
</tbody>
</table>

**Note:** All units stacked in a hex must be attacked together. Attackers in one hex may divide attacks against different frontal hexes, and units from different hexes may attack together. All defending units adjacent to attacking units must be attacked (except under "cavalry impulses"). The attacking player defines each battle. All attackers in a battle must be able to attack all defenders. For the attacker, use the column above for only those units actually involved in the attack.

#### 2. Unit Integrity Effects
Applies to Infantry and Cavalry only, for combat. Cross reference the listed unit types and apply appropriate modifier:

<table>
<thead>
<tr>
<th>Attacker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frant</td>
</tr>
<tr>
<td>Frant</td>
</tr>
<tr>
<td>Other Guard</td>
</tr>
<tr>
<td>Regulars</td>
</tr>
<tr>
<td>Landwehr</td>
</tr>
</tbody>
</table>

#### 3. Elevation Effects
Choose one only if applicable:

- All attackers above all defenders: +2
- Some attackers above all defenders: +1
- Some attackers below all defenders: -1
- All attackers below all defenders: -2

**Note:** Slope hexes are at the same elevation as adjacent plain terrain. Hilltop hexes are above slope hexes. Hilltop hexes are not above adjacent plain terrain.

#### 4. Terrain Effects

**Note:** Fording units must be in defenders’ ZOC to affect combat. All fording effects apply regardless of presence of bridges.

#### 5. Facing Effects
Attacker chooses one only if applicable:

- Any attacking unit on defender’s flank: +1 for each flank
- Any attacking unit on defender’s rear: +2

---

### 3. Facing
All units except broken troops always have a two-hex "front", two one-hex flanks, and two rear hexes to watch. The frontal hexes are indicated by turning the unit so that its top corners touch each of those indicated spaces. After moving all units, the mover only adjusts facing of all his units (including those which did not move). After all attacks by one player (including any second-impulse cavalry charges) are resolved, both players may adjust the facing of any or all of their units.

Units stacked together, must all face the same direction. It is possible for units stacked and faced together to attack into different hexes, so long as the defending positions both fall within the frontal area of the attacking unit. Attacking units may not move to attack in such a way as to leave some enemy units adjacent but outside the frontal hexes—unless those enemy units are also being attacked by other friendly units.

### 4. Terrain Effects on Movement
A large change in these variant rules is that foot artillery may only cross rivers at bridges. This is quite a departure, but clearly supported by the events of the historic campaign. For example, it explains why Grouchy marched north and attacked the Prussians in their fortified position at Wavre. He needed a way to get his guns across the Dyle.

River fording for other types of units also changes to get rid of the “instant fording” ploy. For example, under the old rules an infantry division could begin at W26 near Quatre Bras and march as far as S20 in one turn, ending in a river hex; then, the following turn, the unit magically begins on the north bank of the Genappe and may proceed another four hexes to O27, another river hex. Despite crossing two rivers, the unit has moved as far in three turns as it would have over perfectly clear terrain. Under these new rules, each river hex costs just one point to enter, but two more if the unit wants to cross the river (assuming no road crossing or town).

[OPTIONAL: In addition to bridges in outlined towns, consider bridges over rivers at Tilly (Y15) and Ligny (FF13); players may wish to mark these on the board if using this rule.]

No unit may enter a forest hex unless it has three movement points remaining—one for the hex and two more for the trees. This does not apply to movement along forest-road hexes. This terrain cost is not cumulative to river crossings since it reflects time consumed by breaking formation and reforming units. A unit is disrupted only once no matter how many obstacles are found in a hex. An infantry or cavalry unit beginning in W40 could actually move through V41 and U42. Artillery would have to stop, since the big cannon cannot cross the river. (Artillery can attack an adjacent hex from the far side of the river in its own hex—for example, against an enemy in U24).

Finally, instead of the old bonus, road movement uses up movement points at a reduced rate. Movement “along the road” (as already carefully defined by Avalon Hill in the rules) costs half a point for primary roads and two-thirds of a point for secondary roads per hex entered. For example, T39 to U38 to U37 costs two-thirds of a movement point. The move more you move along a road, the less you may move off the road in that turn, and vice versa. At last, there is a reason for those secondary roads.

[OPTIONAL: Add the following road hexes to the map to correct omissions in the original Primary Roads—from GG22 northwest, extending the Roaman Road through GG21/FF21/FF20/EE20/EE19/DD19/DD18/DD17/CC17/BB17/BB16/AA16/AA15/AA14/AA13/Z13/Z12 and offboard toward...]

Orders of Battle and Appearance for THE CAMPAIGN GAME
SITUATION—7 am on June 15, 1815

This chart lists all the units that are in play at the start of the Campaign Game (beginning as in my "Crossing the Sambre"), and all the units that enter as reinforcements. Players must place these units as indicated.

### French Army

<table>
<thead>
<tr>
<th>Time</th>
<th>Unit (HQ, Artillery, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 am, June 15:</td>
<td>Reille HQ, II Horse Artillery, Pire</td>
</tr>
<tr>
<td>9 am, June 15:</td>
<td>Bachelin, Jerome, Girard, Foy, II Artillery</td>
</tr>
<tr>
<td>11 am, June 15:</td>
<td>Mortier HQ, I Guard Artillery, Frant, Monard, Dubesne, Guyot, Desnoeux, I Guard Horse Artillery</td>
</tr>
<tr>
<td>1 pm, June 15:</td>
<td>Napoleon HQ, Pajol HQ, Soult, Suberie, Excelmans HQ, Strolz, Chastel</td>
</tr>
<tr>
<td>3 pm, June 15:</td>
<td>Gerard HQ, Pechuax, Vichery, Hulot, Morin, IV Artillery, IV Horse Artillery</td>
</tr>
<tr>
<td>7 am, June 16:</td>
<td>Labau HQ, Simmer, Jeanin, Teste, VI Artillery, VI Horse Artillery</td>
</tr>
<tr>
<td>9 am, June 16:</td>
<td>Milhaud HQ, Wathier, Delort, I Cav Artillery, II Cav Artillery, III Cav Artillery, IV Cav Artillery</td>
</tr>
</tbody>
</table>

### Prussian Army

<table>
<thead>
<tr>
<th>Time</th>
<th>Unit (Artillery, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 am, June 15:</td>
<td>I Artillery</td>
</tr>
<tr>
<td>11 am, June 15:</td>
<td>Henkel</td>
</tr>
<tr>
<td>9 am, June 16:</td>
<td>Blucher HQ, Pirch I HQ, Tippelskirchen</td>
</tr>
<tr>
<td></td>
<td>F: L'Eveque, Charleroi, Fleurus, Gosselies</td>
</tr>
<tr>
<td></td>
<td>K: K06, D: D60</td>
</tr>
</tbody>
</table>

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Hannut. From Charleroi south, extend the Charleroi turnpike through V15/W14/X14 and off the board. Secondary Roads—from U39 south, extend the road through V9/W9/X9 and off the mapboard. From U36 northeast, extend the road through T26/S26/S35/R35/R43/Q43/P33/P32/P31/P30/P29/O29/N28/L28/K28/J28/J28/H28/G28/P28 to join the road to Wavre (not crossing any rivers.)

5. New Combat Results Table

The real heart of this rules revision is the new CRT, with a whole new set of combat results based on totally different ideas about the effects of battle. There are 16 odds columns in place of 11, capturing a wider spectrum of possible encounters. Above all, there are two dice. This is the most revolutionary change of all.

With one die, all six outcomes have equal probability at any odds. At 2-to-1, for example, the suspension can be killed! You can lose everything, or kill all the enemy, or retreat—and there's not the slightest hint of which it will be. With two dice, we have a middle range ("5" through "9") which occur two-thirds of the time, and two extremes which each occur only one-sixth of the time—one bad for the attacker ("2" through "4") and one bad for the defender ("10" through "12"). "Surprises" on the dice become truly unusual variations from the ordinary, expected results. Also, additive effects of modifiers are a serious matter, skewing the most likely combat results to more serious defeat or complete victory. A +2 modifier means there are six chances for a "12" instead of just one, and means results will fall in the "high extreme" range more than half the time.

The possible outcomes of combat vary a great deal. Contact means no effect. It is the best result you can get—all the grief is in the enemy's lines. Shaken means a unit must roll for morale (see below). Passing the morale check is equivalent to a "Contact" result. Withdraw means your commander saw his unit getting mauled and conducted an orderly one-hex withdrawal. Retreat is withdrawal combined with a morale check. In particularly unpleasant circumstances, a unit Breaks without the luxury of a morale check—this is a retreat and automatic failure of morale.

[OPTIONAL: French advantage—After resolving all his attacks, a player may move all his cavalry and horse artillery one additional hex IF this movement will end with another attack. These units may attack even after first round combat, but they must attack without infantry or foot artillery being involved. They may expose flanks to adjacent enemy units without attacking them so long as they attack all units in their frontal squares. This sort of cavalry "mopping up" is particularly effective against broken, retreating units when it can be managed safely. After such charges, cavalry and horse artillery must return to the hexes from which the charge began.]

[OPTIONAL: Allied advantage—Foot artillery never "charged" into enemy lines during an attack. After an opening bombardment, it was up to the infantry and cavalry. To reflect this, foot artillery is left behind one hex to the rear of attacking units (horse artillery may gallop forward with the attackers). In attacks, foot artillery is counted as firing two hexes, a bombardment which occurs before the advance to contact by the infantry/cavalry. Combat results or morale checks apply to the "bombarding" artillery units themselves. However, they may not fire unless there is an empty hex between their guns and the enemy target at some time during the movement portion of the turn. After combat, the foot artillery may advance to stack with any units participating in an attack on the same target. Artillery defends normally; there is no "bombardment" on defense, and no two-hex defense range. Combined arms bonuses still apply to "bombarding" artillery.]

6. Combat Results Modifiers

Rivers and hills no longer double defense factors. Instead, they are but one set of modifiers on the roll of the dice. As such, they join a number of other factors considered here. When resolving a battle, roll the dice and then go through each of these sections in turn, accumulating all appropriate modifiers.

Combined Arms effects (see table) essentially reward stacking infantry, artillery and cavalry together. When a unit attacks alone from a stack, use the column for units involved in that attack only. Do not count other unit types in the same hex which do not participate in the attack. Different unit types in different hexes gain the combined arms modifier if they attack the same defensive unit(s).

Unit Integrity effects (see table) give a bonus to Guards and a penalty to Landswehr. These bonuses apply only to infantry and cavalry, never to artillery (neither horse nor foot). In mixed stacks, infantry always takes precedence over cavalry in determining this modifier.

Elevation effects are separate from other terrain modifiers, so they can be cumulative with such other effects. High ground is good defensive terrain. Slope hexes are the same elevation as the plain, but are "below" hilltop hexes. Hilltop hexes themselves are not "above" adjacent plain terrain however. Terrain effects include river fording, forests and towns. The defending player chooses any one applicable effect. Rivers offer the biggest advantage. The penalty for attacking from a hex in which the attacker also crosses a river applies even when bridges are present (crossing a bridge and then deploying into battle formation while facing a formed enemy is just as much a liability as fording in the face of fire). As always, river hexes are those in which a river both enters and leaves the hex. All hexes with green coloring are forest. Remember, these effects are cumulative with elevation effects.

[OPTIONAL: Artillery fire is drastically hampered by dense forest. Hedges partially or wholly covered by green are forest, and artillery fire across such borders is halved (retain fractions) for both attacker and defender.]

Finally, the attacking player chooses one of the "Facing" effects if applicable. For all these modifiers, there is but one simple guideline. If they are in the same paragraph above, only one is applicable, but one DRM from each paragraph may be applied and are cumulative.
7. Morale and Morale Checks

Each unit has a basic morale value as shown. Morale determines whether and when a unit is eliminated from play. This value is highest for the Guards ("15") and normal for Regulars ("12"). British line divisions have a morale of "11" because they included German militia regiments scattered among the line regiments. Dutch, Hanoverian and Prussian landwehr have lower morale. There are two types of morale checks, each performed by rolling two dice.

Roll one morale check for each defensive stack or group of attacking units immediately following a combat result of "Shaken" or "Retreat". After rolling, modify the roll according to the Morale Modifiers as shown on the table. If the modified result is equal to or greater than the unit's morale, that unit fails the morale check—it "breaks". If the result is less than the unit's morale value, there is no effect.

If a unit is broken in combat is inverted immediately. It may not move while broken, except to withdraw again if adjacent to enemy units. If it cannot withdraw, it is considered overrun and is removed from play immediately. Broken units cannot attack, defend at half-strength (retain fractions), and have a zone of control reduced to only the hex they occupy. All surrounding hexes are considered the "rear" of the unit for facing purposes so long as it is broken.

Broken units meet one of two fates. When the owning player next begins his Movement Phase, he may attempt to "Rally" broken units. Only HQ units may move before any attempts to rally. Each HQ may attempt to rally units in one hex only. To rally, a broken unit must be out of enemy zones of control, and stacked with a HQ counter in its own chain of command. For example, Reille may not rally units in Vandamme's corps. (Consult the AH Order of Battle Card for chains of command if unsure.) Army commanders (Wellington, Blucher, Napoleon, Ney and Grouchy) may rally any unit of their own color. Wellington, Hill and the Prince of Orange may rally any Anglo-Allied Reserves (Pitton, Brunswick, and so on—see Order of Battle Card). In rallying, roll two dice for each broken unit with an appropriate commander. Add two for the roll for the attempt to rally. If a broken unit cannot be reached by a commander for a rally attempt, or if the modified result is equal or greater than a unit's morale, the unit fails to rally and is removed from play. If the modified result is less than a unit's morale, the unit is rallied. It may move and defend normally, but it may not attack in the same turn that it rallies.

**OPTIONAL: French Advantage**—To reflect French sympathies and actual performance during this campaign, the morale of Chasse, Lux and Krahmer may be reduced to "8". Their normal behavior at this battle was to run at the first sight of French presence in the field.

If an already-broken unit is attacked before it can attempt to rally (as during a cavalry "second impulse" or for a unit broken while attacking), it may be forced to check morale again. Failing such a morale check while broken results in immediate removal from play, just as if the unit had failed to rally. All pertinent modifiers apply to such a check, based on the situation at the time of this second combat.

The morale modifiers include bonuses for HQ units and penalties for running off at great distances from one's commanders. Since only HQs in a unit's own chain of command count for the "command bonus" on morale checks, and since only such HQs may attempt to rally broken units, it will clarify play considerably to mark the Corps assignments of all non-HQ units somewhere on the counters. Some players may even wish to mark the morale value of each unit on the back of the counters. There are also combined arms bonuses and penalties,
"situational" effects reflecting the unit's position with respect to both friends and enemies. If no enemy units' ZOC extend into the flank or rear hexes of a unit's own zone of control, there is a morale bonus. If, however, enemy units occupy such flank or rear hexes, the flank has been turned and there is a morale penalty. If enemy "frontal" zones of control reach into flank or rear hexes, that flank is turned unless friendly units or the "frontal" ZOCs of other friendly units are also present in that hex.

Corps and higher HQ units, which play such a crucial role in morale, and therefore survival of combat units, normally cannot be eliminated from play. They never "break" in combat. They retreat along with other units that are exposed unprotected to enemy zones of control (they have none themselves), they simply move to the nearest friendly combat unit. However, if all units stacked with a HQ are subject to a "B" result (an automatic Break), roll the dice. A roll of "2" or "12" means that the HQ is overrun and eliminated from play. It may not attempt to rally those or any other units before removal.

PLAYING THE FULL CAMPAIGN

This third scenario, "Napoleon and the Iron Duke", completes the series on the WATERLOO game. To play the full five-day campaign from start to finish, simply combine the rules above with the following Campaign Order of Battle. The game then extends from 7AM on June 15th through 5PM on June 20th.

[OPTIONAL: Allied Advantage—Since evening fighting occurred throughout this campaign, add a 7PM turn to each day. Any PAA reinforcements schedules for arrival at 7AM the following morning may arrive in the preceding 7PM instead. This rule also may be used in any of the three scenarios for the game using these rules.]

All together, there should be enough grist in this article to keep all the "Old Guard" of WATERLOO fans out there busy for years. Doubtless there will be comments on my new rules, and on the scenarios and mini-scenarios themselves. Other mini-scenarios could be devised, for the battles of Wavre and Ligny for example. So, if you've that old WATERLOO game in a closet, go get it out again and see what you can make of all this. If by some bad luck, you don't own the game, I hope that these articles have stimulated your wargaming appetite so that you rush right out and buy it today. You won't be sorry, of that I am certain.

---

**ORIGINS '87**

_The National Adventure Gaming Convention_

Consider this your invitation to the greatest gaming convention on the continent—the 1987 iteration of ORIGINS—held this year in its birthplace, the beautiful city of Baltimore. No place else can you find as many game tournaments, dealers, demonstrations, seminars and outright fun as the National Adventure Gaming Convention. With all events held in the opulent facilities of the Lord Baltimore Hotel, Inner Harbor Hyatt Regency, and the Baltimore Convention Center, this year's convention promises to be the best ever! Convention registration is $25 for the entire show ($20 to pre-registrants). Single day admissions are available but cannot be pre-registered. Convention hours are 1 PM through 12 PM on Thursday, 8 AM through 12 PM on Friday and Saturday, and 8 AM to 5 PM on Sunday.

For those who wish to make the convention a family affair, the sites are in the heart of the city, within easy walking distance of a plethora of entertainment opportunities ranging from the exotic shopping and culinary delights of Harbor Place to the aquatic wonders of the National Aquarium and the fantastic displays of the Maryland Science Center. Or visitors can stroll back in history by boarding the sailing warship USS Constellation or the USS Torsk (a WWII submarine). The new Power Plant is an entertainment complex developed by the famous Six Flags Corporation, a delight to children young and old and only three blocks from the Convention Center. And, in the distance of a short drive are the wonders of Washington, DC and the majesty of America's greatest battlefield—Gettysburg, Pennsylvania. This year ORIGINS can indeed be a vacation for the entire family, with plenty to do and see for both the gamer and non-gamer alike.

So, while spouse and children are occupied with the many wonders of the area, the dedicated gamer can be tending to his hobby in one of the 19 spacious meeting rooms set aside in the Hyatt Regency or Lord Baltimore hotels (offering over 50,000 square feet of gaming space) or indulging himself in the exhibitor areas in the 180,000 square foot Baltimore Convention Center. Miniatures enthusiasts will hold forth in the Luxurious Constellation Ballroom. An additional 60 conference rooms have been set aside for seminars and demonstrations by some of the leading professionals among this hobby's membership. And all these buildings can be reached without ever crossing a street thanks to the system of elevated walkways. To top it off, the attendees will have a front seat for the annual 4th of July Inner Harbor fireworks extravaganza. It will be a weekend to remember for the whole family.

For more information on lodging, or on events, interested gamers should please contact the ORIGINS Committee (P.O. Box 15408, Baltimore, MD 21202). We look forward to seeing you there.
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OPERATION RAINBOW
Results of Contest #131
By Rex A. Martin

For the contest of Vol. 23, No. 1, I decided on a departure from our usual brain-wracking puzzles. Bored beyond measure with contriving yet another mind-bender, it struck me that the readership might like a different kind of challenge—one laced with a bit of fun and fantasy. What could be more natural than an art contest? Everybody likes pretty pictures, and some can even draw them. So Contest #131 called for entrants to submit a name, and appropriate nose art, for a B-17 bomber.

The men who flew in those hazardous skies over Occupied Germany had a love/hate relationship with the lumbering but tough B-17. Quite simply, their lives depended on their craft. It was inevitable that some would personalize their planes. (Americans have a deep "feeling" for their machines—be they planes, boats, cars, computers—that I've never noted in any other nationality; they go so far as to invest them with human qualities despite their bodies of tin and innards of wire.) At the beginning of American involvement in World War II, crews of the USAAF would plaster the bombers with drawings and photographs—usually of risqué-clad ladies, famous or not, clipped from pages of popular magazines of the times. From this evolved the actual painting of these on the aircraft skin, mainly the nose section. This art form developed such with the increasing number of aircraft being deployed in Europe and the Pacific that by the end of the war a small industry for the best artists had arisen.

Pool Shark
Don Hawthorne
Clayville, Rhode Island

Just Plane Goofy
Richard Vigorito
Phoenix, Arizona

Rusty Knights
Don Hawthorne
Clayville, Rhode Island

Amazin' Grace
Don Hawthorne
Clayville, Rhode Island

(One commanded as much as $15.00 per aircraft). By the onset of the Korean War, the art had lost its "virginity", moving with the times to less romantic imagery. During the American involvement in Vietnam, nose art as such did not exist.

This art-form was one thrown up at a time of crisis, a chance to be seen and remembered. It was, for the average American airman in the war, a personal form of expression not catered for in the official squadron insignia. Whatever fantasies the pictures may have provided for him, these paintings on his aircraft imbued that mass-production piece of hardware with a personality no serial number could ever give. We wanted to honor that aspect of their war with this contest, and I was most impressed with the results.

The response to our contest was surprising, bringing a great many entries ranging from crude pencil sketches to one acrylic painting on canvas. The three judges—Charlie Kibler (our resident artist), Bruce Shelley (the developer of B-17, QUEEN OF THE SKIES) and myself—were overwhelmed. Literally, the entrants filled the sky with color. With much trepidation, we began the winnowing process. Each selected his ten favorites in isolation from the other judges. Then we three met, compared our lists, and ended up with 19 entries for which at least one of us had voted. After much argument, we came to a consensus. And I announced the ten winners in Vol. 23, No. 3.
It was obvious that for some of our contestants, these planes were more than a picture. Many sent along histories of their craft, drawn from their play of B-17. For example, the words of Mr. Hawthorne on the Amazin' Grace: "My personal favorite, named for a fondly remembered ex who also serves as the model for the lady on both Grace and Rusty Knights (which tells you why the remembrance is so fond). Grace cracked up on landing but hadn't lost any crew, so her name was transferred to another bomber which served the next twenty missions well . . . ." The stories of the lives and deaths of these craft were often as entertaining to us as the artwork itself. These readers had put their hearts into this game, and into this contest.

So, I felt it wasn't enough to simply announce the names of those planes and their imaginative creators. I wanted to display their work. Using the pages of our magazine as a gallery, here they are—the ten winning entries, along with a couple of honorable mentions from Mr. Hawthorne.

88 Bait
Ryan Schabow
Sussex, Wisconsin

Bee Bopper
Daniel Perrine
Orange, Texas

Donald's Revenge
Edward Heise
Orlando, Florida

Odds Bucker
John Olson
29 Palms, California

Siouxie Q
Robert Beattie
Muenchberg, West Germany

Hey Meier!
Matthe Schreck
Westminster, Maryland
**The 3000-Plane Raid**

When last we reported on Mr. Olimski of El Paso, a die-hard B-17 fan, he had completed 1000 missions. Just recently he sent along word that he had completed 3000 games of this addictive solitaire game, replacing the "stats" on those missions. For the edification of you novice players, these are as follows:

<table>
<thead>
<tr>
<th>Target</th>
<th>On Target</th>
<th>Off Target</th>
<th>B-17 Losses</th>
<th>Bomb Run Total</th>
<th>Average Percentage</th>
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<tbody>
<tr>
<td>Abbeville</td>
<td>125</td>
<td>106</td>
<td>23</td>
<td>4495</td>
<td>19.45%</td>
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<tr>
<td>Amiens</td>
<td>70</td>
<td>82</td>
<td>10</td>
<td>152</td>
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<tr>
<td>Antwerp</td>
<td>65</td>
<td>84</td>
<td>17</td>
<td>2294</td>
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<tr>
<td>Bremen</td>
<td>26</td>
<td>70</td>
<td>16</td>
<td>96</td>
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<tr>
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<td>62</td>
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<td>97</td>
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<td>55</td>
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<td>La Rochelle</td>
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<td>31</td>
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<tr>
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<td>Paris</td>
<td>34</td>
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<td>Romilly SS</td>
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<td>67</td>
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<tr>
<td>Rotterdam</td>
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<td>22</td>
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<tr>
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<td>80</td>
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<tr>
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<tr>
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<tr>
<td>Vegesack</td>
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<td>57</td>
<td>31</td>
<td>97</td>
<td>17.01%</td>
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<tr>
<td>Wilhelmshaven</td>
<td>38</td>
<td>79</td>
<td>35</td>
<td>117</td>
<td>15.46%</td>
</tr>
</tbody>
</table>

**Bombers Destroyed:** 479

**Bombers with 25 Missions:** 10

The "On Target" and "Off Target" listings include bombers shot down, and the "Off Target" listing includes aborted missions.

---

**Crew Statistics:**

- **Total Crew:** 4984
- **KIA:** 2355
- **DOW:** 165
- **Invalided:** 638
- **Captured:** 1306
- **Lost At Sea:** 466
- **Completed:** 25-54

**Enemy Fighters KIA:**

- **Me 109:** 2738 8th AF Victories—1196
- **German Victories:** 479
- **Drews:** 1325

**Campbell Results:**

- **8th AF Victories:**—1196
- **German Victories:**—479

**Crew Statistics:**

- **Ace Status:**
  - Bombadier—4 (23 kills)
  - Navigator—5 (33 kills)
  - Engineer—100 (926 kills)
  - Ball Turret—72 (550 kills)
  - Tail Gunner—88 (714 kills)
  - Stb. Waist Gunner—3 (16 kills)

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**Hitler's Hemorrhoid**

Frank Calcagno Jr.

Billings, Montana

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**Beyond the War... Cont'd from Page 10**

15. **Aerodrome Strike**

As early as 1917, the British had been raiding enemy air bases, bombing and strafing shops and hangars and barracks. By 1919, this had become standard practice for both sides, but the British in particular excelled at the game. Often odd collections of aircraft would be seen circling German aerodromes, waiting to pounce on returning planes. At other times, the pilots of two or three planes might decide to raid an enemy airfield just as a lark. The usual pattern for an attack was five minutes of continuous low-level runs until patrolling enemy fighters from above swept in for dogfight at rooftop heights. Certain planes were especially favored by British pilots for this "sport"—the new Snipe, and the aging but popular S.E. 5a.

- **A. Use the victory point awards listed under Victory Resolution (page 15 of the rulebook). The Allied player receives, in addition, 1 victory point for each plane each turn in which it passes through hex 1605 at an altitude of 419 feet or lower.**
- **B. The scenario ends when all aircraft of either side have exited the mapboard or been removed from play.**
- **C. Lineup**
  - **1. Allied Side:**
    - S.E. 5a—starting hex 1933, nose pointing north, altitude 4019 ft., experienced pilot
    - S.E. 5a—starting hex 2234, nose pointing north, altitude 4208 ft., experienced pilot
    - Sopwith Snipe—starting hex 1434, nose pointing north, altitude 4284 ft., ace pilot
  - **2. German Side:**
    - Fokker D.VII—starting hex 2710, nose pointing south, altitude 6982 ft., ace pilot
    - Fokker D.VII—starting hex 0120, nose pointing northeast, altitude 4511 ft., experienced pilot
LIKE A THUNDERBOLT
Western Options in THIRD REICH
By Craig F. Posey

Simulations of a strategic scope, especially on a continental scale, offer their players a seemingly great choice of options. In some cases, though, the scope of those options is more apparent than real. In WAR & PEACE, for example, France must attack Austria first in 1805, and then will probably concentrate upon Prussia and Spain in turn. In a similar vein, German players tend to follow a well-established course of action: Poland first, France, and then Russia. Still, even with established course of German operations has become almost codified.

The Axis players will most likely eliminate this vein, German players tend to follow a well-established course of action: Poland first, France, and then Russia. Still, even with established course of German operations has become almost codified.

The most reasonable place to start is, as ever, the beginning and, since the German player dictates the flow of this scenario, we need to investigate what he shall probably wish to achieve. This scenario opens with the mandatory invasion of Poland, and the Axis players will most likely eliminate this country during the Fall 1939 turn. At the end of the turn, the majority of the German forces will redeploy westwards, leaving the required 20-factor garrison on the Eastern Front, plus a unit in Rumania. The Winter of 1939 will surely see a German invasion of the Netherlands, Belgium, Luxembourg, and possibly Denmark. The Axis players will likely have Italy build as much of its force pool as can be in the Fall, and possibly declare war upon the Western Allies in the Winter.

As the year 1940 then begins with the German player's counters poised upon the French border, ready for their next drive. The normal German requirements to complete the reduction of France are three turns, though two would be optimal. Since it is anticipated that France will withdraw from the game by the end of the 1939 turn, a German player will at that time redeploy eastwards and southwards. The remainder of 1940 might well be spent by the Axis player in digesting Yugoslavia and Greece, while launching their North African campaign against the beleaguered British.

The 1941 Year Start Sequence (YSS) will find the Axis powers in a similar condition (i.e., more BRPs), even without any growth, as they now possess at least 367 available BRPs to spend. In addition, they have a potential 45 BRPs when their minor allies are activated. This should give the Axis sufficient leeway to conduct their invasion in North Africa, while Germany sets out to eliminate his Russian opponent. As can be seen, this is a relatively light time schedule, having really only one turn-cycle (Winter 1940). To this must be added the fact that if Russia is not absorbed before Spring 1942, the United States joins the Allied cause, shifting the initiative to the Allies.

In order to develop some method of thwarting this schedule, we must give some consideration to the initial placement of the French and British field forces. France in 1939 is only slightly stronger than Italy in potential ground forces (45 SP to 30), but then Italy doesn’t have to confront the impending onslaught which France must. One thing is certain, France cannot face the German forces alone. And it is sure to be overwhelmed eventually. Still, it must protect itself as best it can.

Fortunately, the French border with Germany is only two hexes wide, and both of these are fortress hexes. If this was all there was to consider, France could probably resist the German attack with little effort. Unfortunately, these two hexes can be outflanked quite readily. To their south, an Axis-controlled Italy is adjacent to three border hexes, as are the five hexes of the Benelux countries to the north. Therefore, instead of two hexes, Germany can lay open a front ten hexes wide. It is this front which France must cover with the sole purpose of shielding Paris from possible Axis assault. Within the constraints given by the deployment limits, we must determine the best French initial placements and subsequent deployments prior to the Axis assault.

One of our first concerns, though rarely considered, is the location of the French fleet units. One would think the obvious answer would be Marseilles, and in some cases it might well be. If a French invasion of Norway were to be contemplated (risky at best considering the German threat), basing the fleets at Lorient or Calais might be justified. Certainly, the more traditional solutions are the Mediterranean. Personally, I prefer to base one fleet at Tunis and two at Beirut. With the required 2-3s deployed at these ports, they can be SRed to France or be readily available for other operations.

As Illustration #1 indicates, the air units available for France are based east of La Rochelle. Since they can base forward if they are needed for any attack, this rear area deployment is not unjustified and both air units are quite capable of reaching the majority of the front line if need for DAS. As an added incentive, only the air unit at R20 can be counterattacked, and then only from Italian territory. As long as Italy remains neutral, this is certainly acceptable.

As to the ground forces, the Italian border is weakly held. Here again, we expect the Italians to form our greatest protective barrier. Still, to trust an opponent for your salvation would be foolhardy, therefore an armor unit at T20 will keep any exploitation attempt by German armor from reaching an undefended Paris in the Fall of 1939. The front with Germany is strictly a double line of infantry, the Belgian army supplying a portion of this defense as shown.

As the allowable build-up arrives, they will flesh out the French defenses, completing the remainder of the second line and providing the garrison for Paris. The northern hinge of the line will be formed from the remaining replacement units (hexes L24 and M23), while the infantry at L24 will withdraw to N23. Of the other four infantry units, two will form the Paris garrison, while each can flank the city to the northwest and southeast. The armored units then form a mobile strike force for any recapture attempt. This defense does not take into account any British participation which there will, necessarily, be. This being so, what is now to be looked at is the British initial placement.

As is to be expected with a primarily naval power, the placement of Britain’s fleets is critical. Of the six nine-factor units available, there are three required deployments: two at Gibraltar and one in Egypt. Since the two French fleets at Beirut fulfill the requirements of Rule 35.5, determining an Axis thrust into the eastern Mediterranean, the British fleet in Egypt can be based at Alexandria. Of the remain-
against 200 for Germany alone. North Africa (Libya) would fall to the Allies at no cost. And don't overlook the loss to the German player of the Italian force pool, especially those air and fleet units. True, the German planes still topple France and retain Italy, but the loss of BRPs and units this course represents could prove devastating to him.

Using Mr. Watney's defense in that article (Illustration #3), we will show that we could bring Italy to an early demise. Once this has been tried upon Axis players, they will realize the threat to Italy that is implicit in the British set up. Assuming that the German player makes a full effort, the Italian 18 BRPs necessary to construct her allowable ground force builds, the BRP level at the end of Fall 139 will be 132. Since the Allies begin the game with 210 BRPs, they will have 77 available to spend in order to manipulate the flip-flop. So, what are the projected expenditures for the Allied Fall turn unit? If the Allies win, they will declare war on Italy—35 BRPs. Then Great Britain and France declare an offensive option on the Med Front—15 BRPs each for a total of 30—and attrition on the Western Front.

During the Movement Phase, the second French fleet at Brindisi departs, in order to change its базing to Tunis. The intent is to draw the Italian fleets from their harbors. Then, the two British fleets at Gibraltar will change their base to Oran. This opens the way for one more base change; the fleet at Portsmouth change base to Gibraltar. If during the Movement Phase the Italians have failed to sortie, then they will find their four fleets facing a total of nine Allied fleets in the Mediterranean during the Combat Phase.

In order to complete the Allied preparations, the French construct an airbase at Ajaccio, and stage both of their air units to this point. Also, the British playy constructs an airbase at Oran. French player constructs an airbase at Toulon. They have constructed units to this point. The French armored unit moves to T21 to join a 2-3 infantry unit in preparation for their attack on Turin.

All is now ready for the Combat Phase and the announcement of the seaborne invasions (two) which will take place. The first group to move will be the two fleets at Tunis, transporting the two infantry units located there. Then the fleet at Oran moves to Oran, where they are joined by the fleet at this location, finally steaming to AA22. The second armada consists of the two fleets at Oran moving to Gibraltar where they are joined by the fleets and armored unit at this port. This combined group then sails to Alexandria, picking up the fleet, then moving to Gibraltar, sealing the southern half of the peninsula. Supply for both bridgeheads will be from a designated French fleet. The British WDF at W24 advances to W23 with the 4-5 armor attacking hex X22, creating a breakthrough hex from which the 4-5 armor can exploit into Rome. Next, the British construct an airbase at W21 (Corsica) and at the bridgehead (W24) with air units staging to these bases. A French 2-3 infantry moves to the armored unit at Turin, with an additional French armored unit being moved into T21. With the French air units at Ajaccio flying ground support, the forces can now attempt to intercept missions, the units at Turin will attack the reserve unit at Milan, creating a breakthrough. The armored moves into Milan, joined by the other two armored units which can then exploit into T25 (and maybe T26), sealing Italy's northern border. The Allies could be established as three defensive lines across Italy and await the Axis response.

If we have achieved our goals, do the Axis player(s) actually have a response—at least, any response that will save Rome? No, I don't believe so. Even though the units at X23 with ground support from Italian and German air forces can eliminate the 4-5 armor unit in Rome (especially considering the low BRP total of Axis countering the British air units), they cannot advance into Rome (27.42). German armored units exploiting from a breakthrough hex along the northern Italian border cannot exploit into Rome due to the 1-3 infantry in W24 and the WDF at X22, and Italian units in southern Italy can advance no further than the line created by the French infantry units. The only Axis salvation possible would be if the German airborne unit was located in any one of three hexes with an airbase (S26, S27 or S28).

So, what can the Axis do to forestall this piece of Allied adventurism. Well, they could limit their BRP spending so that the Allies could not manipulate the flip-flop. Or Italy could declare war on the Allies first and German units could SR into Italy to bolster its defenses. Or the German airborne unit could be constructed at Graz. Or the Italian player could reconstruct his defense of the peninsula (not much better, so have air, but a garrison in Rome would help). Of these choices, the first seems highly unlikely as it would jeopardize the Axis Winter turn. The third, while advisable, might well be dismissed as it adversely affects any Norwegian campaign. This leaves us with the second and fourth options, and I feel that the last is the most likely and reasonable. The Italians will generally stand and simply await the Allied assault.

Aside from the attack on Italy, the initial British placement, as indicated earlier, offers other options to them. The Norwegian campaign comes readily to mind; and the placement of the 4-5 armored unit at Gibraltar as the main striking edge, coupled with the flip-flop, will allow the completion of this enterprise prior to any Axis response. Unfortunately, the Axis flip-flop that will follow could prove fatal to France.

What if the Allies decline the flip-flop and are determined to maintain the normal flow of the game? Is this deployment still advantageous? Yes, since the first player is in charge of three ground units from Great Britain, the 4-5 armor from Gibraltar, and possibly even a unit from Egypt to France, as well as the French player's ability to SR the two infantry units from North Africa. This bolstering of the French defense of their homeland could lead to an improvement of the Allied player's ability to resist the German timetable.

Truly then, the opening turns of the 1939 scenario set the tone of the campaign in the West. The Allies can either attempt to seize the initiative or they can choose to react to the Axis player(s). In either case, the Western Allies must continue to seek ways to deprive the Axis of BRPs, thus weakening their position. One method, especially with Soviet colusion, that offers significant rewards is "Foreign Aid". The only questions is to which countries should each side extend their assistance. Since the Russian has the fewest choices, the decision must be made with these in mind.

Of the three countries (Hungary, Rumania and Bulgaria) to which the Russian player can grant BRPs, each has its own reasons for selecting or rejecting it. From the Soviet standpoint, Bulgaria is easily discounted. Since Rule 25.42 precludes the use of Bulgaria's forces in Russia and, in fact, limits them to the Balkans, they pose no immediate threat to any Allied position. Rumania would probably be an ideal choice, as it has the largest BRP total of the Axis Minor Allies as well as the largest force pool (in factors, the same as Finland, but with a greater quantity of counters). Unfortunately, Rule 43.3 precludes the Russian player from garnering the 25 BRPs for East Europe unless they occupy Bessarabia or await the Spring 1940 turn (at which
time the 25 BRPs can be gained by occupying the Baltic States). This coarse gives the remainder of the area to the Axis player as a buffer zone. We believe that Rumania is not a likely receptor of Russian BRPs. This leaves only Hungary, and upon this nation the Soviet Union should shower its largesse.

Once the Soviet selection is made, then the British player, if he desires to aid Russia, must select one of two countries—namely, Finland or Rumania. Any British effort to placate Finland would have some definite advantages: removal of Finland's 10 BRPs and force pool from the grip of the German player, and the securing of the Soviet Union's northern flank. True, it will cost Britain two SRs each turn that they dispatch BRPs to accomplish this, but it would be justified if Finland remains on the sidelines.

As for Rumania, I noted above that her BRP contribution and force pool are the largest available to the German player. With the loss of the Hungarians, the Axis will have to have the Rumanians to secure his southern flank, as to stretch it much farther could cause them serious problems; with the loss of Rumanian support, the Axis will be forced to use German units to hold the entire Russian front. This could jeopardize his double line defense and stretch his reserves to the breaking point. For this reason alone, I believe that the British should choose Rumania over Finland, to secure its BRP grants. If affordable though, Great Britain might consider giving support to both of these countries.

The Western Allies must, in any playing of the 1939 scenario, concentrate on two related courses of action in order to prevail over the long run. One is delay. The longer it takes the Axis player to subdue France, the less time they will have to ready Germany to the breaking point. For this reason alone, I believe that the British should choose Rumania over Finland, to secure its BRP grants. If affordable though, Great Britain might consider giving support to both of these countries.

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1942

"At a time like this, I think of the old days..."

With the disastrous Winter of 1941 over, the German Wehrmacht was once again starting to register great territorial gains. The Sixth Army was on its way towards Stalingrad, and the Afrika Korps was reaching for Alexandria. In the 1942 scenario, the Axis player's forces exhibit great potential for prosecuting their war effort. Yet the Allies have some new capabilities too, highlighted by the advent of the American land and naval forces into the Mediterranean in 1942, the U.S. player might be able to start preparations for an invasion of Greece during the Winter of that year or the Spring of the next. The initial assault should be aimed at the islands in hexes EE28 (Andros) and CC30 (Mytilene) as U.S. airbases on these islands will supply air cover for the beaches at AA22 and CC30. Of course, if these bases are weakly held, and given the British naval superiority, we might consider a strictly naval invasion of the beach at Salonika. From this site, with SRad air units, the Americans can strike toward Sofia (eliminating Bulgaria and her BRPs from the German reserves) or strike southwards and westwards into Greece and Albania with the aim of gathering BRPs and a port.

This threat to Germany's southern flank should achieve the desired result of drawing his reserves to this sector in order to protect his BRP base in the Axis Minor Allied countries. Yet, where are those reserves to come from? Pessimistically Bulgaria, Italy and France, for unless he has been highly successful in Russia during 1942, the German player probably will not be able to remove troops from the Eastern Front.

Since this invasion of the Balkan peninsula will not by itself lead to the destruction of the Axis base, though the presence of Allied armored and air units near the Russian Front will give the German player plenty to ponder, other options should be explored. This is indeed the time for that Italian invasion, not of Sicily but rather of the northern beach we selected in 1939: hex W24. If possible, as in the 1939 scenario, this should be coupled with an invasion of the beach in hex AA23. The goal of this drive is to remove the Italian forces and BRPs from German control, forcing the Axis to bring troops out of Russia to seal these penetrations of Italy.

The immediate objective of these two Allied operations, once the initial requirements for basing and supplemental bases are achieved, is to drive the offensives toward Trieste. In achieving this end, the Allied players should remove Italy, Rumania and Bulgaria from the Axis, while adding Greece and Yugoslavia to the Allied BRP total (in addition to these conquered states). An optimistic schedule would set this linkage of Allied offensives no later than the Winter 1943 turn, assuming that Russia has managed to maintain its pressure upon the German.

With 1944 about to start, a truly combined Allied (American, British and Russian) offensive can be launched against the remaining German forces in the East. The prime end of the Western Allies in this scenario is to reach Berlin before the end of 1944, securing it for themselves.

Why should we, like Churchill, opt for a Balkans campaign instead of the traditional Italian-French campaign. Actually, two reasons spring to mind, both interrelated, historically and in game terms. First, if France is neglected by the Allies, does this mean that the German can afford to? I suspect not, for as long as Great Britain contains enough Allied troops on its shores, the threat of invasion will forestall any German attempt to remove troops from occupied France. Secondly, by invading the Balkans, the Western Allies limit the extent of the territorial gains that can be made by the Soviet player. The result should be a much more rapid collapse of the Axis position as the combined Allied forces drive into the open plains of Central Europe and proceed to Berlin.

1944

"Thou wretched, rash, intruding fool, farewell."

Unlike the other two scenarios which allow the exploration of "fantasy" visions of the past, the time constraints of this 1944 scenario require a direct approach to its solution. First, Germany must be eliminated from the game no later than the Summer of 1945, and the Western Allies must achieve a higher level of victory than the Russians.

At the beginning of the scenario, the Western Allies control nine objectives, as opposed to eight under Soviet control. The prime difference is that the UK/US forces must garner an additional three objectives to reach the same level as the Russian player. A decision then must be made as to where these objectives will come from: Puzzingly Bulgaria, Italy and France, for unless he has been highly successful in Russia during 1942, the German player probably will not be able to remove troops from the Eastern Front.

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If then, in this case, how should the British player deploy his forces to take advantage of the situations which arise on his front. With a total of 27 non-naval units available to him at the start, the British player soon realizes that to crowd everything into Italy is wasteful and unnecessary. To start with, the six replacement units should be used to garrison the North African holdings, as they can function as attrition losses as well there as anywhere else on this front. As shown in Illustration 5, the majority of the remaining forces go on the Italian mainland, with the air units and airbases stationed at Taranto and Brindisi to afford adequate air coverage. The infantry units form the line and its support with the 1-3 infantry units garrisoning Sicily, Malta and Gibraltar. This, then, leaves the airborne unit stationed at Alexandria and Port Said solely for the purpose of keeping the British forces in supply. Of the seven remaining, three fleets can be initially deployed at Gibraltar, one at Malta and the remaining three at Brindisi.

The goal of all of this is to add flexibility to the Allied first turn. What choices might the British player consider? First, dependent as always upon the Axis set up, his forces are positioned to attack straight towards Rome, trying to gain it with exploiting armor. Or, the fleets at Gibraltar could change base to Naples. Once there, they would embark an infantry unit before sailing to Brindisi and joining the three fleets there, as well as two armored units, before setting out to perform an end run of the Axis position, ala Anzio. For British purposes, there exists three beaches which are suitable for this play: U19, W24 and W26. From any one of these beaches the British player can march into northern Italy and head south, trapping the majority of those objectives ahead of the Russians as possible.

Now, what of the Americans? While maintaining an adequate garrison of the British Isles, they are charged with the cross-channel invasion. Look-

Illustration 4 The situation in Italy at the beginning of the Winter 1939 turn.

ing at the available points, Wilhelmshaven would be ideal, though the more likely landing points are Dieppe (M23) and Caen (N21). I’ve a slight preference for the beach at Dieppe due to the adjacent port at Calais (M24). Remember, in this scenario, the destruction of German forces is secondary to the capture and holding of Berlin. But, by the same token, the territory behind the Allied front lines must contain a sufficient number of objectives to win.

Once a landing is effected, the American player must push to eliminate the sources of supply for the bypassed German units. This will entail the capture of certain capital cities (Paris and Brussels) while sealing the French border with Germany. The Axis supply fleets, both in Italy and Germany, must be disposed of so that these encircled units do not remain active.

With France and the Low Countries secured, only one obstacle remains between the Americans and Berlin—the Rhine. In actuality, the Rhine and the West Wall together form this barrier. From the American point of view, the easiest crossing points will be those that do not involve German fortifications: K27, L27 and Q25. Hex L27 is especially favorable for it is the closest to Berlin. Once the Rhine line is breached, the American forces should be split into three unequal parts. Of these three divisions, the smallest, composed almost entirely of infantry, will secure the Denmark peninsula. The second group will strive to isolate Berlin, protecting it from Russian capture until the other two wings complete their missions. The last element will seek to capture Breslau and, eventually, link up with the advancing British forces. As much as possible, this must be accomplished during the Summer 1945 turn, as Berlin must be occupied on this turn at the latest. With the fall of Berlin, the war and the scenario ends, and the accounting begins.

Other Possibilities

"... nothing can be gained except by calculation."

I have not mentioned the Campaign Game in this article, and this is with reason. An amalgam of the first two scenarios (1939 and 1942) actually conveys my beliefs as to the course which players of the Western powers should pursue. We must remember that the Western player has just as much a threat as it is an actual operational option; merely setting up the possibility of initiating it will cause the Axis players some concern as to which course they should take themselves in 1939. Too, the Balkan campaign posited for 1942 is ideally suited to this scenario as it presents a united front by all of the Allied powers against Germany instead of allowing that country to concentrate upon each in turn.

With regards to the Murmansk convoys and Lend-Lease, once the Axis declares war upon the Soviet Union, the British player (followed in 1942 by the American) will need to send the maximum allowance of BRPs per turn that she can afford. Without the continued survival of the Russian player, the Western Allies cannot hope to win. Remember, however, Great Britain must not send everything they have, as some BRPs will be necessary to replace losses and, at critical moments, to launch certain offensives. Generally, I concur that 1941 will see Great Britain on the defensive. But 1942 should see the British, as discussed earlier, attempting to complete the occupation of North Africa, while the Americans deploy and build their arsenal. In this year, the Americans should bear the toll extracted by Soviet BRP needs. Hopefully, with the opening of the new fronts in Italy and the Balkans, strident Russian demands for BRPs shall have started to level off as the Western Allies attempt to relieve German pressure in the East.

Perhaps the least understood country in THIRD REICH is Vichy France, primarily because it is usually a “do-nothing” entity. It does perform, though, several important functions for the Axis players. First, of course, it covers the German player’s southern flank in the West, limiting any Allied advance through Spain, as well as shielding the beach at U19. Second, it forms a reserve pool of troops, especially naval units. A careful eye must be kept upon Axis actions regarding Vichy, as any flow of German foreign aid to this country can only mean that the Axis plan to activate it. The only thing that can prevent this is massive British aid, something the English player may not be able to afford. What can Britain do? To be truthful—nothing much. Especially if Britain is committed to expenditures to Russia. The only Allied recourse is to endeavour to assure the destruction of the French forces before they surrender, with emphasis on the air units.

Conclusions

“I have never committed a crime. I have done worse than that: I have committed mistakes.”

Rashness is not a virtue for any of the Allied players; their greatest advantage is that time is on their side. Eventually, if the Allied players have survived, the Axis will have reached the extent of its leach. Spread thin, they will find themselves forces onto the strategic defensive. Once this occurs, the initiative shifts to the Allied powers and, excepting limited German offensives, should be held by them for the remainder of the game. Early on in the game, the Allies are outclassed by the Axis in all but one category—naval units. So, in any concerted Axis assault, the results will be foregone.

At the start of the game, then, Allied players need to set themselves a realistic objective for their early years. As we have stressed, taking territory from the Axis, except in North Africa, is unrealistic. Economics will win the war, not military strategy. The Allied goal must be to deprive the Axis of valuable BRPs. This is the intent of the Italian invasion, as well as the foreign aid to Germany’s minor allies. They will have to match or exceed the Allied BRP expenditures to save Italy or activate her minors, BRPs they might rather use to pay for an offensive or purchase units. Other methods are available too. Whenever possible, inflict damage upon the Axis air units—especially those of Germany. These are expensive to build, yet they must have them.

As for British expenditures, after the fall of France, try to keep them minimal. The majority of your BRPs are destined to go east.

Illustration 5 The Initial British Troop Deployment in Italy, including two armored units and one air unit (at Taranto and Brindisi) and three fleets at Brindisi.
FULL SERVICE BOOTH

Attendees at this year’s ORIGINS will have the opportunity to purchase virtually anything in The Avalon Hill Game Company inventory from our Parts Booth, down to and including the smallest item. For the first time ever, we will have a booth on hand to accept orders for individual game parts, magazine subscriptions, in-stock back issues, or the relatively obscure games that we don’t normally bring to a convention. Merely place a “mail order”, minus the postage costs and the minimum. Get a Replacement Parts List from our booth on Thursday or Friday, write down your selections, pay the sales clerk, and get a receipt for your order. Your order will be waiting for you on Saturday and Sunday in the same booth for you to claim. So take inventory now. See which of your games have worn or missing pieces that need to be replaced. Make a list. Check your GENERAL collection for any missing issues still available. Check that catalogue for the unmounted mapsheets, magnetic strips, game trays, variants, Pon ki, scenarios, magazine binders, and other accessories that you’ve always wanted but never got around to ordering by mail. Bring your shopping list to ORIGINS ‘87 and get it filled on the spot with no postage charges or mail delays.

AH Philosophy . . . Cont’d from Page 2

and teach us English. These people would take part in our games and would translate all the rules as they appear. Such games would also have an educational side to them—they will be a good lesson in practical English.

We hope that we will succeed. There are many different plans, means and possibilities of making war and historical games more popular here. These games are our common hobby. The first step towards further popularization of them has been made by the article written by T. Machowski and the warmheartedness of the editors of The GENERAL, as well as the generosity of our American friends.

We have already sent individual thanks to all our contributors. But we think that we can’t stop at this moment. We would like to do it in a much more official way. We think that human friendliness and warmheartedness should be talked upon and it should be stressed that such feelings help to build better relations and friendship between different peoples. They also create the solidity and understanding necessary to help others. This is a kind of action that is necessary to all people all over the world.

The game itself becomes a thing trivial and unimportant, but to help others over the borders of the continent is a much more serious affair and you need a great American heart to be able to do it. We have witnessed your friendliness. If it is possible, I would like to ask you to publish in The GENERAL our official gratitude and thanks. It would be very nice if these thanks were published in the last issue published in this year and were connected with our wishes of a Happy New Year. The message would be quite short:

Merry Christmas and a Happy New Year to our Friends, war gamers in America and all over the world. We would like to express our gratitude and thanks for your help, generosity and kindness and for any interesting and fascinating games. We would like to send you and your families our best possible wishes—Tad Urbanowicz and the grateful war gamers in Poland, December 1986.

At the same time we intend to organize an exhibition in “Groteka” in which we will present the games we were given with short explanations. It would be a Christmas exhibition decorated with Christmas trees, candies, colors. I am very glad to inform you that we have received quite a few games produced by AH. They are completely new and can be used as a group, advertising material. The exhibition will be perhaps permanent and we hope to enrich it from time to time with new elements.

The war games connected with the Civil War in the USA are becoming increasingly popular in Poland. To meet this demand, we are planning to open a new special club. We intend to name it with the title of a very popular novel dealing with the period—Got With the Wind—but we have not decided yet. We might call this club differently. Perhaps you can organize among your editorial staff an instant vote on how to call our new club?

This is about a box that I wanted to write you about. I know that there is quite a lot of it, but I would not like to spoil and destroy the chance we were given by your article in The GENERAL and the precious help of the American players.

Yours faithfully,
Tad Urbanowicz

Krajowa Rada Upowszeznienia Gier

GROTEKA

Dear Rex:

Just so you and all of the gamers who have contributed to Groteka will know what has taken place, I want to relay the following information.

I have received letters, games, magazines and books, mostly nearly one hundred contributions have come from all over the United States and also from England, Canada, Australia and Italy. To date, I have forwarded 17 packages to Warsaw containing more than 300 games, and I have five more boxes awaiting shipment containing over 100 more games.

I know we were wargamers who had doubts about the games being sent/received. I want to assure those who have not yet heard from the Polish gamers that they will. Anyone who has sent a letter, game or magazine has received a response from me. I also know, since I have received letters directly from Mr. Urbanowicz (albeit in Polish) acknowledging their receipt of the games. I have received several letters from Mr. Urbanowicz personally indicating their great enthusiasm for the friendship and assistance which has been demonstrated by this project. When I first started out, I did not expect to get any response at all to my request; I cannot express my deepest gratitude on behalf of myself and the Polish gamers for all those who have contributed.

I would also like to relate the “procedure” in getting the games to Poland. The effort is really that of my entire family. When I receive the games, I repackage them for shipment to Poland and enclose a letter in each indicating the name and address of the contributor so that Mr. Urbanowicz is aware of those who have opened their hearts. After I have prepared the package for shipment, my mother takes the boxes to the organization she is associated with for shipment to Poland.

It takes approximately six to eight weeks for the packages to arrive, and any letter sent by Mr. Urbanowicz takes at least two to three weeks to reach its destination. Therefore, if some of the contributors have yet to hear from Mr. Urbanowicz, it is because some packages are still waiting to be sent and others are still in transit. At the time he wrote you, Rex, he had only received eight boxes.

As indicated supra, Mr. Urbanowicz’s letters have been in Polish and my father (who is fluent in Polish) has graciously translated all the letters I have received. As a matter of fact, several of the contributors, having received letters in Polish, have forwarded them to me for translation which my father has done.

So, on behalf of the Polish gamers and myself, I wish to say thank you to all those who have contributed. I would like to thank anyone who wishes to do so at this time that their generosity will be appreciated and acknowledged.

Very truly yours,
Thomas Machowski
Oak Park, Michigan

[There follows a list of those who thus far have donated games to the Polish organization of wargamers. I understand that the Polish gamers are sending personal letters of thanks to each of these folk. I'd like to add my thanks to Mr. Urbanowicz and Mr. Machowski, and voice my pride that so many were willing to help others with a common interest. It was better that I thought that most wargamers are far removed from the subject they ostensibly study, that our hobby promotes comradeship and understanding rather than milita. May it always do so.]
BACK ISSUES

Only the following back issues of The GENERAL remain in stock; price is $3.00 per issue (plus usual shipping and handling charges). Due to the low quantities of some back issues, if ordering please specify alternative selections. Below is a listing of each in-stock back issue by subject matter; game abbreviations are italicized and standard (a partial listing may be found on the "For the Reader's Wanted" form on the insert of this issue). Type of article is indicated by the following abbreviations: H—Historical, DN—Designer's Notes, V—Variant, SR—Series Replay, S—Strategy, Q—Questions, P—PBM (postal), SC—Scenarios, A—Analysis. The featured game for each issue is always the first one listed. Those printed in red indicate one-color reprints of previously out-of-stock issues.

The Baker's Dozen

Disregard the usual price of a back issue; why pay $3.00 when you can pay only $1.00. And that's just what this offer comprises—back issues for only a $1.00. But ... you must order twelve back issues, and enclose payment of $12.00. And, as a bonus, you can select a thirteenth issue as our gift to you. The thirteenth issue must be among those currently in stock as listed to the left. These need not be different issues; you may take thirteen of one issue if such is your choice. So, whether you are a new subscriber who'd like to fill in the couple of years before discovering the hobby's oldest and best magazine or a long-time friend who'd like to replace some missing or worn issues, pay a third of the cover price and pick up a twelve-pack—and the thirteenth's on The Avalon Hill Game Company.

Buy A Game

The GENERAL has, for over twenty years, carried the best articles on strategy and tactics in our hobby. Each issue has featured an Avalon Hill game for our discriminating readers, offering them tips and tricks, history and design insights—often only weeks after the release of the game. Many readers have commented on how this improved their pleasure and ability in that game immensely. Now, we'd like to offer that same enjoyment in one sweet package. For a limited time, when you order a game direct from The Avalon Hill Game Company, you can select any one issue from our back stock (as listed to the left) to be sent along free. Have a hanker to try your hand at B-17, order the game, and select Vol. 20, No. 6; maybe care to see what the excitement is with ADVANCED SQUAD LEADER, pick up Vol. 22, No. 6. This offer extends to any games in our vast line—one free issue for each game ordered by mail or phone. However, we must impose a limit of six such free issues to a customer.

Support Your Local Store

And, if you do not wish to wait to begin punching out those pieces, we'd like to acknowledge all the many readers who buy at local retail outlets. So, the above offer of a free back issue of The GENERAL to anyone who may buy an Avalon Hill game is extended to those who can show that they have purchased an Avalon Hill title within the past sixty days (a dated sales receipt bearing the name of the game and the signature of the store clerk is sufficient). Simply stick that receipt into an envelope, along with the form showing which free issue you'd like, and send it to The Avalon Hill Game Company (4517 Harford Road, Baltimore, Maryland 21214). We'll send you the back issue by return post. Again, please remember that this offer is limited to six games (meaning six back issues). And, while you are making your purchase at your local retail outlet, let them know how much you appreciate their stocking Avalon Hill products.

Reprise

So, three offers to choose from to play Avalon Hill games, and for reading The GENERAL. Please remember that usual shipping and handling fees of 10% (20% for Canadian orders; 30% for overseas orders) apply to all mail orders of back issues and games; Maryland residents please add 5% state sales tax. Too, it will not be possible with these offers to allow alternate selections.
THE QUEEN IN GERMANY

More Targets for B-17

By Doug Bleyaert

The roar of engines fills your ears once again as you climb aboard your B-17. The adrenaline flows freely through your body as you taxi off to your next mission. Today’s mission is to bomb the U-boat pens at Saint Nazaire. As you get up to 14000 feet and join up with the rest of your squadron, you secretly wish that it wasn’t just the U-boat pens you could bomb. To attack the shipyards themselves you would have to bomb. To attack the shipyards themselves you would have to bomb. To attack the shipyards themselves you would have to bomb. To attack the shipyards themselves you would have to bomb. To attack the shipyards themselves you would have to bomb. To attack the shipyards themselves you would have to bomb. To attack the shipyards themselves you would have to bomb.

B-17 gives the solitary player many choices to bomb and a good system of selecting targets—not often were the pilots consulted as to where they were going to bomb. Even though there are plenty of targets there is always that yearning for something that is different. This can be reflected by the new target list: (Table G-3), but acts as a supplement to it. The following rules should be used in conjunction with the new target list:

1) Since the raids on the second list are considered riskier (and therefore rarer) than those included in the game, they will not be selected by higher command for you as often. Before the target selection, one die is rolled. If the outcome is 1-5, use the original Table G-3; if the outcome is 6, use the new mission list below.

2) Planes flying the longer missions were afforded better fighter cover near England due to the importance of these missions. This can be reflected by adding a “+2” modifier to the die roll for fighter cover (Table G-5) in Zones 2, 3, and 4.

3) On longer missions, fighters had a tendency to cover the bombers as long as there was any chance of being destroyed. To reflect this fact, the bombers flying for planes in the high or middle squadrons receive a “-2” modifier to the die roll for fighter cover (Table G-5) in Zones 4 and 5.

4) Once the bombers reach Germany, the probability of enemy fighter waves was greatly increased. With the bomber stream on radar, the proximity of fighter bases, enemy opposition in 1943 was stiff. To reflect this fact, the bombers flying in the low squadron of the formation receive a “+2” modifier to the die roll for number of German fighter waves (Tables B-1 and B-2). There is no modifier for planes in the high or middle squadrons. This modification takes effect throughout the time that a bomber is in Germany (defined on the Flight Log Gazetteer for each target).

Taking a glance at the Gazetteer, the modifier to the roll on Tables B-1 and B-2 for a trip through Germany might look low to many. However, at this point in the war, such raids on Germany were usually large scale, which meant that any individual bomber had less chance to be attacked even though there were more enemy fighters buzzing around.

So, for those who might have made the Grand Circuit—bombing every target on Table G-3—we are proud to offer these new targets. Good luck.

MISSION TARGETS

G-3a MISSIONS 11-25

Roll 2D.

<table>
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<td>12</td>
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<td>42</td>
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</tr>
<tr>
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<td>Industry</td>
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<td>Industry</td>
</tr>
<tr>
<td>63</td>
<td>Leipzig</td>
<td>Aircraft</td>
</tr>
<tr>
<td>64</td>
<td>Badenau</td>
<td>Aircraft</td>
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<tr>
<td>65</td>
<td>Berlin</td>
<td>Industry</td>
</tr>
<tr>
<td>66</td>
<td>Berlin</td>
<td>Government</td>
</tr>
</tbody>
</table>

*Add +1 to die roll for flak occurrence over target, Table O-1.

G11a FLIGHT LOG GAZETTEER

TARGET CITY | ZONE 2 | ZONE 3 | ZONE 4 | ZONE 5 | ZONE 6 | ZONE 7 | ZONE 8 | ZONE 9 | ZONE 10
-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
Amsterdam    | -2/W   | -1/W   | -1/W   | O/N    | 0/G    | 0/G    | 0/G    | 0/G    | +1/G    |
Berlin       | -2/W   | -1/W   | -1/W   | -1/N   | -1/N   | O/G    | 0/G    | 0/G    | 0/G    |
Bonn         | -2/W   | -1/W   | -1/W   | -1/N   | -1/N   | O/G    | 0/G    | 0/G    | 0/G    |
Brandenburg  | -2/W   | -1/W   | -1/W   | -1/N   | -1/N   | O/G    | 0/G    | 0/G    | 0/G    |
Braunschweig | -2/W   | -1/W   | -1/W   | -1/N   | -1/N   | O/G    | 0/G    | 0/G    | 0/G    |
Cologne      | -2/W   | -1/W   | -1/N   | -1/N   | -1/N   | O/G    | 0/G    | 0/G    | 0/G    |
Dusseldorf   | -2/W   | -1/W   | -1/N   | -1/N   | -1/N   | O/G    | 0/G    | 0/G    | 0/G    |
Frankfurt     | -2/W   | -1/B   | -1/B   | -1/B   | -1/B   | -1/B   | 0/G    | 0/G    | 0/G    |
Frederichshaven | -2/W | -1/B   | -1/B   | -1/B   | -1/B   | -1/B   | 0/G    | 0/G    | 0/G    |
Hamburg      | -2/W   | -1/W   | -1/W   | -1/W   | -1/W   | -1/N   | -1/N   | -1/N   | -1/N   |
Hannover     | -2/W   | -1/W   | -1/W   | -1/W   | -1/W   | -1/N   | -1/N   | -1/N   | -1/N   |
Karlsruhe    | -2/W   | -1/B   | -1/B   | -1/B   | -1/B   | 0/G    | 0/G    | 0/G    | 0/G    |
Kassel       | -2/W   | -1/W   | -1/W   | -1/N   | -1/N   | 0/G    | 0/G    | 0/G    | 0/G    |
Leipzig      | -2/W   | -1/W   | -1/W   | -1/W   | -1/W   | 0/G    | 0/G    | 0/G    | 0/G    |
Magdeburg    | -2/W   | -1/W   | -1/W   | -1/N   | -1/N   | 0/G    | 0/G    | 0/G    | 0/G    |
Mannheim     | -2/W   | -1/B   | -1/B   | -1/B   | -1/B   | 0/G    | 0/G    | 0/G    | 0/G    |
Munster      | -2/W   | -1/W   | -1/W   | -1/N   | -1/N   | 0/G    | 0/G    | 0/G    | 0/G    |
Oshabrack    | -2/W   | -1/W   | -1/W   | -1/N   | -1/N   | 0/G    | 0/G    | 0/G    | 0/G    |
Saarbrucken  | -2/W   | -1/B   | -1/B   | -1/B   | -1/B   | 0/G    | 0/G    | 0/G    | 0/G    |
Schweinfurt  | -2/W   | -1/W   | -1/W   | -1/N   | -1/N   | 0/G    | 0/G    | 0/G    | 0/G    |
Stuttgart    | -2/W   | -1/B   | -1/B   | -1/B   | -1/B   | O/G    | 0/G    | 0/G    | 0/G    |
Dear Mr. Martin:

I am writing to discuss the letter to the editor published in the December issue of THE GENERAL. As a long-time subscriber to the magazine, I feel compelled to share my thoughts on the matter.

The discussion centered around the issue of player-choice and the historical accuracy of wargames. Specifically, the letter mentioned Mr. Parker's rule, which states that in certain scenarios, the Germans have the option of playing certain units that did not exist during the actual historical period. The author disputes this rule, arguing that it detracts from the educational value of the game.

I must say, I wholeheartedly agree. While it may be fun to play a scenario where the Germans can use advanced technology or units that didn't exist, it fundamentally changes the experience for the players. As historians and educators, we have a responsibility to present accurate historical depictions. It is disingenuous to present a game in such a way that it manipulates historical events for entertainment purposes.

In conclusion, I urge the magazine to consider revisiting this rule and finding a way to maintain the educational integrity of the game while still allowing for a level of fun and engagement.

Sincerely,

[Your Name]
FLYING LESSONS FROM THE BARON
Updating RICHTHOFEN'S WAR

By Michael Anchors

Back in Vol. 19, No. 6, in an article entitled "A Historian's Guide to AH Wargames", Seth Owens made a plea for "some Tom Oleson" to rescue RICHTHOFEN'S WAR from obsolescence. He advocated simultaneous movement and inclusion of the optional Maneuver Cards as standard features. Now that Mike and his put physics back into air war games with KNIGHTS OF THE AIR, it is high time to refurbish that old WWI classic—but is Owens' formula the best? Actually, RICHTHOFEN'S WAR is so much fun already, I hate to lose it up making it more "realistic". Anyway, what is so realistic about complicated written movement orders? Let's try something new! Throw away your pencils, lads. Get your hands around the stick and your feet on the pedals. We are going to fly!

Variant

All movement and combat rules of the Tournament Game in RICHTHOFEN'S WAR are in effect except as below:

1. The Aircraft Status Pad (ASP) for each aircraft in play now contains a set of controls as well as the Altitude track and other data.

1.1 The "Current Speed" marker on the Speed track represents the throttle and regulates engine speed. (It never was a good reflector of airspeed.) All the old rules apply: Speed can be increased or decreased by one or two movement points per turn; Speed cannot be less than Minimum Speed or greater than Maximum Speed; and so forth.

1.2 A dummy counter, blank side up, represents the pedals. Place to the right, left or directly on top of the word "Maneuver Schedule"; this indicates right, left or neutral rudder respectively.

1.3 A second dummy counter, representing the stick, is placed in or adjacent to the hexagon figure below the word "Schedule". When the stick counter is moved forward toward the word "Schedule", the elevators are depressed and the aircraft dives. Ease the stick back, and the aircraft climbs. Right stick in addition to right rudder effects a right turn. And so forth.

2.0 At the beginning of the game, the controls of all aircraft are set in any position desired by the owning player.

3.0 On its turn to move, each aircraft must be moved according to the positioning of its controls. (See the Control Effects Chart in Figure 1.)

4.0 The new Turn Sequence is as follows:

FIRST SEGMENT

1. Movement Phase. Player "A" moves his aircraft by one by one according to the position of his controls. The controls of aircraft cannot be altered before or during movement of the aircraft counter. As each aircraft completes movement, its controls may be repositioned to determine movement for the next turn.

2. Attack Phase. Player "A" executes attacks, if any, by firing his machine guns.

3. Defensive Fire Phase. Player "B" returns defensive fire, if possible.

SECOND SEGMENT

4. Movement Phase. Player "B" moves his aircraft.

5. Attack Phase. Player "B" executes his attacks.

6. Defensive Fire Phase. Player "A" returns fire, if able.

5.0 Players may inspect the ASP of enemy aircraft only during the Attack Phase of their own segment. In other words, a pilot is not permitted to know the position of the controls of enemy aircraft when setting his own controls (Exception: ADVANTAGE). Of course, a player is always entitled to know the altitude of enemy aircraft.

5.1 ADVANTAGE. A player can see the ASP of an enemy aircraft at times other than his own Attack Phase only if one of his aircraft "has an advantage" over it. This occurs when the enemy aircraft is within the forward 120° arc, seven-hex range and within 250m altitude of the friendly plane (i.e., within the field of fire of an imaginary F-2 in the position of the friendly plane).

5.2 If two opposing aircraft have advantage over each other, the advantage of both is cancelled.

5.3 A plane can possess the advantage regardless of its ammunition or damage status.

5.4 A player must move his non-advantaged aircraft and set their controls before looking at the ASP of disadvantaged enemy aircraft.

6.0 If the controls of an aircraft are found to be in a position other than those shown in Figure 1 (or Figure 2 if in play), the opponent may reposition them in his favor.

7.0 Optional Unexpected Maneuvers

Using the above variant, the optional Unexpected Maneuver cards (available from The Avalon Hill Game Company by mail order) can be used according to the rules supplied with them. At the start of the Movement Phase, aircraft that were attacked in the previous Attack Phase may choose to ignore their controls and go through the ritual of drawing cards and selecting a maneuver. A reasonable addition to the rules would prohibit aircraft with damaged controls (Critical Hits #5, 7, 8 or 9), dead engines or a wounded pilot from performing Unexpected Maneuvers. In addition, planes that exceed Maximum Dive +200m in the course of a Nose Dive or Spin ought to roll the Overdive Penalty.

Players may have more fun using their controls to generate Unexpected Maneuvers instead of the cards. In this form, pilots of aircraft that have been attacked may change their controls to any of the Unexpected Maneuvers shown in Figure 2, during a special "Maneuver Phase" that would follow the Defensive Fire Phase of their opponent's Turn Segment.

Each plane that attacked the maneuvering plane can attempt to follow its quarry by rolling one die. If the die roll is equal to or less than the firing range, the attacking plane may alter its controls to one of the Unexpected Maneuvers or to any position that would allow it to get a shot on the defending plane next turn. The die roll is modified as follows:

<table>
<thead>
<tr>
<th>Maneuver Schedule</th>
<th>DRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>+2</td>
</tr>
<tr>
<td>B</td>
<td>+1</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
</tr>
<tr>
<td>D</td>
<td>-1</td>
</tr>
<tr>
<td>E</td>
<td>-2</td>
</tr>
</tbody>
</table>

Ace Attacker -1

Control Effects Chart

<table>
<thead>
<tr>
<th>Maneuver Schedule</th>
<th>May NOT turn.</th>
<th>Must at least one LEFT turn and no right turns.</th>
<th>Must at least one RIGHT turn and no lef turns.</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td>o</td>
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</tbody>
</table>
If the attacker fails the die roll, he may not alter his controls and must proceed six hexes straight ahead before making any turn, just as in the card variant. Unlike the card variant, however, after performing one of the Unexpected Maneuvers, aircraft in this variant must move straight ahead to the limit of their movement points without turning.

Note that for each Unexpected Maneuver, one or both of the control counters is turned arrow-side up to denote that the control is held longer in position or more widely deviated than for the usual turn or climb. In some cases, the arrows show which way the controls are moved in sequence in a complex maneuver. For play in the game, it is sufficient to memorize the position of the counters as a simple symbol for the maneuver intended.

Some maneuvers require that the aircraft be at a certain speed to initiate the maneuver. It must attain that speed, of course, by increasing or decreasing speed by two movement points per turn—not just moving the Speed Marker back as in the case of a dive. When the maneuver is completed, the Speed Marker is immediately moved to the specific final speed. Altitude loss for the Nose Dive and/or Spin is based on the final speed. Players must use some foresight in planning for maneuvers and executing them if they are not to exceed Maximum Overdive and crash.

With the above, you have as much control of your aircraft as can be expected in any boardgame on this period to date. For the real aficionados, it should prove a challenge; to the novices, it should prove a revelation on how these old "crates" flew. But for all, it should prove fun.

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**SO THAT'S WHAT YOU'VE BEEN PLAYING**

<table>
<thead>
<tr>
<th>Titles Listed</th>
<th>Total Responses</th>
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**Rank Times**

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<th>Last Time</th>
<th>On List</th>
<th>Freq. Ratio</th>
</tr>
</thead>
<tbody>
<tr>
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<td>AH</td>
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<tr>
<td>2</td>
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<td>5</td>
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<td>1.5</td>
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<td>17</td>
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<td>Guns of August</td>
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</tbody>
</table>

Besides the usual standbys—the likes of SQUAD LEADER, THIRD REICH, B-17 and RUSSIAN CAMPAIGN—quite a few unexpected titles cropped in our regular survey of what the readership is playing. Most pleasing, since we've several fine articles on them, we were planning to print soon, are the reappearance of PANZERBLITZ and PANZER LEADER. Although over ten years old now, they obviously are still engrossing enough to keep both new and old players intrigued. SUBMARINE, due to its recent coverage, resurfaces; and the interest in WS&IM and W&AP shows how well the readership can anticipate our articles, since the last issue carried fine pieces on both of these games. The high percentage rankings for ASL and SL indicate that both systems have their hard-line adherents—a fascinating struggle for the dominance of the minds of tactical wargame fans.
For a game as simplified in concept as *VICTORY IN THE PACIFIC*—no minor achievement given its scope—it offers an amazing variety of strategies to its players. This has caused some controversy in past *GENERALS* (beginning with Vol. 14, No. 4), for suggested strategies have been many.

The rules, and format, are deceptively simple. A game that involves a hundred-odd ships, each capable of reaching across half the board, will not be as simple when strategy is considered.

The rules have been simplified to the point where decision-making, not mechanical complexity, is the order of the day. Thus, your conduct of *VITP* will be an exercise in common sense—what you do, rather than how.

The format of this article addresses *VITP* thus. True to the “Commander’s Notebook” pattern which I have used in the past, the game is addressed piecemeal as individual events or components are examined in the Critical Issues chapters. Each Critical Issue is, then, a bite-sized piece of *VITP*, for any article trying to present all possible strategies could very well be unpalatable.

CRITICAL ISSUE #1: Climb Mt. Nitaka

The Pearl Harbor Raid Force is potentially the largest (and certainly the most important) entity on Turn One. Certainly, the Imperial Japanese Navy (*IJN*, for short) will find that Raid Force organization will affect all first-turn strategy. Usually, the rest of the board gets what’s left.

Two general factors in *IJN* first-turn strategy:

First, this turn must give the *IJN* a head start on attrition, taking advantage of Allied vulnerability;

Second, the *IJN* should stake out as much territory as it can, while Allied ships are still restricted.

A third factor—points of control, or *POC*—is considered only indirectly on Turn One. The *IJN* won’t be able to reach the board-edge areas that turn. But, the main consideration is long term *POC*, and the surviving Allied fleet will determine how many *POC* they can defend.

Thus, objectives for the Raid Force:

1. Maximize damage to US ships at Pearl Harbor.
2. Guarantee *IJN* staying power in Hawaiian waters in order to follow up the raid.
3. Go the historical raid one better by sinking any US carriers offering battle, day or night.

Simple enough, in theory. However, enforcing the first objective requires the six biggest *IJN* carriers. Achievement of the second and third objectives will also require a substantial surface fleet. The appearance of one or (two US task forces, combined with the Hawaiian Islands patrol and the raid survivors, will mean that the Raid Force could face ten US cruisers, plus one or more battleships.

The strike on Battleship Row could suffer bad luck; this must be allowed for, in a game with this much dice rolling. The surviving American battleships could seek revenge in conjunction with the carriers, a factor of chance rather than *IJN* strategy.

Such luck can be nullified if the Raid Force has enough strength to face a day or night battle, with equal forces or better. Such a Raid Force will have to include the six biggest *IJN* carriers, which are needed to maximize the strike and deal with the US carrier threat. Such a Raid Force should also include the six *IJN* battlecruisers, the only battle units able to join the Raid Force, and not less than ten cruisers.

Such a Raid Force can try to pre-empt more than the US battle line. The *IJN* can well afford an even exchange of carriers on Turn One. The *IJN* has six carriers and three light carriers, with two or more *CVs* and three *CVLs* arriving in the next two turns. The US has to make five carriers (six, if you count the *Wasp* on Turn Four) last until the sixth turn. The US carriers are all large, a disadvantage in an early 1:1 tradeoff.

Finally, if the Raid Force intimidates the US carriers sufficiently, it can loiter around Hawaii and launch additional strikes under rule 18.36, fully amortizing Battleship Row. The US can contest this, but 22 *IJN* airstrike factors and 16 *IJN* surface units will find it easier to sink American ships in the open ocean.

CRITICAL ISSUE #2: The First Turn Overall

The Raid Force, which ties up most of the *IJN*, deals with one point on the map, Pearl Harbor. What of the rest of the first-turn board?

Allied deployment and movement is limited, of course. Major Allied forces appear in the Central Pacific and Indonesia, and these forces can also face *IJN* pre-emptive attacks.

Indonesia, or the East Indies, as it was known then, is the scene of one such surprise attack. Four *IJN* land-based air units (LBA) are available here. Since LBA will be unopposed in the South Pacific and Marshall Islands areas, one LBA can hold each down; Allied cruisers can only offer futile resistance. Four Japanese LBA are left to deal with Indonesia.

Only one economical strategy exists for Indonesia: Leave the four IJN LBA to eliminate the Allies and establish control. Remember that: a) *IJN* air superiority in the area will just about guarantee control, contested only by the US 5th Air Force; b) the *IJN* LBA can eliminate the two British vessels before normal combat begins under rule 18.5; and c) why give the British a chance to take some *IJN* surface units down with them?

Besides, five more Allied cruisers could intervene, a purely surface threat countered by the purely aerial LBA.

Then, there is the Central Pacific to consider. Much controversy has been inspired in this area due to *IJN* carrier placement (see the original Series Replay in Vol. 14, No. 6) and radical strategies (an article in Vol. 15, No. 2 suggested
putting 17 IJN airstrikes—factors—the four biggest carriers and Hosho (in the Central Pacific). How do we build an IJN task force in the Central Pacific between two extremes?

First, the surface units are considered, since the Series Replay commentary suggested no carrier force in the area. Battleships should not be present if US carriers can get the upper hand in daylight. The SR commentary's assumed losses of one IJN cruiser per turn (assuming only one US carrier) are valid only if Japanese battleships aren't getting shot at first.

So, surface IJN units in the Central Pacific can be battlecruisers only if enough light carriers are around to fight by day. The IJN carriers, trying to sink their American counterparts, will be sunk quickly, but the US player will have to gamble against nighttime.

A night action in the Central Pacific will be unpleasant for the "location uncertain" US task forces. Each task force has two to three cruisers (none for the Saratoga's Group Y). Two US task forces, given a reasonable IJN six unit surface fleet, will find the escort cruisers ill-matched against Japanese carriers, even if battleships are absent. An appearance by only one US task force is probably to the IJN's advantage. The IJN will find Carriers can be attacked if the escort is outnumbered numerically. The choice of which ships engage the escort is the attacker's, which could leave the Lexington, say, facing the Mutsu.

Critical Issue #1 mandated six carriers for the Raid Force. This leaves Ryujo, Zuiho, and Hosho available. Hosho is too slow for the Raid Force, leaving the other two light carriers to pose a pivotal question: Who do they reinforce? Do they go with the Raid Force, adding to its clout? A valid choice, as it allows greater damage to a helpless target. Or, those two can join Hosho in setting an ambush for US carriers.

Why such a strong IJN stance in the Central Pacific? Granted, there is a 49% chance of a US no-show. Conversely, there is a 51% chance of US forces appearing, with nothing in the rules allowing them to flee before combat, unlike the Pearl Harbor raid. Putting Hosho, Ryujo, and Zuiho into the Central Pacific means a 51% chance to shoot at, and possibly eliminate, American carriers. A pre-emptive sinking of one or two US carriers may be worth more than all of Battleship Row.

One final reason for a strong Central Pacific strategy for the IJN: Position. Japanese control of the area means that direct US raids from Pearl Harbor will be defeated. The IJN cruisers' speed is handy only in battlecruiser actions. The Raid Force itself, of course, is so powerful that it should aggressively seek any action with US forces.

The IJN battle line is consigned to the Home Islands. In this turn free cruisers to fatten up the Raid Force, which IJN battleships are unable to do. The Raid Force itself, of course, is so powerful that it should aggressively seek any action with US units off Hawaii. Certainly, the strike on Pearl will be the largest possible.

The Strong Raid plan shows how a beefed-up Raid Force can divert IJN dispositions elsewhere, mainly because of the switch of Zuiho and Ryujo. Unfortunately, the Raid Force is so formidable that the US player will probably use the "escape clause" in rule 18.35 and leave Hawaii. Result: Redundant IJN forces in Hawaii and a weak one off Midway with probable loss of the latter area.

The third plan is a compromise in more than one sense of the word. Three airstrike factors go to the Central Pacific (Hosho and either of the remaining light carriers will do) accompanied by cruisers, as a day action could be too risky for IJN battle units. The Raid Force should be able to take out a US task force, or maybe two, but the risks are manifest. The first IJN airstrike could be the last.

Another problem with the Compromise plan is the addition of one light carrier to the Raid Force, oddly enough. This two factor reinforcement might not contribute anything tangible to the Pearl Harbor strike. This epitomizes the problems with the Compromise plan, which itself is presented for the sake of argument. The risks in the Central Pacific could well be resolved in favor of a more decisive strategy.

Common to all three plans is the LBA and Aleutians deployment discussed in Critical Issue #3. The presence of LBA in Indonesia means that, in any first turn strategy, the IJN must look to the Central Pacific for a third line of attack.

CRITICAL ISSUE #5: Another View

Besides the three plans discussed in Critical Issue #4, a fourth plan is worth considering. This plan, "Air Power in the Pacific," appeared in Vol.
CRITICAL ISSUE #6: Turn Two

The second turn sees Allied forces vastly outnumbered. The Allies do have some advantages, though, in this first turn of unencumbered movement. Thanks to the turn sequence, the Allied player need not lose any raiding ships unless intended to stand up to superior enemy raid or patrol forces. Such temptations include a last ditch defense of Hawaii, Ceylon, or Samoa, but the Allies could end the game.

Still, if the Allied player wants to be able to release the tension of fighting or running, then Allied carriers and battleships will need to come to the rescue. Allied raiders move last and, although not able to sink battleships, can still be worth it. The Allied player need not lose any raiding ships unless goodness above all else, remember that the turn sequence usually allows the Allied player to fight where he chooses, and not where it suits the enemy.

Three ports are critical on Turn Two. Truk, of course, is adjacent to three areas at once, and thus center of the board. Truk is a central position dominating scattered Allied enclaves all around the board-edge, compensating the IJN somewhat for its turn sequence disadvantage. Whether operating as scattered forces, or en masse, the IJN should base almost exclusively at Truk.

Ceylon can serve as an excellent US base, and as an alternative to a threatened Pearl Harbor. The main advantage: If the IJN can be pushed out of Indonesia, Australia can be the springboard for the US part of the effort. Loss of IJN control in Indonesia means that, besides a major loss of the IJN, the IJN siege of Singapore is broken. The Relief of Singapore in turn can establish the Royal Navy a forward base.

Further, Australia can provide a better base for American battling forces. Slow as they are, US battle units can raid Indonesia or the South Pacific from Australia. Rather than basing at Pearl, among less lucrative areas, Australia puts the US battle line squarely into the fight, able to contest large POC areas with the Tokyo Express.

Samoan may serve as an alternative US base, if the US has to withdraw from Pearl in turn. Japan-controlled islands and the Coral Sea easily, Australia is still preferable for combined operations with the British—especially for defending Ceylon—but carrier task forces in Samoa can reach all the way from Ceylon to the North and Central Pacific. A
CRITICAL ISSUE #9: Amphibious Units

Neither the rules nor the official AH Question Box rulings on VITP (see Vol. 14, No. 4 and Vol. 17, No. 4) fully address the issue of marine units in combat to my satisfaction. The following official rulings can be used, if desired:

Q. Can a marine unit go to any friendly major (red) port at turn's end?
A. Yes. See rule 13.32 and section 10 of the rules. Invasion is not required, as long as the port or base being entered is friendly.

Q. Can Marine (amphibious) units be raided in a port or base?
A. Yes, and thanks to rule 9.4, they do not take double damage. Damage beyond their armor factor sinks them wherever they are. NOTE: Rule 22.3 (optional rules) damage should be used for this kind of raiding, if this ruling is used. This means that carriers can actively support a landing under rule 9.3.

Q. Can subs attack amphibious units at the end of a round, after the landing?
A. Yes. That would be the sub's one attack that turn, under rule 7.91.

Q. Can amphibious units control a sea area?
A. No.

CRITICAL ISSUE #8: The Yokosuka Force

Turn Two: The Yokosuka Marines put out from Japan. With this one unit goes much of the JNP prospects for victory or defeat; the Yokosuka unit can define crucial positions on the board. Its possible missions:

1. Take Midway: This means that Allied LBA units will be unable to control the Central Pacific on Turn Two. A first Midway will ensure that JNP air units will use it instead, and their presence will help protect Japan and the Marianas from US raids, by closing the Central Pacific as an avenue of approach.

2. Take the Philippines: True, this base could fall at the end of Turn Two, through simple control of the surrounding areas. However, it is also true that the Allied player can use the Philippines to introduce LBA units into the Marianas. Such a tactic, whatever the consequences elsewhere, will tie up JNP LBA or carrier units. At worst, JNP surface patrols could be driven out, losing POC and leaving the Philippines in US hands. A quick JNP landing on Turn One, from either direction, will put a stop to that.

3. Take Dutch Harbor: This will negate Allied air control over the North Pacific, and allow the JNP to cop some POC later if a LBA unit can be spared. Dutch Harbor also helps to secure the northern end of the Japanese defense perimeter.

4. Proceed to Truk: From there, the Yokosuka unit can make a second turn grab at such useful bases as Guadalcanal, New Hebrides, Port Moresby, or Johnston Island. The POC, and the Philippines, and quindi would have to fall under naval control, or the appearance of the Sasebo unit, especially at Midway.

5. Proceed to Saigon: This will allow a Turn Two threat to the Andaman Islands, Port Moresby, and Guadalcanal, any of which would extend JNP air control into lucrative areas. Saigon is not as convenient to the eastern side of the board, however.

6. Discarded Alternatives: First turn invasion of Attu or Loe would not be profitable, at least, not in preference to the first five alternatives. Both Loe and Attu are apt to fall by other means.

The Sasebo and Kure units, if they appear in Japan, should work on the same missions as the Yokosuka unit. Completion of these missions would have obvious strategic importance.

A final note: Returning LBA units can be reintroduced in any major port. Placement of revived amphibious units in Truk, a favored tactic, is advised for obvious reasons.
CRITICAL ISSUE #9A: A Point of Order

The first turn attack on Pearl Harbor is of obvious importance. Beyond the threat to Battleship Row, the IJN can try for a pre-emptive strike on the US carrier task forces. These task forces, under the sequence described in rule 18, are later turned on the first two air strikes on Pearl Harbor.

Now comes a critical issue, so to speak: What of a direct clash between Japanese and American carriers off Hawaii (Halsey vs. Nagumo)? Rule 18.36 makes direct mention of renewed attacks on Pearl Harbor. The rules do discuss pursuits, but not both.

Q. Can the IJN Raid Force engage US units at sea in the Hawaiian Islands?
A. Yes. If the US does not withdraw them under rule 18.35, the IJN may attack the Indianapolis, Minnesotap, surviving US air units at sea, and Groups W, X, Y, and Z. The IJN is limited to two combat rounds (which can be day or night under rules 7.3–7.34) and must retreat after the second round. Attacks "at sea" are performed instead of against Pearl; the IJN may not attack units in port (except 7th AF) as long as US ships are at sea in the Hawaiian Islands area. Further, the IJN may not pursue retreating units under rule 18.36, due to the same "fuel restrictions."

Q. Optional Rule 25 (Vol. 14, No. 4) limited the IJN Raid Force to 10 ships, and required the IJN to select their third round targets before the US rolled for his "location uncertain" groups. May this be used in conjunction with the above ruling?
A. Absolutely not! Use Optional Rule 25 or these two rulings, but not both.

CRITICAL ISSUE #10: More Questions and Answers

Certain official AH rulings (Vol. 14, No. 4 and Vol. 17, No. 4) bear repeating:

Q. What happens when a marine unit lands on a base that is surrounded by enemy controlled sea areas at the end of the turn and was surrounded by enemy sea areas on the previous turn?
A. When the marine unit lands, it captures the island; thus eliminating it as a base for enemy land based air; however, (f) at the end of the turn the enemy has had it surrounded for two turns, the enemy immediately captures it back.

This means that slipping a marine unit into Midway, unescorted, may work if it is only opposed by LBA. Taking the island in such an instance would remove the sole air base for the area and end enemy control. But, if by a fluke you sneak it past a patrolling enemy fleet, you've achieved nothing, and this ruling closed a loophole big enough for the New Jersey to steam through. So: Either you defeat the defending fleet, or your new forward outpost gets the Krakatoa treatment.

Q. What happens when a "disabled" is rolled against a target during the initial surprise attacks?
A. Nothing. The surprise attacks are "air raids" (even in Indonesia), and during air raids "disabled" results are ignored. Notice that any ship that survives the surprise attack in Indonesia must go through one round of normal combat before they can get away.

And that, fellow midshipmen, is why four Japanese LBA units will suffice to finish what the Bismarck started.

Q. Is it legal to choose a "day action" even when you have no air strikes in the sea area, just to avoid enemy gunnery attacks?
A. Yes—you may always choose day or night actions, regardless of what forces you have in the area.

A good reason why a lone marine unit, by landing at night can defeat air units in such an area, say, as the North Pacific.

Q. Suppose I have carriers in a sea area, but I cannot make any air raids because there are no enemy ships in the ports in that area. Can I make an air raid attack against them?
A. Not if the fighting in that sea area has already been resolved. The Japanese player chooses the order in which battles are fought; if he chooses to resolve the fighting in an area (even if he has no ships or units there), then the units in that sea area must make any air raids there as soon as the fighting is resolved. If he ignores the units that lose the chance to make air raids for the rest of that turn.

The US may have a patent advantage, thanks to broken codes and the sixth inning surge; still, the IJN can save itself much grief by exploiting this pattern, especially if American task forces are loitering in one of the three areas bordering Truk.

Q. In rule 7.73, isn't a ship's gunnery factor reduced to 1/2 when it takes damage equal to its armor factor?
A. Yes! NOT its armor factor; this was a typo.

Q. Can the Japanese ships making the Pearl Harbor surprise attack control the Hawaiian Islands on turn 1?
A. NO. They are "raiding" ships, since they must retreat before the end of the turn.

Q. On turn 1, when the Allied survivors move into the Hawaiian Islands, and the Allied LOCATION UNCERTAIN groups are rolled for, can these ships then move into other sea areas that same turn?
A. NO! They must remain where they are, or retreat at the appropriate time.

Q. Do these ships—the survivors and the LOCATIONS UNCERTAIN groups—count for control?
A. Yes. They are "raiding" ships and control the Hawaiian Islands (if any) and Central Pacific if they remain at sea at the end of the turn.

Which tends to pull the first turn into patterns started by the Surprise Attack rules, patterns the IJN can exploit. These rulings illustrate, among other things, why the IJN should come to Pearl in force and hang around after the initial raid, and why the IJN can blitz the carrier groups as well, particularly off Midway.

Q. When an airstrike attack, do all the factors (of a ship) attack the same target (like gunnery factors), or does each factor attack a separate target (as in WAR AT SEAFIT)?
A. All of the factors attack the same target, like a gunnery attack.

This ruling is a considerable help on Turn One, where a large number of IJN cruisers (say, off Midway) can take on a US carrier task force and make the US player think twice about a night action. Each US carrier could only sink one cruiser at a time.

Q. Suppose both Japanese and Allies have a marine unit in an area, and there is only one Allied base there; does the Japanese unit land first, thus disabling Allied air units in that area, or do the Allies keep the base?
A. The Japanese capture the base first, and all Allied air must leave—then the Allies can recapture the base—but the air units are still gone.

Another illustration discouraging reliance on LBA units, at least to control areas. This can be allowed for. Caveat aviator—let the flier beware.

Q. Rule 7.72 states: "A ship's gunnery factor loses the attack bonus if the ship has any damage." Does a damaged CV lose its airstrike attack bonus?
A. No.

A sharp tactical ruling. This is an important consideration when choosing targets among carriers, LBA, and surface units. A carrier with an enhanced airstrike factor will be deadly until it takes its last hit.

Q. Rule 13.1 says amphibious units "move like ships except they can always move two sea areas and they never make speed rolls." Do amphibious units have to stop on entering an enemy controlled sea area?
A. Yes. The intent of 13.1 is to exempt amphibious units from speed rolls.

This ruling has long term, strategic import. IJN control of the Hawaiian Islands area on Turn Two will mean that the third turn US reinforcements (the 1st and 2nd Marines among them) will be unable to move out of the area. The IJN may not be able to take Pearl Harbor, but they can very well destroy these two Marine units if they're hobbled by control markers. An island hop through Midway of the Marshalls to Saipan over two turns, which would put US LBA in the IJN rear, would be stopped. For that matter, any US offensive would be delayed with the 1st and 2nd Marines out of action.

CRITICAL ISSUE #11: The Hickam-Clark Gambit
Within 24 hours of the crippling of the Pacific

CHART 3. THE WESTERN STRATEGY
fleet, Japanese aircraft had also raided Clark Field in the Philippines, and Hickam Field on Oahu. However, the Air Corps of the box even before the first inning. Can this be duplicated in the game? For practical purposes, no.

The rules are explicit, if you look at 12.22 and 12.23. Carrier factors (circled ones, at that) could be better spent at full value against surface ships. Any attacks on the 7th AF would have only a 16% chance of damaging it, with no combat bonus.

The same is true of the 5th AF in Indonesia. If the British already have gone to Davy Jones, and there's nothing better to do, go for Clark Field. Otherwise, be assured that 5th AF isn't about to try past the first combat round, if the British can't.

True, 7th AF at Pearl could cause some loss to the Raid Force. However, if the surviving battleships and task forces retreat from the Hawaiian Islands, 7th AF will have to do likewise under rules 8.11 and 8.21. By themselves, they could not stop the massacre of the US carriers off Hawaii (worth the reciprocal risk to IJN carriers), nor could the 7th AF avoid being shot down in turn by 22+ carrier factors, P-36s and B-18s would not have fared well against Nagumo's massed Zeros.

In the long term, these same rules will help the USAAF control front line areas. LBA units can be replaced, whereas sunken carriers are gone for good; the latter are also easier to sink.

On Turn One, it's simply not worthwhile for the IJN to attack the 5th and 7th AF, when more lucrative targets are parading like ducks in a shooting gallery. I consider this one of the few faults in an otherwise excellent design.

CRITICAL ISSUE #12: The Asiatic Fleet

Turn One: Peaceful patrol requirements (i.e. Allied forces to rigid patterns in the Pacific, particularly the US carrier task forces. Five cruisers, however, may react to Japanese movements and take on the Imperial fleet: HMS Exeter, HMS Duruyier, HMAS Australia, HMAS Canberra, USS Houston.

So what? Maybe nothing. Five 1-75s aren't terribly impressive. And, they can't wrest area control from LBA—not by themselves. But the Houston, Exeter, and Duruyier can raid into the Marianas or Japanese Islands after IJN raid forces have already deployed. The Allies still have the turn sequence advantage.

All five Allied cruisers can join the British in Indonesia and challenge IJN naval units. An IJN force with few escorts could find carrier or marine units unexpectedly menaced.

Of course, the presence of enemy air units could render such a move unlikely. If nothing else, the five cruisers can spend the turn in the Indian Ocean (out of danger) and scatter to major ports from there. They could also patrol the South Pacific in the off chance the IJN forgets to post a LBA unit there. Or . . .

These five cruisers are the only freedom of action available to the Allies on Turn One. This need not be meaningless.

CRITICAL ISSUE #13: Lae

Let's take it for granted that Japan now holds the outer back yard, where all the points are. And, US Navy, presents the IJN with a major threat in its rear areas and contest forward ones. Turn Five will mark the last turn before the Essex class arrives; attrition strategies will become feasible. Turn Three, then, means that the US can plan ahead and start sowing.

Turn Three also means that the 1st and 2nd Marines arrive. Assuming that they can get out of the Hawaiian Islands (no IJN control there), now what? Dutch Harbur, Attu, Midway, and the Marshalls are not appetizing prospects—especially the latter. The Texan and the LBA regardless of who holds Mokoloup or Kwajalein.

Which brings us to the areas south of Truk. Three bases offer tremendous potential. New Hebrides can serve as an excellent halfway point for US cruiser/carrier task forces based there; in IJN hands, New Hebrides will permit great mischief.

Close by is Guadalcanal. Allied possession of this base means that the USAAF can be infiltrated into the South Pacific. From Guadalcanal, the Allies can contest the South Pacific, and cover the next step: invasion of the IJN.

The IJN forces are absent from, or driven from, the South Pacific on Turn Four, the 1st or 2nd Marines (moved to Australia, Samoa, or New Hebrides on the previous turn) can invade Lae. Lae won't afford removal of IJN air or naval units from the South Pacific, for Truk adjudges this area, as well. Still, Lae offers two great advantages:

1. Allied air units can be introduced into Indonesia, to take more POC from the enemy beyond those lost in the South Pacific.

2. US naval units, basing in Lae after action in the South Pacific, are at Indonesia's door, and two are from Japan as well. Even the slowest remnants of the Pearl Harbor forces can reach Indonesia even from Japan from Lae, depending on control markers.

Maybe this won't guarantee Allied raids into Indonesia or the Japanese Islands on Turn Five, but seizure of Lae is a start, a head start on the inevitable. Putting the slow US battleships this far forward, where they can link up with the Royal Navy, presents the IJN with a major threat in its back yard, where all the points are. And, US carrier/cruiser forces can reach out from there (or Samoa) in the other direction, towards Hawaii and other points across the perimeter.

In short, Allied air and Marine units can lever the IJN out of the southern part of the board, and Lae—after Guadalcanal—is the fulcrum.

CRITICAL ISSUE #14: Sic Transit Britannia

"This is London . . ."

The city is quiet tonight as Lord Beaverbrook, Britain's third Prime Minister in 38 months of war, takes office. News from the Near East and Far East continues to trickle in, all of it grim.

"Rommel's forces entered Cairo yesterday, crossing the Nile virtually unopposed. Since the 8th Army's supply line was cut in the Indian Ocean, and its resulting defeat at El Alamein, British resistance in Egypt has collapsed."

Nothing has been heard from the Persian Gulf Command, and from the Cape, where Teltser told of an uprising of fighters across Iran, then silence. This Lend Lease lifeline to Russia, already cut by the Japanese, is no more.

"The revolution in India, sparked by the surrender of Ceylon last month, has now spread to all corners of that subcontinent. No government has emerged from the chaos, but one fact has been confirmed. The US Navy has again denied that it is seeking a separate peace with the Axis. In today's speech in Capetown, General Smuts repeated his appeal for American troops, noting that his country stands alone against Japan."

"Reports of American victories in the western Pacific, and the unexpected arrival of General Eisenhower's forces, have cheered the British people in these last weeks. It appears that, although there may always be an England, the British Empire is now history."

After the first turn is over, the IJN is faced with four general strategies:

I. Head East: Take Pearl Harbor (as discussed in Critical Issue #7).

II. Head South: Take Australia. This means getting control of both the Coral Sea and the Indian Ocean on the second and third turns. Weak Allied air forces would be sorely tested.

The key to this strategy is control of the Coral Sea. If you take Truk, then we will keep the US from the Indian Ocean, unless American forces redeploy to Australia.

Such an IJN strategy would be signalled by patrols in the Indian Ocean and the Coral Sea. The IJN would be split for two turns, and Allied raiding would be at a low point. Furthermore, the IJN will need reinforcement by LBA, requiring a second turn landing by Yokosuka (from Truk) at Guadalcanal or Port Moresby.

Sure, the fall of Australia would net the IJN a large share of POC, and lose up the Allied position besides. But taking Australia is a long shot, and the IJN would be gambling virtually all of its initiative and material in this one theater.

III. Head Southeast: Take Samoa. Minimal prospects with maximum risks, for the same reasons as the Pearl Harbor or Australia strategies.

IV. Stonewall It: Another strategy is to nail down the outer defensive perimeter, controlling the Aleutians, the Central Pacific, the Marshalls, the South Pacific, and Indonesia on Turn Two and use them as a barrier to Allied probes. The IJN, while strong, can continue to raid outside this perimeter.

The IJN, inside this perimeter, will already have extensive POC. With most forces on raid status, the IJN can judge Allied patrol and air dispositions and control F-POC lines (cutting Allied POC). Toned down versions of the above strategies, i.e., raids and air attacks on Pearl or other high POC areas, should try to compel the US to use its troops for the Mandate, the Coral Sea, or Hawaii. The result would often be a decimation of the US fleet when at its weakest, or, if no battle is offered, the IJN will quickly reach its 20 POC maximum.

V. Head West: Aim: Destruction of the British fleet with overwhelming air and surface forces, and capture of Ceylon.

Chart 3 shows one way of attaining this. The distances involved will require basing slower units, and designing patrol tactics. Should Ceylon fall, the IJN can leave minimal patrols for the Bay of Bengal, the Indian Ocean, and Indonesia; a threat to their rear will have been removed.

This strategy should not be attempted if, on Turn One:

1. Either Indonesia or the Central Pacific are not under IJN control by turn's end. Both are critical to the operation.

2. Four or more US battleships are still afloat and mobile.

3. Four or more US carriers appear on board on Turn One. These and the battleships could intervene from Australia.

The tactical refinements can be worked out by the players (who, I'm sure, are already getting some ideas). The pros and cons are worth contemplating, however.

PRO: The Royal Navy is wiped out. The IJN has a tremendous air advantage over the RN; one day round would wipe out or disable the I-class carriers, with enough Zeros left for LBA. A night action, with the IJN preponderance in numbers, would see heavy gunnery damage to the RN surface AND carrier units.

CON: US intervention from Australia, if strong enough, would combine American carriers with British battleships and turn the strategy into a bloody shambles. A strong Pearl Harbor strike,
Although the Japanese must redeploy first, the US, faced with threats to Pearl and Samoa, might especially if IJN air units patrol Indonesia in force. Would not be provided without risk to them, to go. American help, given the preconditions, of Indonesia and the Bay of Bengal will be easier with the US far off; even control of the Indian Ocean will be found in these areas, the latter two especially, will be a bonus. Indonesia was never really endangered by the RN, which cancels itself out on Twos Four and Five due to withdrawals. This strategy allows the RN to inflict the IJN losses and play an uncustomed part in VITT, while the IJN would eliminate a force due to leave the board anyway. Allied countermeasures are minimal. The IJN can trap the RN easily, as it has nowhere to go. American help, given the preconditions, would not be provided without risk to them, especially if IJN air units patrol Indonesia in force. Although the Japanese must redeploy first, the US, faced with threats to Pearl and Samoa, might not redeploy to Australia, realizing too late the import of IJN dispositions in Saigon.

CON: Allied LBA can easily appear on Turn Three. A determined IJN player can still take Ceylon, but will tie up virtually all of Japan’s carriers to ensure this, and lose some of them in the process.

PRO: Permanent removal of the RN, except for the Victorious, and capture of Ceylon and the Andaman Islands, will secure the IJN rear. Control of Indonesia and the Bay of Bengal will be easier with the US far off; even control of the Indian Ocean will be found in these areas, the latter two especially, will be a bonus.

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Central positioning in Truk will maximize this. These ships will be in trouble later against newer US ships, but there isn't much choice in this. The **Fuso** class is there in force because the other classes generally are too few or fragile to form the line of battle.

**Haruna** (BC). Note the choice of term for these four game-starters. They are the only ones of the type to make the list. These are the battle cruisers. The Rank. Force (the other battle units can't, and should handle other first turn missions). The Haruna class can also keep up with most carrier task forces after that. Their speed, their main advantage, allows them extended operation in the face of much slower Allied battleships early on, while their gunnery factor is standard for early war battle units on both sides. Their weakness is their armored factor, which makes them short lived in a major battle. Still, their speed and obvious role, that of carrier escort, makes this risk hard to avoid. It is suggested that other battle classes carry the escort mission for short cruises. The best situation for battle cruiser deployment is in raid forces, at long distances, particularly against weak Allied (cruiser) opposition.

**Ashigara** (CA). These and all IJN cruiser units arrive at start with no replacements. Main advantage of all cruiser classes is gunnery factor. The **Ashigara** class can easily make the IJN cruiser force (not just the eight ships of the **Ashigara** class) particularly nasty en masse. Thus, this class is at its best as a unified escort force. Five **Ashigara** class are more than a match for any Allied battleship, but IJN cruisers are best used against their US counterparts. A one-to-one exchange of gunnery beta strength values (cruiser class) is particularly bad for the Allies, due to the enhanced gunnery factors of the former. Subsequent rounds would see more and more IJN cruisers able to help the IJN battle lines. And, in large numbers, IJN cruisers can take on the Allied battle line while any excess battleships go for the carriers. The manned IJN cruiser force can help tilt the balance of surface forces against their US counterparts (see rule 7.424), and damage the US cruiser fleet as well. **Kumano** (CA). Six ships, the fastest surface units in the game. That is their distinct advantage over all other cruisers, in that they can retreat from any Allied units without being pursued. This class, then, is the best for patrolling, especially in isolated areas, as these ships have a better (though not overwhelming) chance of survival. Such patrols, though, should be made as seldom as possible, as carrier escort has a higher priority. As with the **Ashigara** class, these ships should oppose enemy cruisers in a general engagement. If caught alone, these cruisers should aim for the biggest surface units, as the combat bonus means a chance of inflicting substantial damage.

**Mutsu** (BB). Two ships, available at start. The gunnery and armor factors are larger than many enemy battle units; otherwise, this class is a match for later US dreadnoughts. Speed is a disadvantage for all IJN game starting battleships, both in terms of strategy and, tactically, pursuing (or being pursued by) American forces. These ships may be of some use in an independent role, but they are exactly average for a small carrier task force (something that cannot be said for the **Haruna** and **Fuso** classes). Best role for this class is with the main escort of a short range, large task force in conjunction with the **Fuso** class.

**Fuso** (BB). Four ships, all available at start. Gunnery and armor factors are extremely average, for battle cruisers early in the game. Speed is a disadvantage in combined operations, but is better than most early Allied battleships. Another advantage is the size of the **Fuso** class, which, combined with the **Mutsu** class, forms a compatible, formidable force against the fragmented Allied surface cruiser line early on.
British battleships, which are needed for escort purposes. The RN is further hobbed by restriction to Ceylon (f ight Singapore, Tokyo, or Hong Kong).

Indomitable (CV). Four ships, two arriving Turn Two, one on Turn Three, and two leaving on Turn Four; Victorious appears at Pearl on Turn Five. The latter is the only RN unit able to operate detached, but leaves on the next up. Chief limitation on the class; one of its main missions, the attack on a coast, is the area strike force, making it tactically inferior to the IJA's LFA. I class speed gets them too close to the enemy (including Buka, Guadalcanal, or Toa). One tries to close, and it will be a matter of chance. This class is strongest on Turn Four, but will be gone on Turn Seven unless the Allies put any earlier action. These units are the RN's only offensive weaponry; without them, the RN is left to both of Bengal patrol or support of a chance US task force.

Hermes (CVL). One ship, available at start. Slow speed is a particular drawback on a British ship, leaving it with only a 50-50 chance to reach Ceylon. This unit is probably best used to support one of the carriers. Prince of Wales (BB). Best of the British fleet in VVTP, and the first to leave. If it survives the first turn somehow, it would be an excellent escort for the class carrier. The speed and armor factors would also be valuable, if...

Repulse (BC). Again, a speedy companion for the class CVs, if it survives the first turn. Armor and gunnery factors are unusually weak for a battle unit, by VVTP standards. Revenge (BB). Two ships, appearing singly on Turn Two and Three; both are removed at the end of Turn Four. Gunny and armor factors make these ships good counterparts to the Fuso class, if you ignore range problems. The speed factor is a drawback but has to suffice if the RN wishes to attack Ceylon. These ships are necessary escorts as British cruisers are few.

Revenge (BB). Four ships, one appearing at start, three on Turn Two; two leave with the Warspite class on Turn Three, and three more leave on Turn Seven. Again, gunny and armor factors make a match for the Fuso class; if you otherwise ignore range problems. The speed factor is a drawback but has to suffice if the RN wishes to attack Ceylon. These ships are necessary escorts as British cruisers are few.

Wasp (CV): One ship, arriving Turn Four, and a supplementalitted with the Fuso class at some advantage to the uniquely slow speed, which won't prevent a three area raid along the outer tier, but will make it significant. Still, the Wasp air attack can make it a match for the Fiji class carrier and the Allies need the help they can get when the Wasp finally arrives from the Atlantic.

Essex (CV): Ten ships; three arriving Turn Six, four on Turn Seven, one on Turn Eight, and two on Turn Nine. Arrival of the Essex class represents the turning point in the game; indeed, the Essex, Independence, and surviving prewar classes could very well crush the IJa unless enemy units are at hand. The objective of the Essex class should be to destroy the AFM enemy fighter planes; secondarily, to defend patrols and invasions into IJa territory. Marine units should be established LBA bases to augment the Essex class and provide the fleet with forward bases.

Independence (CVL): Nine ships; five arriving Turn Six, three on Turn Seven, one on Turn Eight, and two on Turn Nine. The primary mission of the Independence class is to engage the Essex class, and also present a further dispersion of enemy LBA units at two ASF per ship. This class is equal to any enemy CVL, and is usually much better.

Azurina (BB): Six ships; four appear on Battleship Row at Pearl, two more appear on Turn Nine. The slow battleship will find their lack of speed a disadvantage; unless they can base within two areas of a target, they will be unlikely to escape carrier/cruiser groups. The slow battleship can be moved to some help, as they can both threaten Ceylon and the South Pacific. The Arizona class is useful tactically: a) reinforcing the escort numerically, protecting the carrier; and b) attritioning any enemy that it can. In regard, the slow battleships are more expendable than cruisers.

California (BB): Five ships; two on Battleship Row, two more on Turn Two, one on Turn Three. This class is comparable to the Arizona class in characteristics and employment, though the armor factor is superior to the Fuso and Haruna classes. Besides, this class and the other slow (speed three) battleships will find New Hebrides, Guadalcanal, or Laos to be excellent areas of opportunity. Maryland (BB): Two ships; two on Armada Row, with a third arriving Turn Three. This class has the same speed and deployment considerations as the Arizona and California classes. The armor and gunnery factors are strong advantages and can stand up to anything except the Musashi class. The US player should try to get this and all other slow battleship classes into battle as often as possible, as their speed will limit their opportunities.

North Carolina (BB): Two ships; arriving singly on Turn Three and Four. The US player should try to get this and all other slow battleship classes into battle as often as possible, as their speed will limit their opportunities.

South Dakota (BB): Four ships; two arrive Turn Four, one each over the next two turns. This class makes up the main US battle line prior to the appearance of the Iowa class. The South Dakota class and all other Iowa-like classes are the best units, part of a general fleet escort into enemy waters. The two classes are identical, except for the former class' circled gunnery factor, making them a match even for the Musashi class.

Iowa (BB): Four ships; two each on the sixth and seventh turns. The slowest class in the game, capable of unquestioned three area raids, the Iowa class can keep up with CVCA forces, which is exactly what it should do. This class' outstanding firepower, armor, and speed make it too valuable for anything other than the largest offensive. The Iowa class is admirably equipped to engage the enemy battle line; all things considered, the best in the game.

Alaska (CB): This one last turn arrival makes its speed essential to the action from Pearl. The armor factor is tolerable, while the gunnery factor is weak in a turn where annihilation of IJa is the aim. At the starting point in the game, some US ships are available that is little more than a face in the crowd. Still, it can get to the action, while its companions (two Arizona class battleships) might not.

Exeter (CA). Five VVTP-identical British cruisers; one at start, two each appearing on Turn Two and Four. Their sole advantage is their ability to keep up with the carriers; they're otherwise inferior to their IJa counterparts and unable to raid at three areas' distance. Because of their speed, the RN cruisers should serve as escorts to the carriers, rather than on patrol. The Exeter class is one of the only British units capable of moving on the first turn (see Critical Issue #12), and if not offensively employed it should patrol the Indian Ocean and return to Ceylon, rather than share the Prince of Wales' fate. The better part of valor, what?

Australia (CA). Two Australian cruisers, plus the identical HMNS De Ruyter; all available Turn One. They share the same characteristics as the Exeter class, except for their ability to use any friendly port. Their range limitations (two areas) means that they can't accompany the USN at long ranges, but they can support American forces within a two area distance, and their numbers could help the escorts defend the
carriers in a night action. Another use for these three is rear-area patrol, freeing Allied air units to contend for ground. One advantage unique to these Allied cruisers is their ability to base in Ceylon; however, they can support the RN from Australia just as well.

_Baltimore_ (CA): Four ships, arriving two each on Turn Six and Seven. This class has one minor advantage in its armor factor; otherwise, the _Baltimore_ class is still inferior to the _Astron_ class. Worse, this class can't make up for an early loss of US cruisers. The speed of this and all American cruisers allows them to escort the carriers, their paramount duty.

_Astron_ (CA): Fifteen identical ships start the game, with a 16th arriving on Turn Five. Allied LBA are individually inferior to their enemy counterparts, but superior in overall quantity and factoring. Their tactical and patrol advantages are identical to enemy LBA units (see Critical Issue #15 for Allied LBA interaction with their enemy counterparts). A critical advantage to Allied LBA is the fact that retreating LBA units aren't subject to pursuit.

Air units are best placed, from the Allied viewpoint, to patrol as many areas as possible, freeing Allied cruisers to form carrier task forces. In later turns, the air units can contest forward areas and leave rear areas to the odd surface unit.

Placement considerations for Allied LBA: One unit won't face a major offensive, but can take a quick shot at a carrier. Two units will pose a risk to a carrier force, if their shooting to the bitter end, as their loss would be worthwhile if they take down a carrier. Three or four LBA will generally hold an area against most seagoing opposition.

Till Turn Five, the LBA, leapingfrogging with the Marines, should be the vanguard of the Allied offensive; the carriers are too valuable to risk. Critical Issue #13 shows how US air and Marine units can lever the enemy out of vital areas in the face of naval superiority, especially if a massed US carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to Lae, covered by carrier task force is posed as a threat. Marines can advance to Guadalcanal, thence to L
ASL finally gives the heavy tanks of WW2 their historical due. A T-34 commander quickly learned that a Tiger was not just difficult to kill with a front shot—barraging a critical hit, it was impossible. The see-saw of technological advances allowed many tanks brief stardom followed by a lingering fall into obscurity. For those players given PzKw IIs versus KV’s, or T-34s against PzKw VIs (or even Shermans against JgPz Vls), the task seems daunting. As we worked at rebalancing “The Paw of the Tiger” it became evident that a Clinic might be in order as to how light tanks take on their heavier brethren.

OK, you’ve just sat down with a horde of light tanks and the other guy gets the big boomers. What do you do? The most important consideration has to be, “What must I do to win the scenario?” If you win without fighting, then that’s usually your best bet. If you must fight to win, then must you kill, or can you just immobilize? An immobilized tank is often “mission-killed” regardless of how potent its armor and gun. If you must fight and must kill, do you have non-armor resources that can do the job better than your tanks? Infantry, even without special SWs, are potent tank killers in dense terrain.

However, for those who must fight, must kill, and must use armor, then this article discusses the most common tactical tricks that you can use when your side has armor that is easily penetrated by enemy guns and your main guns cannot kill the enemy frontally.

The most important and frequently wasted tool is time. All too often we see ten-turn scenarios ending on Turn 6. If a scenario gives you ten turns, plan on using them all. If your opponent holds his fire till the end, then don’t move the last few vehicles. If he starts to shoot early, then start to scoot forward. Remember that the more shots he takes, the more likely he is to break a gun.

Motion status at the end of a turn decreases vulnerability and increases movement in the next MPH. If you can’t shoot it out, then keep moving. Dazzle him with your footwork. Don’t forget to turn in place if you must simply stay in motion.

The use of cover is critical. Look for walls (HD), gullies (usually out of LOS while therein), and movement through woods and VBM to decrease exposure. Use smoke shells and vehicular smoke dispensers to reduce visibility. Remember that if you throw a particularly vulnerable AFV forward and it burns, you can use its smoky pall to hide behind.

Risk ESB routinely but sparingly. If the choice is between staying in the open or getting behind cover, then always go for the extra movement. Additionally, the judicious use of ESB makes your opponent calculate what he must do if you move 125% of normal. Nice for disconcerting him.

Don’t hesitate to expose your rear if your frontal armor is nearly worthless anyway. Better to move along briskly rather than depend on marginally better armor protection.

If the enemy moves toward you and you are stopped, don’t shoot—get into motion (D2.401). If you fail, there is time enough for desperate shooting. If you have hordes of AFVs, then use “stop-and-go” fire (“Gun Duels”) and pray for a critical hit. Sure it’s less than a 3% chance, but for every couple of gun malfunctions, the gods of chance owe you a CH. Even better is that “stop-and-go” fire may preserve your ROF while Advancing Fire is limited to one shot. Better still is bailing your opponent into taking lousy shots as you move from cover, fire (“come on, snake eyes”) and then zip back into cover.

Use HE if need be. High explosive is often great against CE AFVs (don’t forget to use your MGs too) or detrack the behemoths. Occasionally HE will be strong enough to allow real shock effect. Use special ammo early. Like as not, most vehicles won’t survive, so best use that APCR/HEAT while you’ve got the chance.

When you do finally close in for the kill, maximize your chances whenever possible. This may mean moving through the enemy AFV’s hex in order to get a rear shot. It’s a great way to disconcert the enemy player and increase your killing power at the same time. Get adjacent and use Intensive Fire in addition to Gun Duels. We try to get four light tanks to surround one “biggie”. This gives you the maximum TH and TK modifiers, so you may as well go for broke.

If you are “brewed up” on your approach, roll for CS. Two or three crews can often end up running a vehicle. The best you can hope for is to divert the enemy’s attention, but there is always the chance of a berserker or a hero. Use everything in these situations.

Lastly, if the “pedal is to the metal” and nothing seems to work, you can always go for deliberate immobilization and hope he abandons the vehicle. (Remember, we are presupposing for this discussion that you must kill it.) True, Deliberate Immobilization is +5 TH DRM, only works with hull hits, and acquisitions are valueless. Nonetheless, we constantly use our ordnance smaller than 45mm to go for immobilization. Often these guns have a high ROF which allows for more than one attempt. The
Germans may have called the 37mm ATG “door-knocker”, but we use them more as door-stoppers. (A playbalance note: if players end up preferring the 37L ATG to the 50L, then you might want to consider having the crew pass a TC before each Deliberate Immobilization shot; in the midst of battle, it would be remarkable that anyone would try to simply stop rather than kill the iron monster.)

The “Paw of the Tiger” is a great teaching scenario. The T-34s and T-43s are vastly superior to the PzKw IIIs and equally inferior to the Tigers. Appendixed, players will find two ASL reworkings of COI scenarios, including the infamous Scenario 14.

After Action Report—Timoshenko’s Attack

These notes continue the series of commentaries in the Clinic pertaining to the scenarios published with the previous installment of the column (Vol. 23, No. 3 in this case). The intent is to provide the ASL player with one of numerous possibilities for defensive setup, attacker initial placement, and basic tactical approaches for both. Having had several months to examine your own approaches to our Clinic scenarios, the reader can compare his findings with our summation.

GERMAN: 8-1 leader, two squads and a LMG in 10T6; 9-1 leader, squad with HMG on first floor of 10U5. Place a squad and LMG in 22Q1; the 9-2, two squads, LMG and MMG in 22Q3; squad and LMG in 22Q8. Place a squad and LMG in 11Q1; 8-0 leader radio and squad in 11W3. Put the rest of the force in reserve.

RUSSIAN: Fairly straightforward. Group 1 attacks on Board 11; Group 2 attacks Board 22; and Group 3 on Board 10.

ATTACKER’S TACTICS: If the radio is on Board 11, your best bet is still to use the open terrain for the tanks, but to use independent movement once you have to button up. Board 10 is very tough to assault, so be bold for the first two turns and try to get the German to overcommit there. Board 22 is the one you’re most likely to win on with whatever group you use. Try to outflank the initial German line and press forward fast.

DEFENDER’S TACTICS: Don’t forget that the LMGs and the 50mm MTR are valuable anti-tank weapons. Have your screen fall back slowly while your reserves throw back any infiltrating attackers. Most importantly, don’t commit too much to any one board. Time and again players will find that the German player wins handily on two boards only to lose the whole scenario on the third. This scenario may well require repeated play before you form an opinion.

CONTEST #135

You have emerged, after several minutes of furious cut-and-mouse maneuvering in KNIGHTS OF THE AIR, as an almost certain victor over the despised Zeppelin airship. Just one more hit from your trusty Camel’s machine-guns and you will send that engine of destruction plummeting to its doom. A glance at the flat needle of the fuel gauge gives warning that your next shot must be sure for you to have time enough for only one more pass. Your objective in Contest #135 is to position the Sopwith Camel in its next move where it has the best chance of inflicting that final hit upon the Zeppelin, thus presenting you with a win. A draw is unacceptable.

There is a hitch, of course. Not only must you make your flight preparation, but you must also complete your move before the Zeppelin moves. This requires some foresight on your part, since your final position in relation to all possible Zeppelin positions must be considered. (An important reminder: the Zeppelin fills three altitude levels with its marker showing just the middle level. This means that you may shoot at the airship from two levels above or below its altitude setting.)

The Zeppelin’s nose is in hex 1807, pointing south, at an altitude of 18473 feet. Your Camel’s in hex 1717, pointing northwest, at an altitude of 18454 feet. The relative positions of these two crafts are shown in the diagram to the right. Your mission is to shoot down the Zeppelin. Fill in the spaces indicated for flight preparation and write out the maneuvers you plan to use to get into position to do this.

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If the reader should need a copy of an article from an out-of-print back issue of The GENERAL or one of the Wargamer’s Guides, The Avalon Hill Game Company does provide a photocopying service. The charge for this service is $1.00 per page, with a minimum order of five pages required. Please specify the article title, volume and number it appeared in, and the pages on which it can be found; the GENERAL Index is invaluable for this ($4.50 from Avalon Hill). This service is also extended to our other publications, present and past—ALL-STAR REPLAY and HEROES. Standard Avalon Hill Game Company postage rates of 10% of the amount of the order must be included for domestic orders (20% for Canadian orders and 30% for overseas orders). GENERAL postage coupons may not be applied.

The answer to this contest must be entered on the official entry form (or a facsimile) found on the insert of this issue. Ten winning entries will receive merchandise from The Avalon Hill Game Company. To be valid, an entry must include a numerical rating for this issue as a whole and a listing of the three best articles in the judgment of the contestant. The solution to Contest 135 will appear in Vol. 23, No. 6 and the list of winners in Vol. 24, No. 1 of The GENERAL.
OPPONENTS WANTED

Phm opponent wanted for TRC. Honor system only. I play Russians. Rated 1200. Will answer all letters. Contact W. Dudley Kidd, 4611 Governors Dr., #603, Huntsville, AL 35805, (205) 721-1511.


A few players are forming in the East Valley area! Any interested player will be enthusiastically welcomed: Pierre O'Kruster, 265 N. Second St., Apt. 1, Allentown, PA 18101, (215) 408-5270.

Playtesters wanted for SL scenarios: CDI, COI, COD, GI. A number of SL players exist. Write to: On All Fronts, P.O. Box 265, Marshall, AR 72650.

SL players wanted for all levels—SL thru ASL. East Valley. Questions and/or interest mailed July 15th. All letters answered. On All Fronts, P.O. Box 265, Marshall, AR 72650.

New in Inland Empire area. 25-year old wams of Timeline SL, but mainly in multi-player campaign games. All inquiries welcomed. Leonard Krause, 20711 Main St., Suite 2. Vista, CA 92083. (714) 900-5709.

Opponent wanted for PL. If ftf is optimal, please contact: WTP, LW, 3R. AOC. Alan Flint, 3724 Brunswick Ct., So. San Francisco, CA 94080, (415) 878-5525.

Newly Area rated (300) will play a rated or non-rated game of 3R. Experience: 3R, SL, COI, COD, GI. Will travel. Send top three country choices. Send only top three country choices. ASL, AF, NAB, SON, W&P scenarios. Send John Wood, 343-A Wilson Wood Dr., Columbus, OH 43204, (614) 382-0495.

Area (1500) new to pbm opponents for PB, TRC. Rated and unrated welcome. Tom Scarborough, 477-8911, (216) 772-1429.

Adult gamer wants ftf opponents for SL, PB, TRC, AIW, PB, PL. Will answer all letters. Send top three country choices. Send only top three country choices. ASL, AF, NAB, SON, W&P scenarios. Send John Wood, 343-A Wilson Wood Dr., Columbus, OH 43204, (614) 382-0495.

W&F Campaign Game! Serious players only. Send top three country choices. ASL, AF, NAB, SON, W&P scenarios. Send John Wood, 343-A Wilson Wood Dr., Columbus, OH 43204, (614) 382-0495.


Kids in Playtest #2037. Send all letters answered. Any side. Mark Vogt, 1450, 75th St., West Allis, WI 53225, (414) 262-4509.

The "Opponents Wanted" advertisements of this past are intended as a service to the readership of this periodical. Please print or type the ad copy. If the ad is not legal, it will not be printed. Too, no ad dealing with products of other manufacturers will be printed and any mention of such products will be accepted only for a single printing only. Should the reader desire that a specific ad enjoy a multiple printing, a separate number of copies equal to the number of times the ad is to run must be submitted—although only one total payment need be included to cover the printings. Due to the pressure of various deadlines, often advertisements submitted weeks before an issue appears will not be printed in that issue. Please be patient; such will be printed in the immediately following issue. Please do not specify a particular issue for an ad to appear; such requests cannot be honored.
KNIGHTS OF THE AIR

Q. Under the Combat Fire section, Rule 4b, it states that a machinegun cannot fire again until the remaining three half-seconds are lost. The paragraph before states that if there are still some half-seconds remaining after completing a side movement, the remaining half-seconds are lost. Is this a contradiction?

A. Rule 4b predominates. A pilot cannot, under any circumstances, fire his machineguns continuously. There must be a gap of at least one Movement Point before starting. What if he fired from the same point one, two, or three times, and in between shots.

Q. If there are still some half-seconds remaining after completing a side movement, the remaining half-seconds are lost. The paragraph before states that if the remaining three half-seconds are insufficient to move another hex, they are lost. Is this a contradiction?

A. Yes, though not by the usual one MP per hex rule. There must be a gap of at least one Movement Point before starting. What if he fired from the same point one, two, or three times, and in between shots.

Q. Where can dead crewmen be placed so to be removed from the plane? (Ace or Green or by the attacking gunner's designation.)

A. Roll one die.

Q. Are die rolls on Table M-3 by German Ace pilots different from regular individual rolls? (Ace)

A. Yes; yes.

Q. Are die rolls on Table M-2 (Damage against German Fighter) affected by the German pilot's status (Ace or Green) or by the attacking gunner's status (Ace)?

A. No; yes.

Q. What is the oval-shaped object attached to the bottom of a B-17 under the nose as shown in the article "Operation Rainbow" in this issue?

A. A radio compass which aided in navigation.

Q. Are there any Movement Points expended while performing the diagonal portion of a side-slip?

A. Yes, though not by the usual one MP per hex usually followed. In a side-slip, it is possible to move diagonally several hexes at a fractional movement cost. See the example below: a pilot travelling at 30 mph wishes to slide-diagonally to the right five hexes. He moves forward two hexes, diagonally five hexes and ahead one hex. Since he can't move more ahead two hexes, the remaining three half-seconds are lost. The numbers indicate the number of half-seconds to reach that point of the maneuver.

Q. Where can seriously wounded crewmen be placed so to be out of the way?

A. In the radio room, one of the crew's compartments and in the bomb bay (but only if the bombs are going).

Q. How does the presence of an extra wounded crewmen in a compartment affect further crew casualties?

A. For simplicity's sake, whenever a crew occupant checks for wound; a man checks.

Q. Where can dead crewmen be placed so to be out of the way?

A. Up to two may be placed on the floor or on the floor and in the radio room, on the pilots' compartment and in the bomb bay.

Q. What is the oval-shaped object attached to the bottom of a B-17 under the nose as shown in the article "Operation Rainbow" in this issue?

A. A radio compass which aided in navigation.

Q. Is there anything in the combat rules that states how to attack a non-targeted aircraft. Is this your intention?

A. Not exactly. A non-targeted aircraft can be attacked, but only in the Final Fire Phase after all movement for the turn has been completed.

The following games are ranked by their reader-generated overall Value rating. Further aspects of reader response to our titles are indicated by the ratings in other categories. By breaking down a game's ratings into these individual categories, the game is able to discern for himself where the title's strengths and weaknesses lie in the qualities he values highly. Readers are reminded that the Game Length categories are measured in multiples of ten minutes (thus, a rating of "18" equates to three hours).

WARGAME RBG

Title | Overall Value | Components | Complexity | Playability | Authenticity | Game Length | Year | Value
--- | --- | --- | --- | --- | --- | --- | --- | ---
1. ASL | 1.67 | 1.44 | 10 | 2.80 | 1.98 | 1858 | 133 | 1.67
2. RF | 2.00 | 2.78 | 1854 | 2.36 | 1354 | 85 | 858
3. EJ | 2.02 | 2.78 | 1854 | 2.36 | 1354 | 85 | 858
4. COI | 2.06 | 1.99 | 9 | 3.29 | 1.99 | 1161 | 2927 | 1978 | 532
5. BY | 2.09 | 1.95 | 1858 | 2.82 | 1.85 | 1134 | 2927 | 1985 | 95
6. WR | 2.21 | 2.67 | 1858 | 3.83 | 2.40 | 2723 | 2927 | 1981 | 275
7. COD | 2.23 | 1.97 | 10 | 3.10 | 1.85 | 1215 | 3020 | 1980 | 224
8. TRC | 2.29 | 2.53 | 1858 | 3.12 | 2.11 | 1744 | 3774 | 1974 | 340
9. SL | 2.31 | 2.09 | 8 | 2.87 | 2.13 | 2437 | 2790 | 1981 | 275
10. UF | 2.42 | 2.26 | 1858 | 3.17 | 2.14 | 4.84 | 1309 | 1983 | 58

Year: 1983
Sample Base: 59

PANZERKRIEG

Armored Warfare in the Ukraine, 1941-1944

Our second attempt to evaluate this reprint game finally gives a sample base large enough to make some judgments regarding it. These ratings are much in line with those reported for PANKERKRIEG back in Vol. 20, No. 5. In the critical eyes of those who have played it, the game rated about the average RBG values (as reported in Vol. 20, No. 1) in every category. However, its Overall Rating (3.34, making it 31st on our ongoing listing) is not abysmal, meaning that many reviewers found something to admire in the package.

Of some interest is how the values equate to the reader-generated overall Value rating. Further aspects of reader response to our titles are indicated by the ratings in other categories. By breaking down a game's ratings into these individual categories, the game is able to discern for himself where the title's strengths and weaknesses lie in the qualities he values highly. Readers are reminded that the Game Length categories are measured in multiples of ten minutes (thus, a rating of "18" equates to three hours).

WARGAME RBG

Title | Overall Value | Components | Complexity | Playability | Authenticity | Game Length | Year | Value
--- | --- | --- | --- | --- | --- | --- | --- | ---
1. ASL | 1.67 | 1.44 | 10 | 2.80 | 1.98 | 1858 | 133 | 1.67
2. RF | 2.00 | 2.78 | 1854 | 2.36 | 1354 | 85 | 858
3. EJ | 2.02 | 2.78 | 1854 | 2.36 | 1354 | 85 | 858
4. COI | 2.06 | 1.99 | 9 | 3.29 | 1.99 | 1161 | 2927 | 1978 | 532
5. BY | 2.09 | 1.95 | 1858 | 2.82 | 1.85 | 1134 | 2927 | 1985 | 95
6. WR | 2.21 | 2.67 | 1858 | 3.83 | 2.40 | 2723 | 2927 | 1981 | 275
7. COD | 2.23 | 1.97 | 10 | 3.10 | 1.85 | 1215 | 3020 | 1980 | 224
8. TRC | 2.29 | 2.53 | 1858 | 3.12 | 2.11 | 1744 | 3774 | 1974 | 340
9. SL | 2.31 | 2.09 | 8 | 2.87 | 2.13 | 2437 | 2790 | 1981 | 275
10. UF | 2.42 | 2.26 | 1858 | 3.17 | 2.14 | 4.84 | 1309 | 1983 | 58

Year: 1983
Sample Base: 59

COMING UP NEXT TIME
If the response from our readers is a fair indication, our annual look at one of Avalon Hill's older titles brought some pleasant memories in its wake. The issue (Vol. 23, No. 3), featuring SUBMARINE, managed to garnish a respectable overall rating (2.93)—on par with other recent issues on new releases. The variant introducing the small boats into the game system topped the list for individual articles, with the new scenarios for British submarine missions by Markuss winning a near second. The ratings for all the articles, based on a random sampling of 200 reader responses with three-two-one points assigned for first-second-third choices, are as follows:

**WAR IN THE SHALLOW SEAS** ............................................ 336
**THE LONE WOLVES** .................................................. 313
**BEYOND VALOR SERIES REPLAY** ................................. 137
**KAMPFGRUPPE PEPER** ................................................. 118
**SQUAD LEADER CLINIC** ............................................. 82
**AH PHILOSOPHY** ....................................................... 59
**STALIN'S WAR** ............................................................. 50
**TOTAL KRIEG** ............................................................ 45

The Avalon Hill Game Company is looking for playtest volunteers for a computer-assist program for **ADVANCED SQUAD LEADER**. Interested collaborators are to contact Mike Wilson, at 2201 N. Maple Ave., Suite 201, Madison, Wisconsin 53713. Volunteers are to receive a free copy of this program. Those interested in volunteering should write to Don Greenwood, c/o The Avalon Hill Game Company.

**Infiltrator's Report**

Seems that The Avalon Hill Game Company's computer version of **DIPLOMACY** is at last gaining some respect among the hardcore players and GameMasterers of both classes. Especially with the most recent issue of the hobby flagship "zine, Diplomacy World (#46), author and GM Ken Hill takes a long look at the computer game and its usefulness for novice players, experienced players and especially for GameMasters. Highlighting the strengths of the computer version, he discusses how it can be a boon to the busy GM, allowing them to increase up to 30 games at a time, more than enough for even the most prolific among the breed. And he explores what computer play can teach the player, be he new to the hobby or an old hand. Complementing its graphics and "bug-free" 286 program, he concludes that its hobbyist appeal could be the active and non-active hobbyist who is interested in seeing what the computer version can do. Overall a fine article for those interested in pursuing this line of computer hobbyism.

**SOUTHERN STRATEGIC OPTIONS**

An advance to Linz can easily be fully supplied from the Salzburg and Linz bases in Central Europe. Since only a few areas in Austria are available for depots, the city of Linz can be reached immediately, two battles can be fought back-to-back against the Austrians by following up a likely October success at Linz with a first-move November march on Vienna (since there is an Austrian depot in Vienna, this is the Austrian army at Linz must retreat); a French depot could be built at Linz for easy supply of the November attack. Although a Linz battle, with one at Kustrin, would be fought in wooded terrain, a followup battle at Vienna would be in the open. The corps composition of Charles' army indicates that the French will either have cavalry superiority (the Austrians will have ten or less cavalry Sp) or, if the Austrian army includes a Grenadier and a Little Infantry corps all possible cavalry, a pleasingly large numerical superiority. Twin French victories (or even "draws" that caused heavy Austrian losses and forced Austrian "end of day" withdrawals) at Linz and Vienna, followed by the possible capture of Vienna (a more important capital than Berlin), could conceivably cause an Austrian surrender and start the breakup of the coalition. At the very least, any degree of success in these maneuvers would greatly weaken the coalition's front line strength. Although a success is more likely at Linz, at the current strength, the Austrians are unopposed, their current position is so east that they could not make much immediate trouble up north and could be ignored for a few months.

**FIELD COMBAT**

Now we come too the part you've all been waiting for, this contest's tie-breaker. What chip should the French player choose for the attack at Linz? Being no dummies, we realize that any pick could be counted for a tie, so this must be a bit of an intuitively "educated guess" that can be argued over until Doomsday, or we can bore all concerned by grading through probability formulas to "prove" that one pick is statistically superior to another. Rather than go through all that, we chose to use an empirical method to this fun-loving editor (twice voted the "least logical man in America") was lured up and talked into making a pick for the Austrians. He picked "Defend" as he felt that there was a good chance that the French would "Assault" (or, maybe even "Escalate Assault") to reduce the chances of an Austrian withdrawal and build up their strength, maybe even use their forces as a feint. Since the published rules of the French allows a player to use the "outflank" clause of the French attack, and analyst Ihlsen was told to consider this move, and then a player who is interested in playing a French game might choose a "Defend" if they wanted to use the "outflank" clause to play a French game might choose a "Defend" if they wanted to use the "outflank" clause. The French player should probably not gratuitously throw away this much strength. An October advance of the main body to Berlin while detaching a corps to the area west of Berlin and another corps to Magdeburg and building a depot in the area north of Hanover and supporting that of a corps east of Berlin and at Magdeburg in November. This could accross a large front to move to Kustrin, but yields only one immediate battle versus Kutusov's army (with three Russian and three Prussian corps, Kutusov is the obvious pick to command) in their position. A defeated Kutusov army could retreat and half of November, linking up with Bennigesn and sitting beyond the range of French supplies. Besides, the linkup of Kutusov's Russians with the Prussian army in the first half of October and the corps composition and last-known Russian strength (six cavalry Sp, two infantry corps, 15,000 men) fit the French line of thought of any cavalry superiority in a battle at Kustrin. These maneuvers would have a decent chance of capturing Berlin, but Berlin is the "most important" enemy capital since Prussia produces the least income. Also, while the Grand Armee went north, the Austrians would probably have a free hand to recapture Tyro and Venetia and to threaten the rest of Italy.

**NORTHERN STRATEGIC OPTIONS**

An advance on Kustrin should probably not be pursued; foraging losses would average one to two for the cavalry corps and two to three Sp per infantry corps. With the strength of the hostile coalition, France should probably not gratuitously throw away this much strength. An October advance of the main army might be a promising move, but it would not be without risk of French counterattacks taking place. Perhaps the most promising move is to look at the computer game and its usefulness for novice players, experienced players and especially for GameMasters. Highlighting the strengths of the computer version, he concludes that its hobbyist appeal could be the active and non-active hobbyist who is interested in seeing what the computer version can do. Overall a fine article for those interested in pursuing this line of computer hobbyism.
HEROES magazine, the magazine of Avalon Hill Role Playing, is setting out anew to bring the excitement and adventure of Role Playing and other thrilling forms of gaming into your home. Gauged to thrill, calculated to enthrall, the new HEROES continues in the hunt to become your Role Playing magazine.

Retaining the best of the old, the new HEROES strikes out into new fields to provide more information and more excitement. With the fine regular features below, HEROES will be your magazine. Give it a try today.

***COMPUTER CORNER—A regular feature highlighting the finest of the new, old and projected products by Avalon Hill's Microcomputer Games.

***COMIC FLOW GAMES—Exciting graphic adventures where you are the hero, and you see everything as he does. The story is told through pictures with just enough words to make it interesting.

***EDITORIAL FEATURES—Powerful editorial features providing accurate, detailed information about important historical and mythological concepts, places, etc., in a way that does not tie the information to any specific game system. Just one of the new general information and feedback features that will play an important part in the New Heroes.

***Too much more to mention here, if your buying, your mind will be flying!
WHAT HAVE YOU BEEN PLAYING?

Top ten lists are seemingly always in vogue these days. Whether the subject is books on the Best Seller List, television's Nielsen ratings, or even games, the public never seems to tire of seeing how their individual favorites stack up numerically against the competition. Our preoccupation with this national pastime is almost akin to rooting the home team on to victory every Sunday. So to further cater to your whims (and to satisfy our own curiosity) we unveil THE GENERAL's version of the gamer's TOP TEN.

We won't ask you to objectively rate any game. That sort of thing is already done in these pages and elsewhere. Instead, we ask that you merely list the three (or less) games which you've spent the most time with since you received your last issue of THE GENERAL. With this we can generate a consensus list of what's being bought. The degree of correlation between the Best Selling Lists and the Most Played List should prove interesting.

Feel free to list any game regardless of manufacturer. There will be a built-in bias to the survey because you all play our games to some extent but it should be no more prevalent than similar projects undertaken by other magazines with a special interest-based circulation. The amount to which this bias affects the final outcome will be left to the individual's discretion.

The games I've spent the most time playing during the past two months are:

1.  
2.  
3.  

CONTEST 135

Sopwith Camel: Stick Engine Power Final Speed Turn Speed Altitude
At Start 0 5 5 90 90 18454

Preparation Adjustments

Maneuver Number of Hexes

1.  
2.  
3.  
4.  
5.  

Issue as a whole... (Rate from 1 to 10, with 1 equating excellent, 10 equating terrible)

Best 3 Articles:

1.  
2.  
3.  

NAME PHONE
ADDRESS
CITY STATE ZIP

NAME PHONE
ADDRESS
CITY STATE ZIP
Now an Avalon Hill board game, faithfully portraying what Oliver Stone's film says Viet Nam was all about. Yet another design masterpiece by Avalon Hill's Craig Taylor, PLATOON is a game of survival. The playing pieces represent each of the main characters of the film. An "entry level" game, PLATOON will appeal to a wide audience of historians and Viet Nam veterans who will appreciate the extreme accuracy of the game.

See PLATOON at your favorite game store ... along with brand new titles such as...
HUBE'S POCKET

ASL Scenario G

SOUTHERN RUSSIAN NEAR BUCHACH, April 6, 1944: The March Russian offensive to drive the Germans back to the Carpathian Mountains had been successful. Partially due to Hitler's 'stand fast' order, many large German formations were encircled. Among them was the entire First Panzer Army of General Hube. Determined not to be part of another Stalingrad debacle, Hube and Manstein planned a daring breakout. Avoiding the favorable terrain to the south, Hube drove west across forested hills. The terrain was more difficult, and hence was less likely to be the move the Russians would be expecting. Elements of the elite 2nd SS Panzer Corps would drive eastward to aid in the breakout with a linkup expected in the vicinity of Buchach.

BOARD CONFIGURATION:

**VICTORY CONDITIONS:** The Germans win immediately upon exiting at least ten vehicles in either ONE or TWO Convoy off the west edge.

**BALANCE:**
- Increase the number of SS squads to 12 and replace the 9-1 German armor leader with a 10-2 armor leader.
- Decrease the number of SS squads to 9 and remove the German 10-2 Infantry leader.

**TURN RECORD CHART**

<table>
<thead>
<tr>
<th>GERMEN Moves First [172]</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Restart on turn 11</th>
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<td>[282]</td>
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**Elements of the 10th Panzer Division Frundsberg [ELR: 4] enter turn 1 anywhere on west edge of board(s) 2/5: {SAN: 2}**

**Elements of First Panzer Army enter on turn 5 or later along any east edge road hex (see SSR 4):**

**Advance elements of 5th Tank Corps [ELR: 3] enter turn 1 anywhere along north edge of board 4: {SAN: 2}**

**SPECIAL RULES:**
1. EC are Moderate with no Wind at start.
2. The German HS (see German Vehicle Note S8) is SS. German crews, while inherently in an AFV, have a ML of 9.
3. German forces may not enter any hex of board 4 (wholly or partially) on turn 1.
4. All vehicles of First Panzer Army enter using Convoy rules (E11).

**AFTERMATH:** The westward thrust caught Zhukov by surprise and he desperately threw anything available in the way of Hube's panzers. His last blocking force, a guggle from the 1st Tank Army, was pushed aside by the 10th SS Panzer Division Frundsberg—now little more than a kampfgruppe. Hube, with his 200,000 men, was able to pull out and escape the trap...this time.
SOUTH OF LENINGRAD, January 12, 1943: Throughout the winter of '42-'43, the Soviets launched repeated attacks to relieve the siege of Leningrad. The hard-pressed Germans rebuffed one attack after another, but in so doing, their lines became progressively thinner. Finally, the Germans had to develop a trip wire defense of light local forces, backed by a "fire brigade" mobile force, which was quickly dispatched to the inevitable breakthrough sector. Such a fire brigade was 1st Company, s. Panzer Battalion 502, with ace tanker Cpt. Hans Boiter, who was called upon to halt a major Russian armored incursion by a full battalion of the 122nd Tank Brigade.

BOARD CONFIGURATION:

VICTORY CONDITIONS: The Russians win immediately by exiting one AFV with functioning MA off the west edge of board 2, provided there are no Mobile German tanks left on board 2 during the Player Turn in which the Russian tank exits; OR by exiting seven AFV with functioning MA off the west edge of board 2.

BALANCE:
- Increase number of Russian AFV exiting to 2 and 8.
- Decrease number of Russian AFV exiting to 0 and 6.

TURN RECORD CHART

SPECIAL RULES:
1. No Wind at start; Ground Snow rules are in effect (E3.72). All units, including AFV of both sides, have Winter Camouflage (E3.712).
2. The German radio represents one battery of 150mm OBA.
3. The Russian sets up first, offboard of the east edge of board 5, along offboard hexrows Y/Q/I (as explained in A2.51). When they enter on turn 1, they do so via hex(es) I10/Q10/Y10.

AFTERMATH: The Tigers and their Pz. III escort arrived just in time to bolster the feeble infantry positions. Though heavily outnumbered, the combination of Tiger superiority and Bolton's superb gunnery carried the day, and the backbone of the Russian 122nd Tank Brigade was shattered.