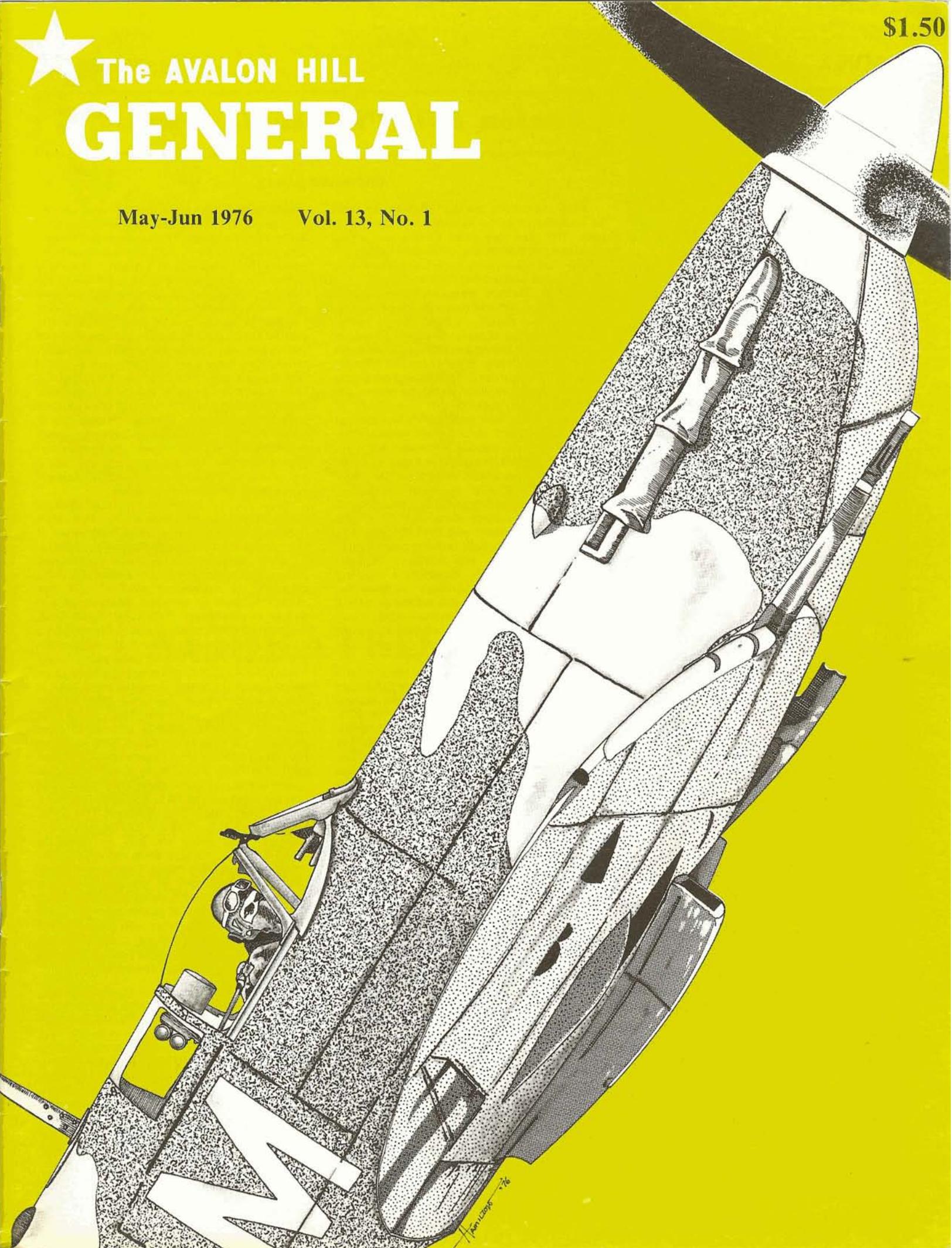


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H. J. ... '76

★ The AVALON HILL
GENERAL
 The Game Players Magazine

The Avalon Hill GENERAL is dedicated to the presentation of authoritative articles on the strategy, tactics, and variation of Avalon Hill games of strategy. Historical articles are included only inasmuch as they provide useful background information on current Avalon Hill titles. THE GENERAL is published by the Avalon Hill Company solely for the cultural edification of the serious game aficionado, in the hopes of improving the game owner's proficiency of play and providing services not otherwise available to the Avalon Hill game buff.

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Avalon Hill Philosophy Part 55

UPCOMING GAMES

Early indications are that 1976 has brought an acceleration to the already hectic new game pace. We now have more titles under active development than at any other time during our history. To help out with our increased workload we've added another full time developer in the form of A. Richard Hamblen, an inveterate wargame designer and player of long standing. Among other things, Richard brings us an immense amount of expertise on the American Civil War and a reputation as a top flight game player. You've already sampled his literary skills in Vol. 12, No. 6 of the GENERAL and we expect you'll be even more pleased with his prowess at game design and development.

Hamblen may well design AH's first attempt at one of the "giant" or "monster" games which have proven so popular recently. Although untitled at present, the game will be a strategic portrayal of the entire American Civil War utilizing eight 22" x 28" mapboards. The game will have approximately 2,000 unit counters but will feature low piece density. Political and logistic considerations will limit the action to bursts of furious intensity rather than prolonged attrition. The game will subdivide into six separate games, each recreating a separate theatre or campaign. Although we have not completed our pricing studies yet the game will probably command a price in the neighborhood of \$50. The separate boxed sub-game versions will be available at regular prices. Completion is scheduled for the summer of 1977.

The GETTYSBURG redesign by Mick Uhl will stress accuracy and realism in the mapboard and counters and will be a complete divorce from the simplistic GETTYSBURG of the 60's. This version will be brigade level with semi-hidden movement in that only the unit's identity will be visible to the opponent. Strengths will be hidden beneath the counter. Even more radical will be the disappearance of hexes from the mapboard. Movement will be from point to point or via special road movement rates. The artistic treatment of the board and counters will be a first in the industry. The whole thing will be innovative in a big way and designed by someone who lives and breathes Civil War. GETTYSBURG may be ready by fall, depending on current inventory status.

ARAB ISRAELI WAR is yet another addition to the PANZERBLITZ family of tactical games, and marks our first attempt at a post WWII subject. Designed by Seth Carus and jointly developed by Randall Reed and Richard Hamblen, AIW will, in a sense, be another PANZER LEADER with modifications and improvements which will show in detail the evolution of weaponry from 1956 up to the present. Twenty scenarios are currently being playtested including several macro games. Use of sophisticated weapons systems, split-move and fire, and greater reliance on airpower will give AIW a very distinct flavor of its own. We would like to offer AIW at ORIGINS II but that may prove wishful thinking. It should be ready by this fall however.

FOUR ROADS TO MOSCOW was somewhat erroneously reported on in various gossip columns of other magazines. Designed by Joseph Angiolillo, 4 ROADS will utilize a large 44" x 22" mapboard on which division-level

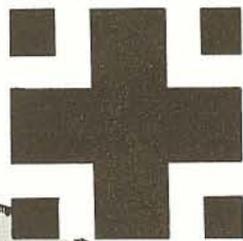
invasions of Russia from four different periods are recreated. The four different invaders are the Mongols, Charles the XII, Napoleon and Hitler's Operation Barbarossa. Turns are weekly with no version lasting more than 6 months. Originally planned for release at ORIGINS II, 4 ROADS has run into problems in development and probably will not be available before fall.

SQUAD LEADER is a game we're pretty excited about. John Hill is the designer and one with an excellent track record. His games under other labels have been uniformly well received and we look forward to the compilation of his talents with AH physical quality and development. SQUAD LEADER is set in WWII with each counter representing a single officer, nco or squad. Borrowing heavily from both miniatures and PANZERBLITZ, it promises to be an extremely colorful game. The beauty of this one lies in the extremely simple game mechanics. Release is not expected before next spring.

WAR AT SEA is the AH version of Jedko's game of the same name which has been receiving fine reviews in hobby magazines of late. Jedko is our exclusive Australian distributor which explains in part why this is the second Jedko game to be published by Avalon Hill. John Edwards, the designer of WAR AT SEA, has proven himself an excellent designer of fun games as purchasers of RUSSIAN CAMPAIGN will attest. His emphasis on playability and game playing as a fun activity rather than a mathematical exercise stands him in good stead in our eyes. WAR AT SEA is an extremely simple game dealing with the WWII European naval war in almost abstract form. The game assumes that the Axis becomes bolder with their surface fleet and make a more vigorous attempt to deny control of the seas to the Allies. Ships such as the German carrier Graf Zeppelin and the Italian battleship Roma which were never finished in reality see action in the game. Both sides try to win the eight turn game by accumulating more control points than their opponent. The Allied fleet is much larger but the Axis counters with U-Boats, land based air, and an ability to concentrate in one area while the Allies must attempt to guard everything. Playing time is one hour. Be forewarned, if you are a realism devotee who despises simple games then WAR AT SEA is not for you. If, on the other hand, you enjoy a game you can play with your wife, kid brother, or girl friend—you'll find WAR AT SEA a real bargain at \$5.00. The game will be available at ORIGINS II and by mail thereafter.

STARSHIP TROOPERS is finally rounding into form. Robert Heinlein, who was recently voted the first "Grand Master" of science fiction, has given the game his endorsement and written a preface for Randall Reed's treatment of his most popular book. Any description of the conflict between Skinnies and Arachnids here would be a gross injustice to Mr. Heinlein's literary talents. We suggest that if you haven't already read the book of the same name, that you get a copy. STARSHIP TROOPERS will make its debut at ORIGINS II and be available by mail shortly thereafter.

Continued on page 24, column 1



CALIBRATED LUFTWAFFE

by Robert D. Harmon

"Luftwaffe Organized" (Vol. 10, No. 4) discussed the strategic aspects of the *LUFTWAFFE* game, e.g., the topography of the board, deployment, etc. This article will examine the tactical, historical, and auxiliary aspects of *LUFTWAFFE* in a detailed and compartmentalized form, from the story behind each aircraft to their game performance at the moment of attack.

This article will examine the background of each of the aircraft appearing in *LW*. The performance statistics, of course, can be found in the *LW* rules. However, there is a story behind each aircraft—and more than a cursory note is necessary to do them justice. Understanding of the aircraft in the game can only follow the telling of their story.

With the P-40, the Airacobra made up most of the USAAF resistance to Japan in the early months of the war. It became quickly apparent that the Zero had rendered the heavier P-39 instantaneously obsolete. After taking heavy losses in the first months of the war the P-39 was gradually withdrawn as a tactical fighter.

Its powerful armament and remarkably durable construction—which had made it an unsuccessful fighter—now made the P-39 an outstanding ground-attack plane. In the South Pacific, in North Africa, and especially in Russia, the P-39 performed outstanding service. Its most distinguished record was with the Soviet Air Force, which received almost 5000 P-39s, and an additional 2,400 P-63 Kingcobras; a direct development of the P-39.

The P-39 appears in the *LW* game nearing the end of its service as a fighter, serving a role it was increasingly unable to fill against more agile Axis opposition. The *LW* model is the P-39Q, most of which served on the Eastern Front.

The B-17 project came about as the result of controversy over the role and direction of the Air Corps. The military was slow to accept bombers as anything other than an auxiliary; the Boeing Model 299 prototype (there was no XB-17) was designed mainly for extended coastal defense. It was the first four-engine bomber to be considered by the U.S. Army, and the first all-metal four-engine bomber anywhere; its sheer size alone caused controversy. The 1935 crash of 299 seemed to prove the accusations of oversize and led to the adoption of the Douglas B-18 Digby in its place. Sheer persistence by Boeing and the Air Corps kept a few B-17s around until 1940, when world developments brought a rash of orders.

1941 saw the lighter B-17B, C, and D models give way to a major redesign—the B-17E. Originally the bomber had a narrow tailfin and only a few fixed gun positions. The B-17E featured the familiar curving tail, and introduced hydraulic dorsal and belly turrets, and also a tail-gun position; also included were self-sealing tanks and armor. The redesign had come as a result of limited (and unfortunate) B-17C duty with the RAF, and the B-17E was entering service just in time for war.

After initial service in the Pacific, the B-17 was relegated almost exclusively to Europe, where it became the crux and the focus for the daytime bomber offensive. Without it, USAAF daylight precision bombing may not have come off. Its stability, its armament, its range, and its unparalleled durability all contributed to get its mission accomplished. The B-24, and other bombers, may have had more range or bombload—but the B-17 alone had the ability to endure some of the worst flak and fighter opposition of the war.



Bell P-39 Airacobra

One of the first of the USAAF's World War II-generation fighters, the P-39 was, in its day, quite an innovative aircraft. Introduced into active service in 1940, the P-39—in a day when .30-caliber machine-guns were standard pursuit armament—featured a 37mm cannon in the propeller hub, in addition to four MGs. To make room for the weapon, the Bell Aircraft Corp. adopted the radical expedient of moving the engine *behind the cockpit*, connected to the prop by a 10-foot shaft. The P-39 was additionally unique in that it was the first major fighter to feature "tricycle" landing-gear, i.e., with a center wheel in the nose rather than in the tail.



Boeing B-17 Flying Fortress

Because of the supreme importance of military aviation, many aircraft win a measure of fame. A few—such as the Sopwith Camel, the Zero, the F-86, the F-4 Phantom, and the MIG-21—can lay claim to greatness. The B-17 Flying Fortress is no less than legend.

The wartime B-17 models included the E, F, and G series, the last of which included a chin turret—Axis fighter pilots had discovered early that the nose position was the most weakly defended. A B-17H appeared in limited numbers as an air-sea rescue plane.

Although V-E day marked the effective end of B-17 service, the knowledge that had been gained from this pioneering design—from Model 299 through the battle-tested B-17G—was to live on in a newer development: the Boeing B-29 Superfortress.



Consolidated B-24 Liberator

Developed for a 1939 U.S. Army requirement for a long-range bomber, the B-24 featured a narrow, low-drag wing and a deep fuselage. The result was an aircraft that could fly further and hit harder than the Flying Fortress—or any other aircraft prior to the B-29. Delivered to the USAAF and RAF Coastal Command for the first time in July 1941, it went on to serve in many capacities, on all fronts—the North Atlantic, Europe, Africa, China, the Pacific, Alaska. In Europe it served as a partner to the B-17, taking a dominant role in southern Europe, including the famous 1943 strike on the Ploesti oil fields. The B-24's range made it equally effective for operations throughout the Pacific and China.

Perhaps its most crucial role was as a patrol-bomber in the North Atlantic. Operated by RAF Coastal Command and by the US Navy, the Liberator extended Allied presence over most of the Atlantic; Liberators destroyed many, many U-boats far from land—and drove the Focke-Wulf Fw 200 Condor from the skies.

Named as "Liberator" by the British, the B-24 went through many modifications through the war years. The B-24D, G (which introduced the nose turret), and J models provided the bulk of the Liberator force. As the F-7, it served as a photo recon plane; as the LB-30 and C-87 cargo planes; and as a Navy patrol bomber, the PB4Y.



Curtiss P-40 Warhawk

The USAAF's standard fighter at the time of Pearl Harbor, the P-40 was a development of Curtiss' P-36 Mohawk and Hawk 75 fighters. Although it had little more than durability to offer during the first, dark months of the war, it had one distinction: it was there, and it served.

Armed with 4-6 .50-caliber machine-guns, the P-40C, D, and E Tomahawk and Kittyhawk fighters formed the basis of Allied opposition to the Axis in 1941 and 1942, serving in the South Pacific, in China, and in North Africa. Initial combat service of the P-40 was with Allied forces. P-40s would win fame in China as part of the "Flying Tiger" unit serving with the Nationalist Chinese; P-40s also would see good service with the RAF. Although unsuitable for operations in Europe, the P-40 proved valuable in Africa as a major part of the Desert Air Force serving in Egypt.

P-40s also formed the first major USAAF resistance to Japan. Although heavy and less agile than the Zero, its durability, diving speed, and armament at least offered the Japanese some opposition. Such that it was, it helped check

Japanese advances in New Guinea and the Solomons.

The P-40 appears in *LW* like the P-39, in one of its lesser roles, as an adjunct to the Combined Bomber Offensive. Also serving with Soviet, Free French, Canadian, and South African forces, the P-40 was to total some 14,000 aircraft.



Douglas A-20 Boston/Havoc

The A-20, first of the USAAF's twin-engine attack bombers, proved adaptable to a variety of roles, and served throughout World War II. First produced in 1939, it was immediately ordered by the French, and later by the British. By Pearl Harbor the A-20 had seen wide service with the Third Republic, Free France, and Vichy, as well as with the RAF, which designated the bomber as "Boston".

It was also the RAF that would become the first to employ the A-20 as a fighter, first as a fighter-bomber and shortly thereafter as a night fighter. The RAF had been able to adapt the A-20 to help fill their need for fighter aircraft, as the USAAF was to do after Pearl Harbor. Besides extensive service in the Pacific, Africa, and Europe as a tactical and maritime bomber, the A-20 also saw service as the P-70, America's first effective night-fighter, and filled this need until the Northrop P-61 Black Widow was ready for service.

Of the 7,000-odd A-20s, the Soviet Union received 3,100 under Lend-Lease, employing it as a ground-attack aircraft. This, combined with the numbers of P-39s and P-63s sent to Russia, only begin to underline the size and importance of the air war in Russia (no less than 35,000 Ilyushin Il-2 Sturmoviks were produced) and of the Allied aircraft sent there to help.

The A-20's dependability and excellent handling qualities made it an excellent craft for the air forces that used it; its adaptability makes its career as illustrious as its German counterpart, the Ju88.



Lockheed P-38 Lightning

Lockheed Corporation designers have had a long record of unusual and effective designs—the P-80 Shooting Star, P-2 Neptune, P-3 Orion, F-104 Starfighter, and YF-12A/SR-71 have all featured unorthodox lines and excellent service. So it was with the P-38.

Entering production in 1941 with both the USAAF and RAF (which named the fighter "Lightning"), the P-38 was the best of America's in-service fighters at the start of war, and was still in effective service at the end. In between, the P-38 had

piled up an excellent record. It was the first USAAF fighter of the war to destroy an Axis aircraft (an Fw200). It was the first Allied fighter to match the Zero, by countering maneuverability with speed, armament, and durability; the P-38 took the brunt of day-to-day operations against Japan, and accounted for more downed Japanese aircraft than any other Allied fighter.

In Europe, the P-38 saw important service as an escort for the USAAF's bombers. The P-38's range made it the first Allied daytime fighter to penetrate deep into Europe, and it provided effective cover for the bombers even after the P-47 and P-51 replaced it as a tactical fighter.

The P-38 also saw important duties as a fighter-bomber, particularly in North Africa; as the F-4 and F-5 it was well employed as photo recon.



Martin B-26 Marauder

The very capabilities that made the B-26 an excellent medium bomber also contributed to an ugly reputation as a pilot-killer. A demanding aircraft to fly, it could, when handled right, live up to its name, and did.

There was no prototype. The Marauder was ordered right off the blue-prints in 1940, and was in service by 1941. It served well on all fronts, and particularly well in Europe, where it was primarily employed. The B-26 was particularly successful in tactical operations with the US 9th Air Force.

Primary versions of the B-26 were in the B and C series. The B-26F introduced a larger wing, at the urging of the Truman Committee; the B-26G was the final version produced.



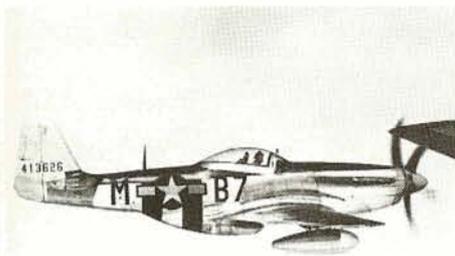
North American B-25 Mitchell

Like the Martin B-26, the B-25 design was of such excellence that it was ordered off the drawing board, entering service in 1940. The B-25 went on to become the most outstanding American medium bomber of the war.

Employed on many fronts, including Europe, Africa, and China, the B-25 saw heavy use in the Pacific. It served with great distinction with the US 5th Air Force in the South Pacific, flying in many low-level strikes on Japanese airfields and shipping. The B-25, daringly launched from the USS *Hornet*, carried out the first strike on the Japanese homeland. Although of small military importance, the 1942 strike gave a psychological boost to the Allied cause at a crucial time.

The B-25's experiences in low-level attacks encouraged many modifications. Many models featured a solid nose; the last of them, the B-25H, carried no less than 14 .50-cal machine-guns... and a 75mm cannon. This was followed by the B-25J, which reintroduced a bombardier in a transparent

nose position, reinstating the B-25 as a bona-fide medium bomber. The B-25J was the most-produced model of the Mitchell; many B-25Js served in Europe in the late years of the war. In fact, the B-25 went on to serve with the USAF until 1960.



North American P-51 Mustang

Originally built to British specifications, the P-51 became the best USAAF fighter of the war. Although bettered by a few fighter designs, the P-51 can rank as the most outstanding fighter of WWII—if for no other reason than the fact that we could not have defeated Germany without it.

Designed after the start of war to an RAF order, the P-51 differed from then current US pursuit planes in that it was to have an in-line engine and eight MGs. Originally equipped with an Allison engine, the first RAF P-51s were given Rolls-Royce Merlin engines; subsequently all American P-51s were to carry the British-designed engine.

Quickly adopted by the USAF, the P-51 began service with the US 8th Air Force in 1943. Its range and high-altitude abilities gave the Allies effective fighter range over Germany for the first time—not only as an escort but as a daylight tactical fighter. The P-51 would eventually account for over 8,000 Axis aircraft in the ETO, and would provide most of the opposition for German interceptors.

The P-51 also saw extensive escort service in the Pacific in the late months of the war, mainly with 20th Air Force B-29s. The range problems encountered on these missions caused the USAAF to create the most unusual version of the Mustang: two P-51 fuselages joined by a common wing and stabilizer, with two pilots and doubled range. The result was the P-82 Twin Mustang. Although few appeared before VJ-Day, the F-82 became a standard postwar USAF escort fighter, and accounted for the first Communist aircraft shot down in the Korean War.

The F-51 was also on hand to serve in Korea, and saw extensive ground-attack duty with the USAF and South Korean units. Surplus P-51s (redesignated F-51 after creation of the US Air Force) went on to long service with NATO, SEATO, and Latin American countries.

The F-51 Mustang is in service with the USAF even today. Reinstated in 1967, the newest F-51s have been assembled from P-51 components and updated with the latest systems. They serve in Air Commando squadrons, mainly for counterinsurgent uses.



Douglas A-26 Invader

Although it went from design to production during World War II, this excellent bomber, in a sense, is not a World War II aircraft. Although it was the last piston-driven, multi-engined attack

bomber in American service, it saw only limited service in the last months of WWII. Technically, of course, it was the best attack bomber of the war.

Redesignated as the B-26 after the passing of the Martin Marauder, the Invader did yeoman duty as a tactical bomber in the Korean War. In service with the USAF for over two decades, the B-26 was modified as the B-26K Counter Invader, and saw service through much of the Vietnam War.

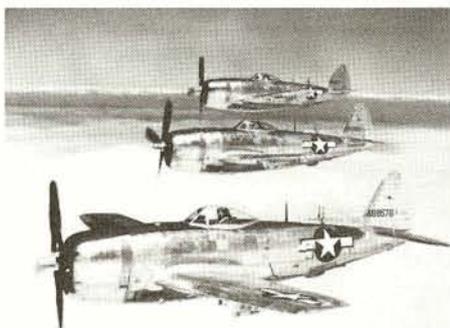


Supermarine Spitfire

In service throughout World War II, the Spitfire design proved of such excellence that it remained a first-rank fighter through 1945, while such long-standing fighters as the Me109 and Zero reached the limits of their design and began to fade. Mk. I Spitfires ensured England's survival in 1940; a Mk. XIV Spitfire became the first to knock down an Me262 in combat. The Spitfire, which went through 24 models and six years of war, put together a record that makes it one of the greatest fighters in history.

Patterned after a series of prizewinning racing planes, the Spitfire was first flown in 1936, and was in service with the RAF as early as 1938. The Mk. I served at the Battle of Britain and was superseded in 1941 by the Mk. V, which was outclassed by the new Fw190 and in turn replaced by the Mk. IX, which became the most widely used of the Spitfire series. Although its role in the Combined Bomber Offensive was hobbled by short range, the Spitfire served with distinction with British forces over Britain and France throughout the war.

The Spitfire was also built for the Fleet Air Arm as the Seafire, a carrier-borne version that served from May 1945 through the Korean conflict. The Spitfire seen in *LW* are Mk. Vs, supplied under reverse Lend-Lease.



Republic P-47 Thunderbolt

Originally designed as a lightweight fighter, the P-47 became the heaviest single-engine, propeller-driven fighter ever built. Developed from the Seversky P-35 and Republic P-43, the Thunderbolt became the workhorse fighter in the European Theatre of Operations, serving as fighter, escort fighter, fighter-bomber.

The durability of the "Jug" rivals that of the B-17. P-47s have gone on record as returning minus half a wing, with half the engine cylinders shot out, with so many holes that it often looked like a cheese-grater, rather than an aircraft. But P-47s did return; its durability stood it in good stead in ground attacks, and even more so against less-durable German fighters.

The P-47D, which appears in *LW*, was the first to feature a "bubble" canopy, similar to the P-51. The P-47D and N models were the most-produced of the 15,000 Thunderbolts; the latter N model, featuring longer range, served primarily in the Pacific.

NOTE: for a full order of battle of all USAAF groups in the ETO (not included in the *LW* Campaign Briefing Manual), see the *GENERAL* May '71 issue: Vol. 8, No. 1.



Dornier Do217

Developed from the famous Do17 "Flying Pencil," the Do217 appeared as a reconnaissance and torpedo-bomber in 1941. Eventually replacing the Do17, the 217 served as a bomber in various roles for the remainder of the war.

The Do217 saw widespread service, in modified form, as a night fighter. With a solid nose (a similar development was made in the B-25), the Do217 was equipped for this role with radar and no less than four 20mm and four 7.9mm guns, with an additional 13mm for rearward defense. With similarly-adapted Ju88s, the Do217 saw good service defending German cities from RAF firebombings.



Focke-Wulf Fw190

The first major German fighter since the Me109, the Fw190 became the primary interceptor opposing the Combined Bomber Offensive, as well as superseding, but not replacing, the Me109 as the Luftwaffe tactical fighter. Although it had difficulties at higher altitudes, the Fw190A and D interceptors were the equal of any Allied fighter. The Luftwaffe's first radial-engined monoplane fighter, the Fw190 retained excellent maneuverability and speed, and was respected by its opponents.



Focke-Wulf Ta152

Perhaps the best conventional fighter of the war, the Ta152 appeared almost too late to see effective service. Designed by Focke-Wulf designer Kurt Tank (hence the "Ta" designation), the Ta152C—the only operational model—started production at Sorau. Few were made before the Red Army took the plant.

The Ta152C featured an engine of 2100-2300 hp, and was armed with a 30mm cannon in the propeller hub, supplemented by four MG151 cannon.



Heinkel He162 Salamander/People's Fighter

The Volksjager was one of the most remarkable examples of the radical direction taken by German

interceptor design. Built to a government specification of September 1944, the fighter was in the air no less than 10 weeks. Made primarily of plywood and other nonstrategic material, the He162 was designed to make up for the bombing of the conventional German aircraft industry, and eventually was to serve as the basis for an airgoing Volkssturm.

Armed with two 20mm or 30mm cannon, the He162A went into service with JG84 in the spring of 1945. Few were completed before VE-Day; fewer still ever saw combat. Besides design problems caused by the hasty appearance of the Salamander, the plane had proven to be extremely difficult to fly.



Junkers Ju88

The Ju88 was the most adaptable of any combat aircraft of the war; it served throughout the ETO in virtually any role required of combat aircraft.

Originally designed as a medium bomber, the Ju88 appeared in 1937. It served in Poland, France, Britain, and Russia throughout the first years of the war in tactical and strategic roles, eventually superseding the He111 and Do17 in these roles. Ju88s engaged Allied shipping from Norway and Italy, climaxed by General von Riechthofen's strike on the Allied supply port at Bari in December 1943, sinking 17 merchant vessels (one of which turned out to be full of mustard gas, which caused over a thousand casualties) and causing a disaster rivaling Pearl Harbor; the British 8th Army and US 12th Air Force were neutralized for much of the winter.

Versions of the Ju88 bomber were also supplied to Italy and Finland; the Ju88 went through many modifications and continued into the Ju188 and Ju388 series.

Built also as a nightfighter and destroyer, Ju88C and later modifications began service with NJG1 in 1940. Some 6,000 Ju88 fighters were built to oppose Allied day and night bombers, carrying Liechtenstein radar systems and an assortment of up to six 20mm cannon, additional 13mm and 7.9mm MGs, and assorted rockets. The Ju88 was instrumental in the night actions against the RAF; between nightfighters and German electronic advances the RAF Bomber Command was nearly driven from the sky in 1944.



Heinkel He219 Owl

Originally proposed in 1940, official disinterest delayed the first flight of the He219. Germany's first genuine night-fighter, until late 1942. Due to bureaucratic interference with the entire German twin-engine fighter program, less than 300 He219s were made, fortunately for the Allied cause.

Radar-equipped, faster than 400 mph, and armed with six 30mm and two 20mm guns, the He219 turned out to be the best night-fighter of the war, surpassing even the P-61 and Mosquito in

some respects. Because of its small numbers, converted nightfighters like the Ju88 and Me110 continued to form the bulk of German night defenses.



Messerschmitt Bf110

Although somewhat underrated throughout its career, the Me110 gave excellent and versatile service throughout the war, and proved to be a valuable workhorse. Developed just after the Me109, the Me110 entered service too late for the war in Spain, and first saw action in Poland as an attack bomber.

Designed as a long-range escort fighter, the Me110 was found wanting in this role in its first actions against enemy fighters. The clumsy aircraft was continually outclassed in clashes with British fighters and Swiss Me109s in the summer of 1940; the situation got so bad that Me110s required escorts of their own. The aircraft would probably have been replaced by the Me210, had not the latter proved to be a major boondoggle.

1942 saw the effective re-introduction of the Me110 as a fighter-bomber (Me110F) and night-fighter (Me110G), roles in which it was to serve with excellence for the remainder of the war.



Messerschmitt Bf109

The Me109 (the official "Bf" designation refers to the Bayerische Flugzeugwerke, where it was originally produced) was one of the greatest combat aircraft in history. It served throughout the war—in fact, its active service spanned three decades—and was the most numerous fighter of the war: some 32,000 were built. It dominated the skies of Europe, almost entirely on its own, for several years; even toward the end it offered opposition to Allied power.

First flown in 1935, and entering active service two years later, the Me109 was Germany's first monoplane fighter. Indeed, until the advent of the Fw190, it was the only German single-seat fighter, gradually replacing the He51. First combat was in the Spanish Civil War, where Me109Bs served with the Condor Legion; initially it was matched by Polikarpov I-15 and I-16 series fighters flown by Republican pilots. But the older Polikarpov fighters were at the peak of their development; the appearance of the Me109C established final Nationalist air supremacy in that war. Combat experiences led to the development of the Me109E ("Emil"), which were predominant in the first year of World War II.

The Me109 led the Luftwaffe to spectacular victories over the air forces of Europe, and was the key to the entire German offensive effort, which could not have succeeded without air superiority. There is even some conjecture that the Me109E-3, despite its limited range, might have won the Battle of Britain had they been directed more intelligently. Certainly the Me109 was a match for any Allied fighter then in service.

The Me109E was briefly replaced by the F series, which sought to improve the plane's handling characteristics by removing the wing guns. The Me109F had a short and controversial career; never fully accepted by Luftwaffe pilots, despite the fact that it could out-maneuver the Spitfire V, the Me109F was replaced in 1942 by the most important and most widely used series of all—the Me109G ("Gustav"). Like previous models, the G series retained a 20mm cannon in the propeller hub (later changed to a 30mm MK 108 starting with the Me109G-6) and two MGs in the nose. Unlike the 109E, the two wing-mounted 20mm guns were mounted under the wings, rather than in them. The Me109G saw action on all fronts and was increasingly called on to perform high-altitude missions against the USAAF—as good as the Fw190 was at low and medium altitudes, it was proving inadequate at higher levels. A few Me109H and K series fighters were completed to fill the gap before the appearance of the Ta152, but by then the war was ending. As events proved, the Me109 had lasted so long that it, the Fw190, and the Ta152 were slated for replacement by the Me262.

Me109s were not limited to Luftwaffe service, nor does VE-Day mark the end of their story. Large numbers of Me109E and G series fighters had been exported to Spain, Yugoslavia (where they served against German Me109s), Hungary, Rumania, Bulgaria, Finland, and Switzerland, the latter using its Me109s on straying German Me109s, among others; the Swiss Me109 inventory consisted of both imported and confiscated Me109s. Spain and Czechoslovakia both produced Me109s after the war; the Czech version, the Avia S-99 and S-199, was the standard Czech fighter until the issue of MIG-15 fighters in the early '50s. Some S-199 found their way into the Israeli Air Force, serving in the 1948 War for Independence.

The Spanish version, which began manufacture during the war years, was the Hispano HA-1109 and HA-1112, the latter a fighter-bomber version powered with Rolls-Royce Merlin engines. Production ended in the late '50s; active service of the HA-1112 continued into the late 1960s.



Messerschmitt Me163 Comet

At the dawn of the jet age, fighter development took a radical new direction in the mid-1940s with the appearance of the rocket fighter. During the early and mid-40s, the Soviet Union built the Bereznyak-Isaev BI-1, the United States brought out the Northrop XP-79. Germany—in addition to the Komet—built the Bachem Ba349 Viper, and Britain followed in 1949 with the Hawker P.1072. All these aircraft were rocket-powered prototypes for an innovative wave of fighters. All were passed by; war production priorities, and the turbojet had overcome them, all except the Me163: the world's only operational rocket fighter.

The by-product of German advances in aircraft design and rocketry, the Me163 was developed through a series of powerless prototypes, while the rocket engines were still being readied. The Me163A (later used as a trainer) showed superb gliding characteristics—important in a fighter able to maintain only 8 minutes of powered flight. After a series of problems with the rocket engines, the Me163 went into service with JG400 in the summer of 1944, as a point-interceptor. Despite the volatile nature of the aircraft—which made take-offs and landings hazardous—and the fact that the extreme speed of the Me163 made accurate attacks difficult, the Me163 proved pretty much unstoppable.

The Me163B—the only operational version of the fighter—was a very small plane: it had a wingspan of 30 feet and a length of only 18 ft. The Comet could reach its ceiling of 39,500 ft. in only 3½ minutes. The Me163 was to be replaced with the Me263—a development of the Komet with more range and retractable, rather than detachable, landing gear; however, the war ended before it could go into full production.

Another development of the Me163 was the Mitsubishi J8M1 Shusui (Sword Wind), patterned after the Komet and built with German-supplied information. The Shusui was developed by the Japanese Navy as a last-ditch defense against the onslaught of the 20th Air Force; the prototype flew in July of 1945 but did not enter production until the day of the surrender, 15 August 1945.



Messerschmitt Me410 Hornet

The Nazi system is occasionally (and mistakenly) portrayed as the model of efficiency. It certainly wasn't apparent in the Third Reich's aviation industry. Plagued by mistaken doctrine (see "Luftwaffe Analysis," Vol. 10, No. 2), bureaucratic meddling (not the least of which was the near-suppression of the He219 and Me262), and punctuated by such disasters as the He177 and Me210—unrivaled by even the U.S. defense industry's best efforts—the German aerospace industry was shackled from beginning to end.

The German government, having committed itself to large orders of the Me210, found itself in a bind with the plane going from prototype stage (1939) into service (1941) with no improvement. The plane had rotten handling characteristics, and a bad tendency to crash. After extensive re-design the aircraft re-appeared as the Me410 Hornisse (Hornet), and about a thousand of these were produced until 1944. Although the aircraft had heavy armament and tolerable performance, its record was marginal at best.



Messerschmitt Me262 Swallow

It was the first jet fighter in history, and easily the best fighter of World War II. The few that did see combat made the last months of the war most anxious for the 8th Air Force. Yet, the role of the Me262 was in the realm of might-have-been, a shadow of what could have been.

The first Me262 prototype flew in April of 1941. Government apathy and inadequate engines kept the aircraft in the prototype stage for two years. Finally demonstrated for Hitler in November of 1943, the Führer stunned everyone present by ordering its production—as a bomber. When the 1944 production of the Me262A-1 fighter was discovered by Hitler, he ordered the conversion of those made into the Me262A-2 Sturmvogel (Stormbird). Despite the new Junkers Jumo 004B turbojets, the bomber configuration slowed the aircraft to within the reach of Allied conventional fighters; in this role the Me262 was not only misused but redundant, as the Arado Ar234 Blitz jet bomber had already gone into production. Eventually Hitler was to give the Me262 fighter priority in production—but by then it was too late. Fewer than 200 of the 1,000+ production Me262s saw combat.

The *LW* rules' Profiles and Data section alleges that the Me262 was "the most successful example of"—mark this—"German genius." Nonsense!

Hardly a success—and "most successful of an industry plagued with a TFX mentality isn't saying much. But "German genius?" By the time the Me262 went into production, the USSR had tested a rocket fighter; Britain had flown the Gloster E.28/39 Pioneer prototype in May of 1941, and had the Gloster Meteor jet fighter in production by July 1944. The United States produced two jet fighters that year—the Bell P-59 Airacomet and the Lockheed P-80 Shooting Star. The Meteor saw action in the last year of the war, most of it defending England from V-Is.



Dewoitine De520

The best of the Armee de l'Air fighters at the start of the Battle of France, the Dewoitine 520 might have had a decisive impact on the war had it been produced in large numbers. However, production had been delayed by French government-imposed modifications, and deliveries began in the spring of 1940. The Morane-Saulnier and Bloch fighters proved inadequate against the Me109E-3, which would have found a match in the Dewoitine 520.

Production of the fighter continued until 1942 under the Vichy government. The German occupation forces, invading Vichy that November, confiscated the 700 or so D-520s, giving many to Bulgaria, Rumania, and Italy, and using others to train pilots for JG 103 and JG 105.

After the invasion of France, 30 D-520s were recaptured by Allied forces. These fighters subsequently saw good service in the forces of Free France, in the closing months of the war.

ANALYSIS AND TACTICAL EMPLOYMENT NUMEROLOGY AND A RATINGS

What follows is the result of an in-depth analysis. Problem: in order to accurately assess the relative worth of each aircraft, we must assess all of its characteristics as they appear in the game. E ratings alone won't do it—the He162 and Me262 have the same E rating, but I doubt if anyone can assert that the Salamander is better than the much more effective Me262.

It is a question, then, not only of the E ratings—which represent the aircraft's effectiveness as a fighter (mainly its agility)—but also of its hitting power, as represented in the confusion of the Aerial Combat Table.

I direct your attention to Chart 1—the Per-Factor Effectiveness Table (P-FET). The P-FET, the result of computer analysis of the *LW* ACT, lists the average effectiveness of each factor in attacks of from 1-34 factors; the chart is laid out in comparative form, e.g., an attack of 5 P-47s, given average results, will destroy the same number of enemy factors (per P-47 factor) as with 5 Fw190 or 15 Me110 factors.

In basic terms, the P-FET lists the average kills gained by one factor, as a part of a larger attack. If we were to, say, just analyze the average results of each attack, it would prove nothing. One look at the ACT should indicate to you what the over-all results will be—more units make a bigger bang and that's that.

But when we analyze the killing power of each factor, 3 important facts emerge:

(1) With few exceptions, the effectiveness of each factor increases with the size of the attack. One Me262 by itself kills only .167 USAAF factors in an

average attack; as part of a 28-factor (14-gruppen) attack, that one factor gets .583!

(2) A fighter that is in large numbers is more effective than some of the freaks in the game. Check the mean/factor (mean effectiveness per factor—the average of the recorded results in each column on the P-FET) results on Chart 1. The Ju88 and Ta152 use the same results column, but have different overall ratings. Because of the rules of attack—"best against the best" and so forth—the Ta152 attacks by itself because of its higher E rating. But a number of Ju88s in the same attack is apt to get better results (see (1) above). Of course, against bombers, the Ta152 and Ju88 act together.

(3) E rating and attack effectiveness are two different things. The Me410, few of them as there are, far exceed anything in the USAAF in deadliness.

Comparison of fighters in the *LW* game must consider not only their E rating, but, co-incidentally with that, their average per-factor effectiveness—or A rating—as shown in the mean/factor results on the P-FET. Range, a third consideration, can be considered as an entity, as the game presents it as an abstract. What has been discussed in this presentation underlies everything written in the more general tactical commentaries below.

(NOTE: the A factors of aircraft sharing the same ACT column and E rating—the B-17 and B-24, the Me163 and He162, and He219 and Do217—are similar because, when together, they can attack as one group, whereas the P-40 and P-51, or Ta152 and Ju88 must attack by E rating, under the rules.)

ANALYSIS AND TACTICAL EMPLOYMENT AIRCRAFT COMMENTARIES

Here follows a type-by-type discussion of the properties and uses of the aircraft that appear in *LW*.

Fw190 E rtg 4/3s A rtg .510 Fuel 4/3

This aircraft, by virtue of its numbers and relative effectiveness, is the backbone of the German defenses. It has enough range to operate in most areas of Germany and Austria, enough E rating to take on USAAF fighters, and enough hitting power to make it count.

It is suggested that the aircraft be employed as one large force, to augment effectiveness, based in the Schweinfurt-Karlsruhe sector. If the US goes for northern or central Germany, it can move north quickly and intercept over Hesse-Kassel or in front of Hannover. If the main American effort comes from the south, the 190s based in southern Germany, can cover the back door of the Reich.

Wherever it is employed, it must be at the forefront of the interception. Twin-engine fighters can't cope with US fighter opposition; the Me109s short range chains it to areas with lots of airfields. What's more, the Germans can't afford to suffer heavy 190 losses; if it hits the US fighters it must hit with every 190 available, and other fighters if available, to forestall counterattack. The German must also consider the 190, because of its endurance, its best weapon against bomber forces. To sum up: the German must use judgement—and decisiveness—in employing the Focke-Wulf; more importantly, its power requires that it be kept busy.

Me262 E rtg 6 A rtg .538 Fuel 2

This fighter, by virtue of its E and A ratings, is the best the Germans have. But it isn't a cure-all for the German's defensive ills; it has inherent weaknesses and must cooperate with conventional fighters if it is to survive.

CHART 1. PER-FACTOR EFFECTIVENESS TABLE (Figures indicate average No. of enemy factors destroyed by each factor of attacking force)

	P39	B26	P38	B17 B24	P40 P51	Spit P47		190	262	109	163 162	110	88 152	410	219 217	520	
1	—	—	—	—	—	—	1	—	.167	—	—	—	—	.333	.167	—	1
2	.083	—	.167	—	.167	.25	2	.25	.416	.25	.083	.25	.167	.5	.416	—	2
3	—	—	.167	.111	.278	.333	3	.333	.5	.333	.167	.333	.278	.556	.5	.111	3
4	—	—	.25	.125	.25	.417	4	.417	.5	.375	.208	.375	.25	.583	.542	.125	4
5	—	.067	.375	.2	.333	.467	5	.467	.5	.4	.2	.4	.375	.7	.5	.167	5
6	—	—	.278	—	.333	.417	6	.417	.583	.389	.25	.417	.333	.667	.583	.167	6
7	—	.071	—	.214	.357	.5	7	.5	.524	.357	—	—	.333	.643	—	—	7
8	—	—	—	.208	—	.479	8	.479	.521	.438	.25	.438	.313	.646	—	—	8
9	—	.093	—	.222	.389	.5	9	.5	.556	.426	.241	.444	.389	.648	—	—	9
10	—	.1	—	.233	.383	.517	10	.517	.55	.433	.25	.45	.367	.7	—	—	10
11	—	—	—	.227	.394	.530	11	.530	.545	.455	—	.455	.364	—	—	—	11
12	—	—	—	—	.375	.5	12	.5	.583	.431	.292	.458	.375	—	—	—	12
13	—	—	—	.269	.397	.539	13	.539	.551	.423	—	.462	.385	—	—	—	13
14	—	—	—	—	.393	.536	14	.536	.560	.429	.262	—	.369	—	—	—	14
15	—	—	—	.256	.4	.533	15	.533	.567	.467	.267	.467	.378	—	—	—	15
16	—	—	—	.25	—	.542	16	.542	.563	.448	.271	.469	.375	—	—	—	16
17	—	—	—	.255	.412	.549	17	.549	.559	.441	.265	—	.412	—	—	—	17
18	—	—	—	.25	.407	.528	18	.528	.583	.444	.278	—	—	—	—	—	18
19	—	—	—	.263	.412	.553	19	.553	.579	.447	—	—	—	—	—	—	19
20	—	—	—	.258	.4	.55	20	.55	.575	.45	.275	—	—	—	—	—	20
21	—	—	—	.262	.397	.548	21	.548	.571	.452	.270	—	—	—	—	—	21
22	—	—	—	.265	.402	.553	22	.553	.568	.477	.273	—	—	—	—	—	22
23	—	—	—	.261	—	—	23	.558	.565	—	—	—	—	—	—	—	23
24	—	—	—	—	—	—	24	.542	.583	.458	.276	—	—	—	—	—	24
25	—	—	—	—	—	—	25	.56	.573	.46	.278	—	—	—	—	—	25
26	—	—	—	—	—	—	26	.558	.571	.461	.280	—	—	—	—	—	26
27	—	—	—	—	—	—	27	.556	.574	.463	—	—	—	—	—	—	27
28	—	—	—	—	—	—	28	.560	.583	.458	—	—	—	—	—	—	28
29	—	—	—	—	—	—	29	.563	—	.448	—	—	—	—	—	—	29
30	—	—	—	—	—	—	30	.55	—	.467	—	—	—	—	—	—	30
31	—	—	—	—	—	—	31	—	—	.462	—	—	—	—	—	—	31
32	—	—	—	—	—	—	32	—	—	.464	—	—	—	—	—	—	32
33	—	—	—	—	—	—	33	—	—	.470	—	—	—	—	—	—	33
34	—	—	—	—	—	—	34	—	—	.461	—	—	—	—	—	—	34
mean/ factor	.083	.083	.247	.229	.195	.25		.510	.538	.432	.249	.417	.341	.598	.451	.143	
	P39	B26	P38	B17 B24	P40 P51	Spit P47		190	262	109	163 162	110	88 152	410	219 217	520	

The advantage of the Me262—E rating and hitting power—are obvious. But its drawbacks are not always recognized. The aircraft's poor endurance and its being tethered to designated jet airfields put it at a disadvantage. US fighter groups can enter its area, if close to the front, wait for it to land, and then strafe if when it no longer has an E rating to protect it. Me262's, unless in large (non-historical) numbers, can't really retaliate as overwhelmingly.

The 262 is all at its best as a bomber interceptor. It can score impressive results without suffering return fire, and its E rating can help cover the whole attacking force from fighter retaliation. It is at its best in rear areas, based away from US fighters and able to serve as a backup for the conventional fighters. The Me262 should be based in the Brunswick-Leipzig-Berlin area, as most bomber missions will come in this direction anyway, particularly in the closing months of the war.

Me109 E rtg 3/2s A rtg :432 Fuel 4/2

The most numerous of the German fighters, it takes second in importance to the less-plentiful Fw190 because of the 109's short range. Between its large numbers and need for frequent refueling, the 109 has to have large numbers of airfields present; this limits its operational area to northern and

central Germany. Also, the threat of US strafing keeps the 109 pretty well out of any airfield within 7 hexes of the R line—including every airfield in Holland and the Ruhr. This usually puts the Me109 front-line effort in the Wilhelmshaven-Hamm-Gotha-Hannover region, and back from there.

Because of the lessons of the P-FET, and the use of the everybody-drop-tanks-at-once rule in less-sophisticated circles, the Me109 pretty well must strike in one big attack. It is strongly urged that tanks be kept on as long as possible, to give the German forces one or two extra turns of attack.

The staging rules do allow the German to clump his forces together. However, it is strongly urged that the German player do not use this rule:

1) Rule 4 makes any tactical operations in a staging area difficult. Staging can be tricky at best, and disastrous if US fighters are coming.

2) Staged airfields just beg a bombing or strafing attack. All it would require would be one oversight, and the Luftwaffe would take it in the chops.

3) *It's not necessary.* There are so many airfields in north-central Germany that large numbers of fighters can be posted 2 factors per base and still be able to hit nearby bombers with most or all groups in the area. Fighters can attack on the turn they take off, which makes bomber groups fair game for anybody in a 6-hex radius.

Me163 E rtg G A rtg .249 Fuel 0

The disadvantages of the Me163 are comparable to the Me262—it's chained to its own base, it can't stay up and fight anything outside its 4-hex range, and what's more, it can be bypassed if it's not in the middle of a major bomber route, e.g., if it's based in southern Poland. Combined with rotten hitting power, this aircraft has few advantages.

About the only real advantage it has is that it can hit and hit and hit anyone flying through its immediate area, mainly slow bomber forces. Based in the middle of a cluster of targets, it can eventually inflict a lot of casualties, especially because it is immune to bomber fire.

It is strongly urged that the Komet be used to cover a major target complex, remote from the R line. Brandenburg and Juterbog, on the approaches to the Berlin area, are ideal Komet bases.

He162 E rtg 6 A rtg .249 Fuel 1

A combination of short range, comparable A rating, and similar characteristics make the Salamander quite similar to the Komet. Other than its E rating and the fact that it doesn't land on the same turn it takes off, the He162 can be thought of as a Komet with a 9-hex radius of action, with all the attendant problems.

Like the Me262, though, the He162 can cover other interceptors in its area with its E rating. Care must be taken, however, to keep it out of reach of Allied fighters.

Me110 E rgt 2 A rgt .417 Fuel 9/4

The ratings of the 110 show its main uses: it can be effectively used against bombers, and is equally poor against Allied fighters. The chief plus of the Me110 is range—it can operate in areas with few airfields. So, it can be consigned to such regions as Austria and the Baltic with good reason—unless there's a major sweep the main opposition will be bombers. And, as long as the 110s keep their tanks, they can stay with the enemy formations, and attack continually.

Ju88 E rgt 0-1s A rgt .341 Fuel 10/8

This aircraft can be posted in the south with the 110 and 410 fighters, but can be sent to the Baltic and Eastern Front without much trouble, as the E rating and A rating are poor by German standards. It should not be used, say, in the West, where large escorts (E ratings) and fighter sweeps are to be expected, as the 88 is in little position to hit back.

Ta152 E rgt 5 A rgt .167 Fuel 3

Its large E rating and great speed make this aircraft similar to the jets, in that it is useful mainly for its E rating as top cover. It is too few in number to count for much else. It should be employed somewhere in Germany, exactly where doesn't matter all that much.

Me410 E rgt 2 A rgt .598 Fuel 11

By *LW* standards, the 410 is the deadliest aircraft in the game. Everything said about the 110 goes, doubly so, for the 410. Although atrocious against Allied fighters, and shouldn't be risked that way, the 410 is hell on wheels in a bomber formation, and its range allows it to "escort" bomber formations quite a ways.

The 410 should be sent to Austria. It really won't add much to north German defenses and might get in the way of 109s; the main thing is, if it isn't guarding the south, what else will do the job as well? Considering the few airfields, no other aircraft can.

Do217/He219 E rgt 2 A rgt .451 Fuel 14/7

These two aircraft are also at their best in remote areas. The single Do217 can cover the Russian and eastern Baltic sectors quite well; with the later He219s it can help cover the Baltic, Russian, and southern fronts. The He219, with an endurance of 7, should go where there are at least a few airfields, e.g., Austria.

De520 E rgt 2 A rgt .143 Fuel 8/5

What is said about this aircraft goes for all school units. Although it would be a waste to withhold them in the face of the need for all available forces, the German player must consider the rules: if the school units are to be converted into jet units on a 1-1 basis, they must have not taken casualties. (However, there is a loophole—the rules specify two units for one jet unit. Two 1-factor units will do nicely, helping to recoup some of the loss).

If employed, the school units should be limited to the Baltic and the East, to limit the chance of losses. Even if they *have* taken losses, they should still be kept back there—rebuilding school units is a waste of scarce replacement factors that can better be used to rebuild Fw190s.

P-51 E rgt 4 A rgt .362 Fuel 14/5

P-47 E rgt 3 A rgt .492 Fuel 10/3

These aircraft are often assigned mistakenly to escort duty. One or two on escort to provide a covering E rating is OK, but assigning many or all of

ANALYSIS AND TACTICAL EMPLOYMENT BOMBER TACTICS

We all know the basic strategy of USAAF bomber employment, as suggested to us by history, and that is, of course, clumping the bombers into enormous formations and making the Hun pay dearly for attempts on them. What may not be as well understood is the measures and countermeasures of organized bomber warfare on the *LW* board.

The P-FET demonstrated the lesson of numbers; the greater the number of bombers, the more interceptors they'll knock down, collectively and individually. This limits bomber groups to 3-5 groups: B-17s, B-24s, B-26s, and a group or two operating on other fronts.

The best practice, by consensus, is to keep the bombers together as long as possible, then release individual groups as the targets draw near—the optimum being releasing all bombers within a turn of their targets. The map shows several attacks, and the problems involved. (See Chart 2.)

The sample attacks in north Germany, involving 12 B-24 groups and 5 B-17s on a sneak raid (appearing 5 turns after the B-24s), illustrate this strategy. The final B-24 target, Ruhland, is 8 turns from the R line by straight-line distance; since the route chosen takes exactly 8 turns it is legal. The bomber group releases groups on turns 4, 5, 6, and 7 (unloading one on Hannover on turn 4, then scattering groups outward and forward, at the points marked by arrows). In effect, the formation becomes an omnibus of destruction, dropping individual groups off along the way.

The three southern attacks shown are all improper. The rules clearly indicate that detours must not add to the time-in-air between R line and target. The B17 group headed for Stuttgart goes so far east of Munich that the group going there will have been 5 turns out from Italy instead of 4. The B-26 attack on Ingolstadt and Regensburg is illegal—the Regensburg plant is 4 turns from Italy, but so is Ingolstadt; the group headed there would have had to go via Salzburg. Further, the attack on the Linz-Steyr area is legal, but just barely: Steyr is 3 turns away, so the group assigned there has to break formation that turn near Zeltweg, whereas the Linz group can stay with the main group another full turn, and then turn sharply right—Linz is 4 turns away either way.

The left wing of the B-24 attack is quite illegal. Pardubice is 7 turns away from Italy, so that's OK, but the group reaching Prague is a turn late. But; other than the actual strike on Prague, it's a good—and legal attack. If the Luftwaffe is caught unaware the whole German southern flank could be burnt out in one quarter.

One note on target priorities, beyond what I wrote in "Luftwaffe Organized" in the Dec. '73 issue of the *GENERAL*: The targets marked out on the map in the Hannover-Leipzig area not only constitute the bulk of your targets as the US player, but are the center of the German defense. Burn it out in early or mid-1944 (if you can bring it off), and you will not only have crippled the German aircraft and oil industries, but you'll have torn out the heart of the German defense. The German player will be forced to defend the outer targets that much more—at a disadvantage.

Escorting is a major part of bomber operations—whether or not to, and if so, how much and of what units. Escort serves two basic purposes; it gives the bomber force an E factor of sorts, as the Germans have to hit at the escort first; and, the escort force absorbs what otherwise would be bomber casualties.

We already discussed escort problems from the fighters' view. Escorts for a bomber are not necessarily a good thing, as their effectiveness in the face of large groups of German fighters are limited at best—and, may even strip cooperating fighter forces of a countermeasure. Close-escort is not the only way to get the bombers through, as the Germans learned, too late, at the Battle of Britain. Aggressive P-47 and P-51 sweeps can do the job just as well.

Often neglected are escorts for the medium and light bombers. Lone A-20s and B-25s might not need escorts, if they aren't going anywhere important, but the US player should consider assigning P-38 or P-40 escorts, or the sole P-39, to the B-26s, which are somewhat numerous and can make the difference if they get through. Usually they don't even against indifferent German opposition. But an escort group or two could mean as much as 5 extra targets to the USAAF—or force the Germans to use disproportionate forces to stop it from occurring.



them is a supreme waste. These fighters, by virtue of their speed, numbers, and effectiveness, should actively hunt the enemy. Each German factor they shoot down is one less that can take out the bombers—and each bomber unit is one more city taken out. Further, chasing the Luftwaffe out of their airfields, or launching pre-emptive strikes at aircraft based 7 hexes or less from the R line, will disorganize them, and delay their attack on the bombers.

The Thunderbolt is good for most tactical purposes. It's the deadliest USAAF aircraft, and its speed and E rating is enough for most German fighters. Its drawback is range—if it expects to fight with full E rating it must keep within basic range of the R line—21 hexes or less.

Its partner, the P-51, can reach much further into the German heartland. Although not as hard-hitting, large numbers can make up for it. It is strongly suggested that no less than 8 groups of P-51s try going it alone. The initial 4 aren't all that strong.

Remember one thing—these aircraft can be replaced easier than their German counterparts.

Spitfire E rtg 3 A rtg .15 Fuel 6/2

Because of its range problems, the Spitfire is really not suited for escort duties—but it can be employed with some reason, as its E rating offers some uses; besides, its speed and range makes its employment with its partner P-47s difficult. Still, this fighter has enough going for it that it can be used either way; also, one group really won't have too much importance in a mass of fighters. If its E rating mitigates an attack on a bomber force, then it's been of some use.

P-40	E rtg 2	A rtg .195	Fuel 10/5
P-39	E rtg 0	A rtg .083	Fuel 6/4
P-38	E rtg 2	A rtg .247	Fuel 14/6

All three of these fighters are useful for little other than escort duties. The P-40 and P-39 certainly can't match German fighters, and the P-38 might have use as a tactical fighter only against German twin-engine aircraft. Even then, the Germans have the advantages in range (locality included) and numbers. Better that the P-38 losses be taken instead of bombers, hence the need to keep them on escort. About the P-40 and P-39, the less said the better.

B-17, B-24, B-26

A-20, A-26, B-25

These aircraft are something of an anomaly. Limited mostly to the Advanced Game, they have no firepower, so there is no need for them to move in formation. Excluded by the rules from other bomber formations, they are pretty well on their own.

Their main effectiveness in the game is in the absence of opposition. For peripheral raids—Hungary, Austria, isolated targets away from main bomber routes, targets close to the current R line—these are their main targets.

The faster bombers—the A-type bombers—also have uses in pre-emptive strikes on airfields. This is of only limited use—the German is apt to shoot them down first if he feels in the mood, and even if the bombers do take out an airfield the German will seldom be fooled twice. There's only one airfield on the map that is, even without aircraft, worth bombing—Zeltweg, Austria—the rest are too numerous, and the USAAF needs to take out every target he can, with the victory conditions being so tight.

THE PROBLEM OF BALANCE

In both the Advanced and Tournament versions of the game, the USAAF is faced with stringent victory conditions. In the Advanced Game, the USAAF must take out every target on the map—all 79 of them—in the face of increasingly strong German fighter opposition. The Tournament Game, the less involved version of the campaign-type part of *LW* only requires the destruction of 43 German aircraft plants—with diminished US forces.

In either game, the US is hard-put to achieve his objective, despite his numerical and replacement strengths. Further, no allowances are made under standard rules for German fuel problems or advancing Russian forces, the latter leading one to the nasty conclusion that the USAAF player's objectives is not to help the Western Alliance win the war, but to smash targets before the Sovs can get to them—in effect, a gigantic Demolition Derby. In fact, historically-minded players may note that they are, in the last two or three quarters of the game, bombing targets in Soviet hands, historically.

Technically, the game is balanced. Very, very delicately balanced. But, since the obligation of attack is on the US, bad luck or a single bad quarter will do him in. Considering the amount of effort required for a full Tournament or Advanced Game, quite tragic. Being beaten by a good opponent is one thing, losing the game quite another.

The Optional Games section proposes a number of variants to balance things out. Basically, this means that the US attempts to pull chits marked with some industry. Once the targets of that industry are all taken out, the Luftwaffe is grounded, whether the industry is oil, armaments, ball bearings, or wing nuts. Ignoring the generalized effects, it must be said that the game's standard target system—eliminate the target with all its industries at once—is as close as anyone could come. The Combined Bomber Offensive, besides its problems with the new science of target intelligence (what effect does the target have on the German industry?), had to follow the whims of the Allied high command. The result was a lot of side-trips for secondary or political purposes, e.g., the attacks on sub pens, V-weapons, terror missions, etc. Besides, even when key industries were badly-hit, the Germans often came up with something to replace it, from ersatz chocolate and soap, to ersatz fuel (synthetic oil), and even ersatz planes (the Salamander).

Thus, the problem of balance: how do we balance the game without unhinging it, rendering it altogether unplayable, or putting in a historical atrocity?

For example: a lot of the woes of the game stem from the Aerial Combat Table. Just look at it! On some of the larger (and more crucial) battles, the ACT has results ranging from 4 to 20 or 25. That's as much as 75-100% above and below the average. Considering that 20-odd factors on the attack represents a large part of that quarter's forces at any given time, the results of a few bad die rolls can be fatal. Maybe the wing commander got up on the wrong side of the bed that morning—that's great history but lousy game-playing.

Computer analysis again provides the answer. Chart 3—the Standard Results Chart—shows the average results for any given attack on the ACT, rounded to the nearest .001. This can very easily be implemented into the game, in two forms:

(1) *Those who still want a smoothly playable game, with no record-keeping, can do so. Merely round off the results shown, rounding anything below .499 down to the nearest factor (1.0), and rounding anything at or above .500 up.*

(2) History buffs, misanthropic wargamers, and CPAs can elect to implement the full result, down to the last thousandth. They can either:

A. Remove the unit as above, but keep a running total of the losses for each type, and alter the replacement accordingly, building up new units out of fragments of the old ones.

B. Retain the unit as long as it has .001 or more, keeping records on each group's losses; when units enter combat, round the unit's factor off and keep it on the ACT within manageability.

C. Retain the unit to the last .001, and recompute its attack value accordingly—and exactly—to the last .001. An attack of more than two units will require the use of a Hewlett-Packard HP-35 and the Caltech Department of Mathematics.

That is what we get into with average results in the abstract. I offer (1) above as a plausible means of averaging results; (2) is not too strongly recommended for everyday wargaming.

Now and then the problem of E ratings will arise. A fighter with an inferior E rating subtracts that rating from a superior defending fighter (E ratings not considered when the attacker is equal to or superior to the defending fighter's E rating). That amount is subtracted from the die roll. This can sometimes involve even more luck on the die-rolling (example: 20 factors of P-47s attack 2 factors of Ta152. Subtract the P-47s factor of 3 from the Ta152s 5, and you subtract 2 from the die roll. If the US player rolls a one or two, that's all she wrote—the Ta152 gets away scot-free.

This can be implemented—and fairly—onto the Standard Results Table. If you run into a situation where you have an inferior fighter attacking something with a larger E factor, and you want to have average results, use the following formula:

$$X = A - A \frac{e}{A}$$

e = defender's E rating — attacker's E rating
A = average results, according to SRT, for that attack

This will give you true average results after the E rating differential has been extracted from the 6 possibilities, as expressed in the SRT. It's not as difficult as it looks.

Another means of balance can be found by using the Russian Gambit. This assumes that the USAAF player is merely out to win the war, and not merely to score off the Kremlin or the Armed Services Committee. The Russian gambit is as follows:

Remove the following cities from the target list, crediting them to the USAAF player:

end of Oct '44 quarter: Warsaw.
end of Jan '45 quarter: Marienburg, Pozan, Liegnitz, Breslau, Diosgyor.
end of Apr '45 quarter: Anklam, Peenemunde, Oranienburg, Berlin, Erkner, Ruhland, Sorau, Pardubice, Bratislava, Budapest, Brandenburg.

fighter bases: Germans may not use bases east of line Bergen-Peenemunde, Sorau, Diosgyor in 1945 quarters. Germans may not use fighter bases on or west of line running through Friedrichshaven, Stuttgart, Aschaffenburg, Osnabruck, Wangerrooge in 1945 quarters.

This is, of course, assuming historical results on ground, which was not too affected by bombings of war industries, but was quite affected by the absence of German airpower, called home to defend Germany.

The Advanced Game allows the Germans to get away with murder, allowing him Me262s as early as Jan '44. Besides the problems in developing the turbojet—and rocket engines—the Me262 in

particular could not be developed early because of Hitler's interference. As a result, it and the Me163 should not appear in anything other than what is shown on the Order of Battle.

The game can be balanced toward the German— somewhat, and then I wonder— by allowing him to build the He162 in 1944. Considering the problems of the Salamander, allowing the German to form a Luft-Volkssturm of Salamanders when he should have a proper air force can be dubious for the German cause. Let's just say that a US player can offer Salamanders to his opponent in good

conscience—but nothing else. Besides, if the German wants Salamanders he'll get what he deserves.

ENERGY RULES

Since the October War of 1973, we have been painfully learning the effects of petroleum shortages on a peacetime economy. Thirty years ago, Germany and Japan learned what it could do to a concerted war effort.

Much of World War II was fought over raw materials and energy sources, particularly in southern Europe, Russia, and the East Indies. The

two Axis powers struck out with this very much in mind—Japan southwards to the Indies, Hitler eastward toward Rumania and the Caucasus, and southeast then, toward Egypt and Iraq, aiming at the Persian Gulf, among other things.

The two Axis powers suffered particularly when their oil supplies were cut—Japan ran short when the Indies oil was interrupted by the loss of the Philippines; Germany felt the pinch when the Rumanian oil fields were bombed and the Caucasus slipped out of reach. Germany was partially able to

Continued on page 30, column 3

CHART 3. STANDARD RESULTS CHART – LW AERIAL COMBAT TABLE

A20	A26	P39	B26	P38	B17	P40	SPTFR	AVG	Fw190	Me262	Me109	Me163	Me110	Ju88	Me410	He219	De520
B25					B24	P51	P47	RESLT				He162		Ta152		Do217	
2								.167		1		2				1	
	5	2	3	2				.333						2	1		3
7	3	4		2				.5	2		2	3	2				4
9					3			.833		2		4		3		2	5
10	4	5	4	3				1.0	3		3	5	3	4	2		6
	5	7						1.5		3	4	6	4	5		3	
	6	8	5	4				1.667	4						3		
		9	6					2.0		4	5	8	5	6			
								2.167				9				4	
	10					5		2.333	5		6			7	4		
	11	7	6					2.5	6	5	7	10	6	8		5	
	13	9	7					3.5	7	6	8	12	8	9	5	6	
								3.666		7		14		10			
	15	10						3.833			9						
	16					8		4.0	8			15	9	11	6		
	17	11						4.333		8	10	16					
	18	12	9					4.5	9			17	10	12	7		
	19							5.0		9	11	18	11	13			
	20	13	10					5.167	10		12			14	8		
	21	14						5.5		10		20	12				
								5.667			13	21		15			
	22					11		5.833	11						9		
	23	15	12					6.0	12	11	14	22	13	16			
		17	13					7.0	13	12	15	24	15	17	10		
								7.167		13	16	26					
	18							7.333									
		14						7.5	14		17	27	16				
	19							7.833		14		28					
	20	15						8.0	15		18						
	21							8.333									
								8.5		15	19						
		16						8.667	16								
	22							8.833									
								9.0		16	20						
		17						9.333	17								
	18							9.5	18	17	21						
	19							10.5	19	18	22						
								10.666									
	20							11.0	20	19	24						
								11.167									
	21							11.5	21	20	25						
								12.0		21	26						
	22							12.167	22								
								12.5		22	27						
								12.833	23		28						
								13.0	24	23	29						
								14.0	25	24	30						
								14.333		25	31						
								14.5	26								
								14.833		26	32						
								15.0	27								
								15.5		27	33						
								15.666	28		34						
								16.333	29	28							
								16.5	30								

CITY A.A. .167
BASE A.A. .333

PANZER LEADER: ELSENBORN RIDGE

German: Richard Plock
American: Robert Livermore
Commentary: Randall C. Reed

This is one of the more interesting and bloody situations in the set. Competent play on the part of the Allied player will force the German to destroy something better than half of the Allied units, probably two thirds or more. In general, the German player can count on achieving two of his victory requirements (counting Wiln and St. Athan as separate objectives), while the third one is a toss-up. St. Athan is vulnerable, and should fall easily; the two difficult items are Wiln and exiting the board. Wiln is well situated for strong point defense, while the bulk of the ten units exiting the board will have to be infantry on foot. It would appear that the strength of the German is sufficient to make this easier than it is, but the terrain causes great difficulty in properly coordinating the infantry and armored units. There are only a few suitable points of attack, which tends to create traffic jams.

Randall Reed, who developed the game, handles the neutral commentary which is printed in italics.

AMERICAN SETUP:

The situation card specifies that the German wins only by fulfilling *three* conditions—take the towns of St. Athan and Wiln and exit ten *combat* units off the west edge of the board; the American player wins by frustrating one or more of these German goals. Experience has shown that the American can count on frustrating only one of these goals, and further that the best bet is to try and prevent the German player from exiting the ten combat units. My assessment here is based on six or seven practice plays. My setup is thus made with the intention of preventing the exit of ten German combat units.

Clearly, this has to be a delay-withdrawal type defense, since the American forces are much too weak and have too large an area to defend, and finally, are too immobile to be able to concentrate their forces at one point. The German player would simply mass his force somewhere else and punch right through the weak point. The American force could not respond and would be required to sit and watch the Germans go west. The main concentration of force should, however, be in the center between the two rivers and on the back ridges, slopes and forest hexes; this location accomplishes the important task of having all the exit hexes in this most western part covered with combat units which reinforce each other.

Bitter experience has shown that any attempt to defend the forward ridge with a large force (from CH3 to CO2) only results in large portions of that force being outflanked and by-passed. These pieces are in effect lost, since the losses on either side have no effect on victory conditions. This indicates a criterion for a reasonable defense: the vast majority of the American pieces should either be destroyed or engaged with the Germans by the last turn of the game. If large numbers of combat units are not destroyed, dispersed, or otherwise engaged with the enemy, then the defensive setup very likely needs to be changed. Clearly any defense which has the likely result that significant segments of the American

force are outflanked is inadequate according to that criterion.

For this reason weak screening forces have been placed in the forward "holes" on the eastern ridge (hexes CH3—CO2). This small force proves to be rather effective in delaying the German advance through the ridge by three to four turns. Mobile and, thus easily withdrawn, forces have been used to delay advance from the northeast woods hexes (the B column of hexes). Thus in one case a small force is expended to purchase considerable delay time and in the other a mobile and easily withdrawn force is used to accomplish the same purpose.

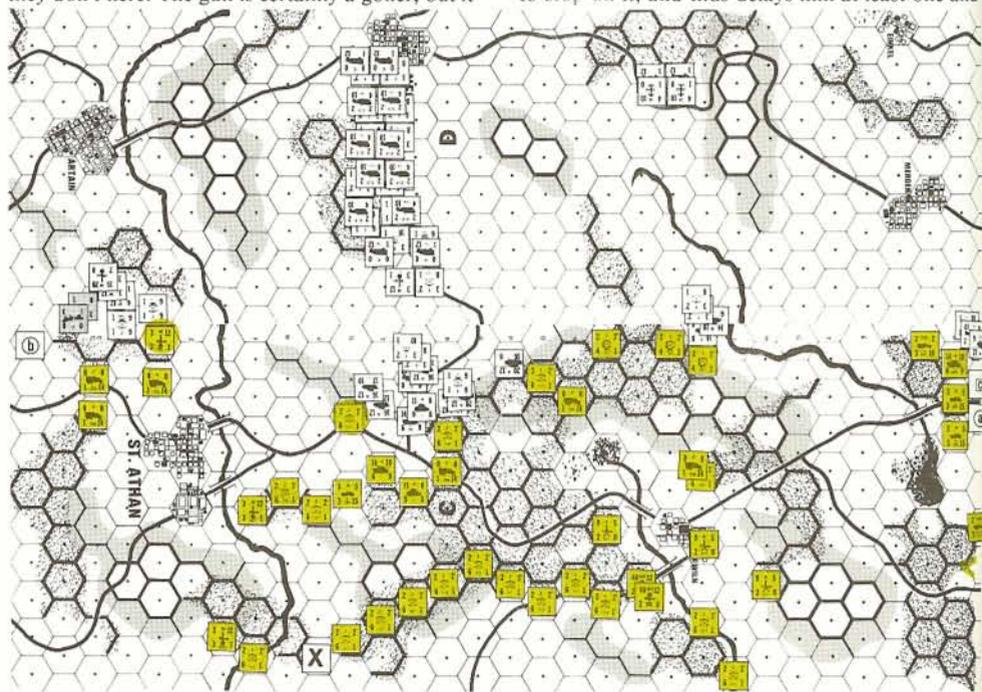
On the other side of the board to the south I have placed a gun in a forest hex (hex CAA1). This is necessary, since trucks have no combat factors and hence cannot spot. This means that the truck cannot prevent a German player from setting up in the forest hex due east and adjacent to his. If the German sets up there, then the truck can be spotted and shot out (with reasonable luck for the German) on the first turn. If the German has infantry in that hex he could CAT on turn one the light screening force occupying the forest hexes to the south and east of St. Athan. Thus he gains a full turn and all this because a piece that could not spot was put in the wrong place. I have made a point of this, since many old *PANZERBLITZ* hands could very easily miss it; trucks can and do spot in *PB*. Remember they don't here. The gun is certainly a goner, but it

served the purpose of delay for one turn.

The placement of the pieces to the north and west of St. Athan permits both delay and withdrawal. Many of these pieces can get back to the western edge of the board and engage in the final fights. The infantry piece has been placed on the slope to delay and encumber the German advance; if it can survive the first fire, then it hurts the German advance.

Three of the most important placements in this situation are of the block and the two 105's. Where to place the block was always a troublesome question. I tried different places during previous games with Dr. Plock and others. The problem with all the earlier placements was that the block was too easily outflanked or bypassed too early. The block is a significant, although passive, force in this game, and hence according to our criterion, if it is not "engaged" during the last turns of the game, its placement is poor.

The block has been placed in one of the three hexes through which the German forces can exit vehicles coming from the east and going west. That the choice should be one of these hexes should be clear from the option I have decided on—to prevent the exit of ten combat units from the west edge of the board. A block in one of these three hexes compels the German to stop in front of it and then to stop on it, and thus delays him at least one and



GERMAN TURN 1: The German mortars at DBB10 eliminate the American infantry unit on the slope at CU3 with direct fire at 2-1 odds. The German advances boldly, daring the American to Opportunity Fire and thus commit himself to a stand. He is disappointed when the bait isn't taken. The American fires only with the mortar at CAA1 at a loaded wagon. The resulting dispersal at 3-1

odds is indicative of how American fortunes will fare in turns to come. The firing mortar is automatically eliminated in a 4-1 CAT at the hands of two German SMG units. The German stack at "a" consists of three Tigers carrying as many rifle units; "b"=three wagons conveying three rifle units; "c"=two unloaded SMG sections plus two Panthers.

possibly two full turns. Moreover, the block counts toward stacking limitations. Thus if there are armored wrecks on the block, then the German player can place only one vehicle and passenger on that hex. Thus a hex from which the German could in theory have passed eight combat units becomes one through which he could pass only two at a time and at a reduced rate.

Of the three hexes, I chose the single one to the north along the V column of hexes. There are two other places from which the German player can exit with vehicles to the south and blocking one of them alone accomplishes little; moreover, this territory is harder for the German to pass through since there are slopes screening it. A heavy combined arms defense by the American might prove hard to break, and would certainly require some time to break through. It is time we are trying to get, anyway. This defense is easily co-ordinated with the delaying action around Wiln. Moreover, this defense leaves open the option of defending Wiln, if the improbable occurs and that defense has better prospects than the attempt to frustrate the German goal of exiting the ten combat units. In other words, it leaves options open.

Possibly it is even harder to find a place or places for the 105's which permit the maximum usage of these pieces than it was to find such a placement for the block. First these pieces are, for all intents and purposes, permanently placed, since it takes at least three turns to reposition them. This is far too many turns to lose in a ten turn game. On the other hand, if these are guns used in direct fire where they can be spotted, they will probably be lost on the subsequent enemy firing turn, after being spotted. This means that the 105's are best used in indirect fire: there are, however, problems with employing the guns exclusively for indirect fire. The minimum distance required for indirect fire is, in this case, nine hexes. Thus, as the enemy approaches, certain of his pieces cannot be fired upon by the 105's. Moreover practically any position in which these guns can be placed will eventually be spotted. Thus, I have decided to put these guns in a place where they can fire both directly and indirectly.

It is probably unrealistic to expect to get more than five firings out of these guns, if that. The placement permits two to three turns of indirect fire, and a turn of direct fire. This placement also permits the guns to defend the town of Wiln. This more or less explains the major placements of the pieces.

This situation is fairly well balanced, if both players are experienced. I think that the situation slightly favors the Germans—55% chance of a German win.

AMERICAN SET-UP:

This is a strange set-up to say the least. I will be curious to see how he intends to deploy this 'defense-in-depth' arrangement given his overall inferiority in combat strength. Does he really need all of that infantry in the 'rear areas'? A few observations:

1. *Infantry—In an effort to avoid being 'out-flanked', it appears as if the American player refuses to commit himself to a set point ANYWHERE, thus assuring that he will have no counter-attack strength ANYWHERE! This could be mitigated to some extent if he would employ his eight transport vehicles loaded with eight infantry units as a tactical reserve positioned somewhere near Wiln. This could have the dual effect of increasing his hitting power and decreasing the German player's certainty of where the main points of resistance will be established. Eighteen infantry units can be divided into five (3-4 unit) company-sized groups—two loaded in reserve in Wiln and three positioned within mutual-support range in the most likely avenue of attack (probably the 'gap' area: C-U-4 to C-X-4). This type of concentration would allow*

three 'companies' to have a 50% dispersal chance in a CAT attack against a stack of German infantry. In the confined area of the 'gap', this could be as good as a turn's delay. This infantry placement will determine the outcome of the game.

2. *Delay units: It doesn't make sense to place these units where they can be CAT'd on the first turn. The MG unit and the 81mm mortar are being sacrificed for very little return on their investment. If he desired to spot a certain hex on the first turn, I think he should have used his armored cars. In the long run, they are the least important units that he has, with the MG units a distant second. Between the two, they could generate six lose-able delay units which could be fitted into the same screening/delay arrangement he currently has.*

3. *81mm Mortars: What a waste! Using the three mortars as delay units gives me chills. If three 81mm mortars were positioned on hex C-S-7, they could direct fire down the St. Athan-Nece road and could wallop the German mortar at D-BB-10 at 4-1! Given the number of trucks and halftracks that would be moving down the road, those nine attack strength points could be mighty hurtful to the Germans (besides providing an eventual 15-point delay stack if coupled with a single infantry platoon).*

4. *105mm Howitzers: Ah, here's a frustrating situation. With such a long range, they are severely limited in their indirect fire radius of action. Where he has them located is about as good as can be done under the circumstances. The only other possibility is hex C-L-10, which has the advantage of being on the slope/woods hex and being screened from all fire except from the town of Wiln itself. No matter where they are located, their lack of useful employment really hurts the American position*

AMERICAN STRATEGY:

I question the purpose of some of the delay units within the fabric of the American strategy. In the north, the question of delay does not center around St. Athan. It is critical to the northern 'backdoor'. Wagon-loaded infantry, by moving around the north-northwest edge of the mapboard can reach the northern river line in six turns, in which case they can easily exit off after crossing the river. A single truck unit at C-GG-5 (or an armored car) could force the wagons to unload and attack with infantry, thus negating the 'backdoor' approach.

In response to the half-track loaded infantry coming from Nece, the task is to make them dismount EARLY and as far EAST as possible. A three turn delay in the C-S-4/C-V-4 area means that they will be unable to get off of the board in time. Delay in the 'gap' area is the most productive type of unit sacrifice. Which brings up an interesting hypothesis concerning placement of the block. I agree with the American's analysis of the likely locations. But an interesting possibility occurs if we want to help the Germans unload as far out as possible. What about hex C-U-6? If we sacrifice three armored units at C-V-6 (not a bad last-stand position in any case) we have restricted the German movement well-EAST of the board edge. If supported by the bulk of the infantry on the reverse slopes (offensive fire halved) and the mortars, we have a force sufficient to make the Germans unload east of the gap and slog it out with the infantry—a type of battle least affected by the German armor. In this situation, a dispersal against German units on those two hexes is better than elimination: If stacked to capacity and dispersed, no German units can move through or CAT from those hexes. And if two wrecks appear on the block hex, the German is really in a 'jam'. Against a German player expecting the block at C-V-10, it could be upsetting enough just to make him a bit more cautious.

In the south, the delayability of the C-A-3/Wiln road axis will force the German drive to approach over the westerly hillsops overlooking Wiln. This requires and justifies the placement of the heavy artillery at C-L-8. The position of the AT guns seems to be a bit flakey. Why not keep them bunched up near the bridge for a doubled attack strength shot at the armor coming over the bridge? Use mobile units to screen the woods southwest of Wiln. The real battle in this sector will be from C-K-7 westward. Two 'companies' of infantry, minimum, should be employed here to protect the guns and prevent German infantry from crossing the river. The battle will be cut-and-dried; either the Americans defend and block the bridge with German wrecks and halt the armor, or they won't.

Remember two significant points about stream hexes:

- They can only be ENTERED on a 50% probability die roll.*
- Units in streams cannot attack in any manner and therefore cannot EXIT if there are enemy units in the adjacent hex.*

Given the dearth of German IF artillery and 'H'-type weapons, this means that stream hexes are easier to defend than they seem. Obviously then, the fight in the south will also be determined by infantry.

INITIAL GERMAN COMMENTS:

His setup is obviously designed to block the last of the requirements—that I exit ten combat units. He does, however, have the option of shifting to try to hold Wiln. Personally, I would have put more infantry in the Wiln area. A forward line is, however, untenable since I can crack through fairly early. The block on C-V-10 is about as awkward a location for me as there is on the board; I almost certainly will not have time to remove it, and it virtually guarantees that few, if any, mobile units will get off the board. He is, as anticipated, conceding St. Athan without a struggle; I am not sure, in fact, that he is not leaving too much in that vicinity.

My strategy involves two main thrusts. The armored force in Merden will clear out the units by the south edge and move to assault Wiln. The engineer will be used to improve the odds in the final assault on Wiln. The Wirbelwind and PzKw-IV will attempt to force the ridge. This is a weak force, but no matter how much I use it takes four or five moves to reach Wiln this way, and by then the force in the south will be there. In fact, an argument can be made that I should not even try to force the ridge at all. The Panthers and King Tigers in the center will join with the main infantry force to hit the center. It is this infantry that I must rely upon to exit the board, hence I must get it into action quickly. With the bulk of my transport in the south, I must set up to load it on turn #1, and to unload a portion of it in reasonable assault positions on turn #2. Finally, in the north the guns will first go after the blocking unit on C-U-3, while the infantry clears St. Athan. Later these guns can help the central assault, while I may be able to slip a few units off the board by crossing the stream at C-X-10.

The game will probably have two distinct phases. The first one of about four or five moves involves getting my pieces into positions usable for combat, the balance is a pure slugfest while I try to push everything west.

GERMAN SET-UP:

Actually, this is a very clever arrangement. He manages to threaten all avenues of approach while maintaining a good concentration at the two main points of attack. The infantry/transport set-up neatly overcomes a problem purposely built into the

situation. The mobile unit is in the south and the nonmotorized infantry is in the north. Unfortunately, the motorization is best used along the northern roads which makes for a built-in traffic jam situation. His organization very neatly sidesteps the whole problem. I do think that he has exposed his mortars and FLAK at D-BB-10. They are easily spotted/sighted from the hills for the powerful American artillery. Also, the little kampfsgruppe at D-L-10 might be a bit light in infantry for its intended task. Other than those nit-picks, a competent set-up.

GERMAN STRATEGY:

His assessment is clear and cogent in all points. I do think, however, that despite his misgivings, he is correct in attempting to force the American player to defend as many points as possible. The terrain on the 'C' board is such that it forces the German player to 'channel' his attacks at many critical points. If the American player has freedom of concentration, he can do real damage in narrow-front attack situations.

German Turn 1:

In the north, I do not mind if he takes out a wagon with the mortar. I am in too much of a hurry to worry about losing units. He can even overrun the stack on C-EE-1 with an armored car, but this would cost him the car—a good trade for me at this time. In the center, the units on C-S-2 make the entire forest region R-4, R-5, S-5, T-5 hazardous for him because of the CAT threat with the engineer. In the south, I have unloaded on C-A-2 in order to CAT any unit blocking the bridge C-3. I would not expect him to try to hold here or even pick off a passenger; any units he loses here will be unavailable to help defend Wiln. Notice that in the ridge assault (C-J-1), rule #XV-B-7 implies (or states) that he did not have a chance for opportunity fire until after I unloaded. Hence he had no easy shot at a passenger.

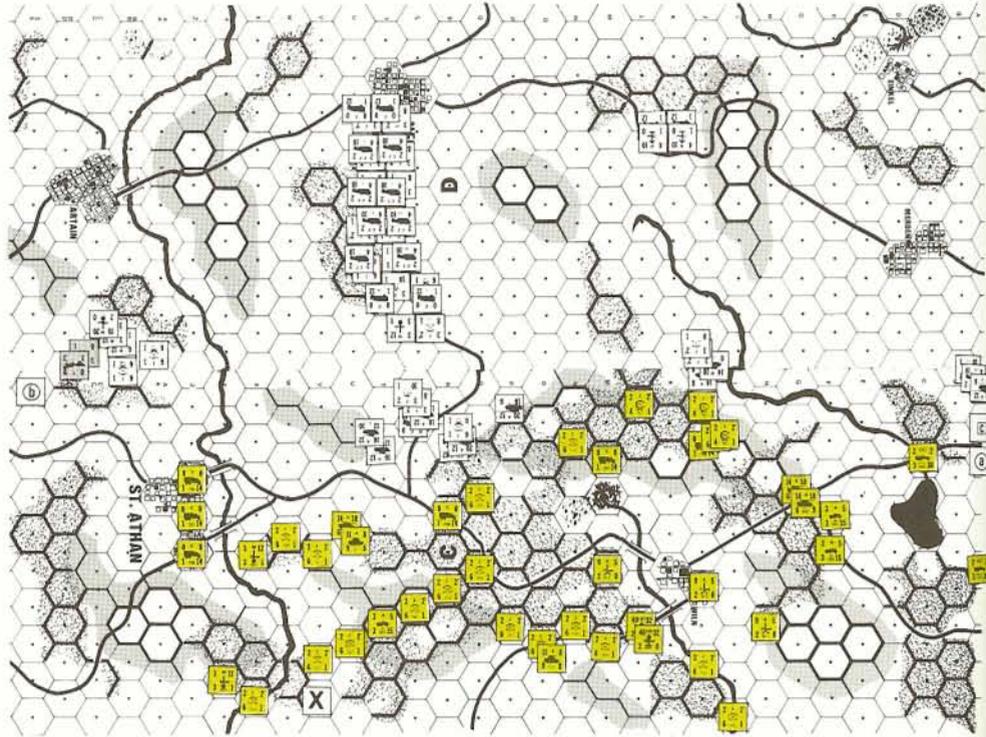
I had a very lucky break with my fire, but could hardly set up in such a way as to enable maximum exploitation of such a result.

TURN ONE-GERMAN:

1. Wasting the American 81mm mortars shows its effect immediately as the wagons roll away unmolested in the north. I fail to see how hex C-AA-1 was worth the sacrifice of the mortar.
2. With a little more macho, the German player could have trapped the two armored units at C-S-3 by attempting to move behind them into hexes C-T-4 and C-S-4. Opportunity fire might have cost a Panther but bagging two American armored units is well worth the price—road or no road!
3. In the south, conservative German play loses the opportunity to trap the M3 at C-C-1 by moving a Panther or Tiger to C-B-1 thus leaving the M3 spotted. A Panther could have pushed all the way to C-B-6, thereby forcing the M3 in C-A-6 to abandon his position there one turn earlier.

American Turn 1:

Too bad the infantry didn't survive, it would have delayed the German advance somewhat. I have decided to retreat the trucks to St. Athan as planned in the delaying action. All my moves are made with delay in mind. Most of the moves are obvious in that light. The most important decision I have to make this turn is where to schedule the indirect fire. His forces must enter hex CV5 in order to advance: the position is well spotted by my forces and will probably remain so the next turn. He simply must occupy this hex with undispersed units in order to spot and then to bring down his fire power, and he must have the position.



AMERICAN TURN 1: The American refuses fire and withdraws.

I took opportunity fire with the mortar located in the forest positions to the east of St. Athan, since the mortar is doomed next turn anyway. Exposing it to counterfire next turn was no longer a risk, since the gun already was spotted. In general it is a poor idea to engage in 'rip-off' attacks, if a piece that could block some space next turn will be lost on that turn and hence not able to block and delay. This is the reason I have not attacked him anywhere else.

His unloading of infantry, some of which are engineers, gives the German a very powerful position from which he can CAT five hexes. One of my trucks is the only piece which he can destroy with a CAT next turn and it holds a place he needs at the beginning of next turn—not at its end.

Otherwise the withdrawal is proceeding as expected.

TURN ONE-AMERICAN:

1. Again, three 81mm mortars at hex C-T-8 could have had a 4-1 shot on the German 120mm mortar and the 37mm could have been pasted in the following turn. This would drastically reduce the German IF capability and reduce the 'H'-type direct fire capability in the 'gap' area by 21 points. Pity, pity . . .
2. Grouping the infantry and/or mounting in trucks would have avoided many unpleasant little situations as what will occur in hex C-Q-4. The American infantry unit is completely out of position and about to get CAT'd. It would have been better positioned in hex C-S-3; at least from that hex it could have blocked the road for a turn. A useless waste . . .
3. Hex C-J-2; again, more 'frittering'. Why not place the infantry unit on hex C-J-3 at the start? That would at least yield 15 defense strength points on C-J-2 giving the German a direct fire attack of 1-1(+1) and a 1-3(-1) CAT attack. This position could take some time to reduce (6% probability of elimination) and even give the defenders a chance to pull back to Wiln when the delay becomes unnecessary. As it is, the MG unit at C-J-2 gets hit at 4-

1, the tanks roll around the slope to C-I-3, and the German infantry attacks C-J-3 at 1-2(-1) (P/disp.=50%).

4. What is the M4/75 doing in hex C-O-8?? Of all possible positions, this is among the least useful. Better used intimidating the German southern thrust.

5. And speaking of intimidation, why not place the two M10 TD's in C-F-5 instead of C-G-4? That way, the German units skirting the southern edge of the board face TWICE the "A"-type attack strength points (half range).

6. I personally would have taken the overrun with the M8 armored car against hex C-EE-1. With a 50% probability of killing two wagons and two infantry units, plus a guaranteed dispersal at the minimum, plus an almost certain chance of getting the armored car away scot-free, plus the opportunity of bagging another wagon and infantry unit in the next turn, the attack is a screaming gift!

7. Lack of offensive-mindedness!! Why bother with hex C-V-5 now, when NOW is the best time to blow away the German units in D-BB-10?? And why not target the 81mm mortar at C-Y-9 at the dispersed wagon? He should be chip-chip-chipping away!

8. Note that this is the German player's most vulnerable position. He has already committed his armored units north and south in an unsupported fashion. It would not have been difficult for the American player to have disguised a concentration of armor that would have placed nearly all mobile 'A'-type units in the immediate area. A quick count shows that 140 'A'-type attack strength points could have hit the Panthers, Tigers and halftracks. Coupled with a few useful 1-3 CAT's (P/elim=33% against dispersed units), the German player could have had a real traffic jam—of wrecks! If the German armor and transport can be banged-up NOW all that is left to fight is infantry. Even at the cost of trading-off ALL of the American armor, this works out to be a worthwhile sacrifice. The American player is obviously much too 'delay-conscious' at the cost of overlooking good offensive opportunities. A German dispersal is often more valuable than a single American delay unit.

German Turn 2:

So far, everything is as expected. I am trying to insure his probable indirect fire targets being too strong to destroy. He could go after the guns on board D, but they have served their primary purpose. I think he made an error; one of his armored units should have been placed on C-U-6 instead of C-U-5. Note that the Panther on C-Y-5 can take opportunity fire on a unit moving to C-U-7, thereby inhibiting his freedom of motion. I have been fortunate in my combat results thus far. I may use my mortars for indirect fire later.

TURN TWO-GERMAN:

Too easy. The time to delay, counter-attack, intimidate, and harass is BEFORE the German player can unload well-west in the 'gap'. In the current situation, the German player can unload where HE wants to. An aggressive armored sacrifice by the American player, coupled with concentrated infantry in the 'gap', had a good chance of frustrating this "Banjai" deployment.

American Turn 2:

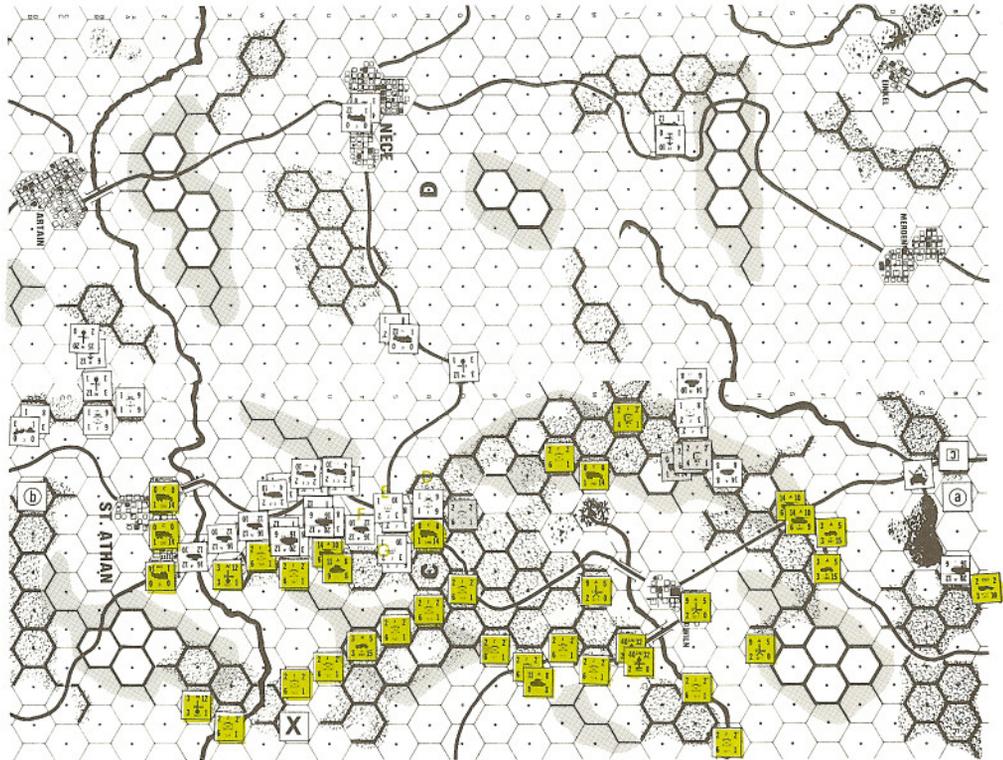
I scheduled indirect fire for hex (CW5) directly west of the hex where the first IF is scheduled to come in. This hex is in his line of shortest advance for exit purposes. My indirect fire hit with good effect. Otherwise the withdrawal is following the expected course with the tanks drawing back toward the west and the center.

TURN TWO-AMERICAN:

- If delay is what you want, then this is what the American certainly has. But notice that, with a bit of concentration, the American infantry could be counterattacking with 1-2 CAT attacks—without needlessly sacrificing units. CAT attacks from hex C-S-6 and C-Q-4, coupled with indirect fire into hex C-R-4 (from 81mm mortars), could stall the German attack along the 'S'-row and inhibit his ability to concentrate against a single stack of American infantry.*
- If the overrun has been executed in turn one against the wagons and the IF had hit the mortars in D-BB-10, there would be practically nothing left of the German northern force. Moving a company of M3-mounted infantry into St. Athan temporarily on the first turn, could by this time, be distracting the German player from his main task. A radical move? Yes, but one that could only add to the unpredictability of the American defense.*
- And where, you might well ask, is all this infantry suppose to come from? Look around. There are easily eight American infantry units literally sitting around doing nothing. Loaded on trucks, they could possess enough mobility to inhibit and discourage at the MAIN POINT OF ATTACK. As it is, the infantry is simply strung out waiting to be gobbled up by the German juggernaut. So intent on avoiding being outflanked, the American player has gone to the opposite extreme by having his units too far back to allow for OPPORTUNISTIC action.*
- Question: What have the two M10 units accomplished in the south so far? Answer: Nothing. They would have been better put to use this turn in the 'gap' area intimidating the German advance. With their mobility, they are not irrevocably committed to either front.*

German Turn 3:

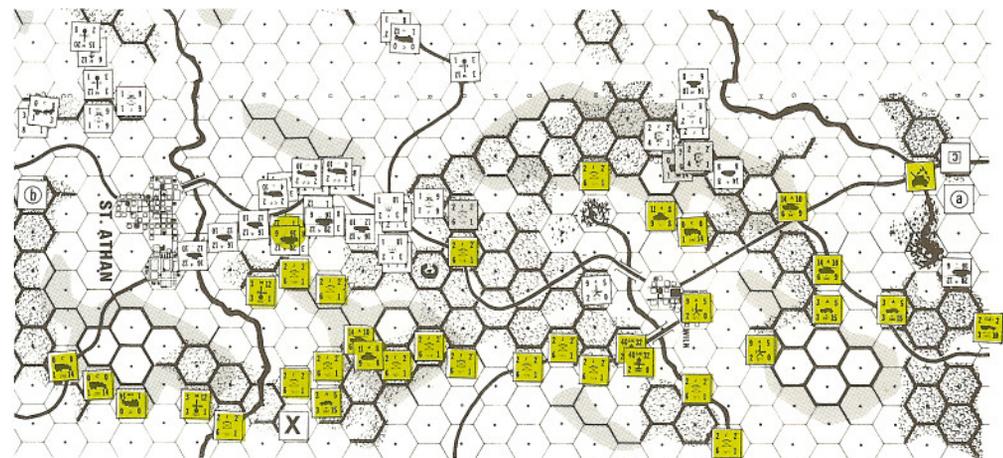
Suffered my first casualties. I do not mind the loss of the infantry; the dispersal of King Tiger hurt me more. I am going to schedule indirect fire for C-J-3 with my heavy mortar. Perhaps I should have



GERMAN TURN 2: Direct fire from the Wirblewind and a 20mm eliminates the MG unit at J2 allowing the German rifle units to enter and CAT from that hex. The American truck, MG and rifle units are dispersed in the 1-2 attack. Elsewhere a halftrack is eliminated in a 4-1 CAT at C3 as is the truck at R5. To complete the American miseries

for this turn the rifle unit at Q4 is dispersed in a 1-1 CAT.

An engineer loaded on a halftrack has been added to stack "a". Not shown in the illustration are two rifle units on halftracks at "d", a similarly loaded halftrack at "e", two more at "f" and two unloaded trucks at "g".



AMERICAN TURN 2: The American move is a general withdrawal with the exception of previously dispersed units and the rifle unit at Q5 which advances to take up a blocking position on the

road. Allied Indirect Fire from the 105's draws the first German blood—eliminating the loaded truck and dispersing the King Tiger on V5.

gone after the tank on K-4, but it would have been awkward and I could not count on getting it. The Panther on X-8 is intended to hamper movement on the opposite slopes. My infantry is now in position to drive on Wiln from the south while my armor moves to the hilltop area to both hit Wiln and neutralize his heavy guns. Likewise, the central mass is set to move down rows S, T, and U for the board edge. The major problem in the center is avoiding a traffic jam. The first phase of the game—maneuvering for position and getting my armor and infantry coordinated—is almost over. I am slightly ahead of schedule, but only slightly. Experience has shown that the second phase takes a good five moves.

TURN THREE-GERMAN:

1. I don't know what the German player is afraid of! His penetration in the south is conservative, to say the least. An unkind observer might even call it dawdling. He is in a position to 'force' the situation much more than he is doing. If the M10's Op Fire, they are cold meat. Why then didn't the German player push a Tiger and a Panther into hexes C-E-6 and C-F-8? FORCE the American to use Op Fire! Had he done so, he could have trapped the M10 at C-F-6 and the M3 at C-F-7.

2. His mortar is being wasted. Although not critical, harassment at 3-1(+1) of C-Q-4 would have been nice, as a dispersal or elimination would have

forced the American player to commit a mobile unit to cover the St. Athan-Wiln road.

3. Notice how the American CAT possibilities get even bleaker as each turn passes? The time to damage the German is BEFORE he can fully deploy his infantry!

TURN THREE-AMERICAN:

1. Why fire indirectly at C-W-5? If those units had been dispersed in C-U-5 or C-V-5, it might have significantly added to the German traffic control woes.

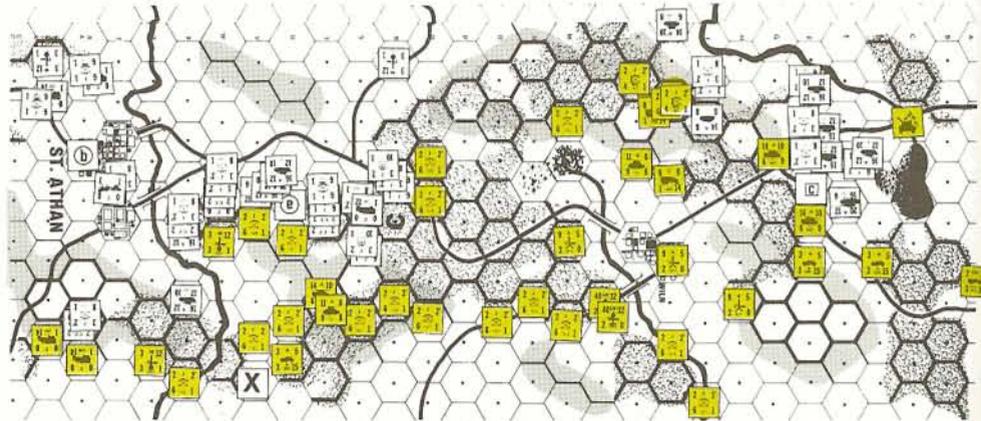
2. The folly of the scattered American infantry deployment is becoming even more obvious. Instead of forming-up in concentrated groups that require the German player to also concentrate to effectively CAT attack, the American player is simply throwing them in his path. **EXAMPLE:** If the four infantry units around C-S-7 had been stacked IN C-S-7, the best the Germans could have done would be a 1-1(-1). As it is now, the Germans get a 2-1 and two 3-1's on three American infantry units. Another American group in C-T-7 would have made it very tough going for the Germans. The Americans would GAIN an extra turn in the delay by simply placing heavier strength in the delay hexes. If the American loses, he loses big, but the losses work out to be no heavier in the long run than the 'frittering' tactics herein employed. And it also preserves the American counterattack potential which can really upset the German timetable.

3. The German Op Fire was a BIG mistake! Unfortunately for the American, he failed to capitalize on it. How? The American player has a chance to bag the Pzkw-IV at C-K-3 and the Wirblewind at C-J-1. Since those two units Op Fired, the American player could move the M10, an M3, and the infantry unit to C-J-4 and move an M4/75 and another armored car into hex C-J-3 containing the MG unit. This would allow the armor two 4-1 attacks on the panzers with the only German response being a 1-3(-1) CAT against one of the stacks. This would effectively eliminate any German threat in this sector and allow the American player to pull out the excess blocking units. Definitely, the American player lacks aggressiveness!

To be fair, I understand the purpose behind the type of delay tactics that the American player is attempting to use. They are legitimate tactics. What I disagree with is the DEGREE to which they are being employed. What is advocated is a COMBINED type of defense in which units are SELECTIVELY expended for delay with the bulk of the remaining units concentrated for stubborn defense and aggressive counter-attack. Small attacks that succeed can have a large effect on the carefully orchestrated German advance.

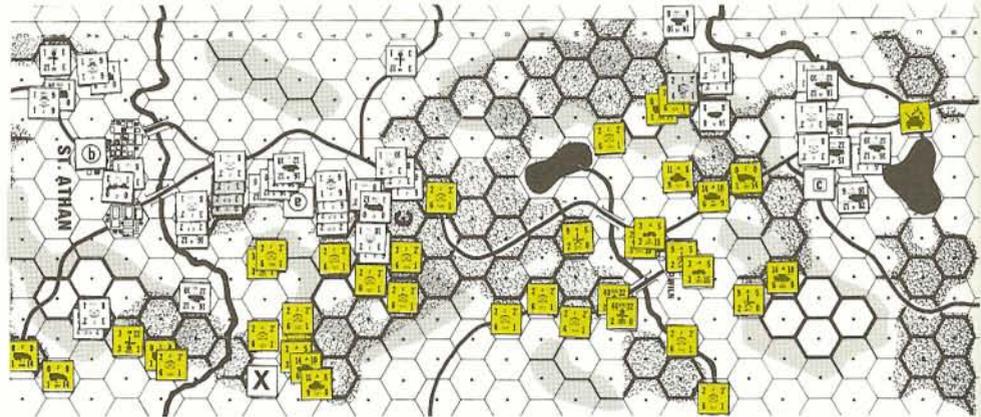
German Turn 4:

I had poor combat results this turn, but have been lucky overall. I have scheduled indirect fire for C-S-7 for next turn on the assumption he will reoccupy that hex after I CAT his infantry. I want to use IF since it is not halved by elevation difference. Phase two of the game is now starting. He no longer has free indirect fire; he is spotted if he tries. In fact, I think it was a mistake if he scheduled any for this turn. I have his M10 trapped at hex C-G-7. His unit cannot escape to help support Wiln; he should have used an armored car or halftrack there. I think I have him now; I know I am ahead of schedule and have a definite edge. I am pushing hard and ignoring losses to keep him off balance. I expect to achieve my victory conditions on turn 9, although bad luck



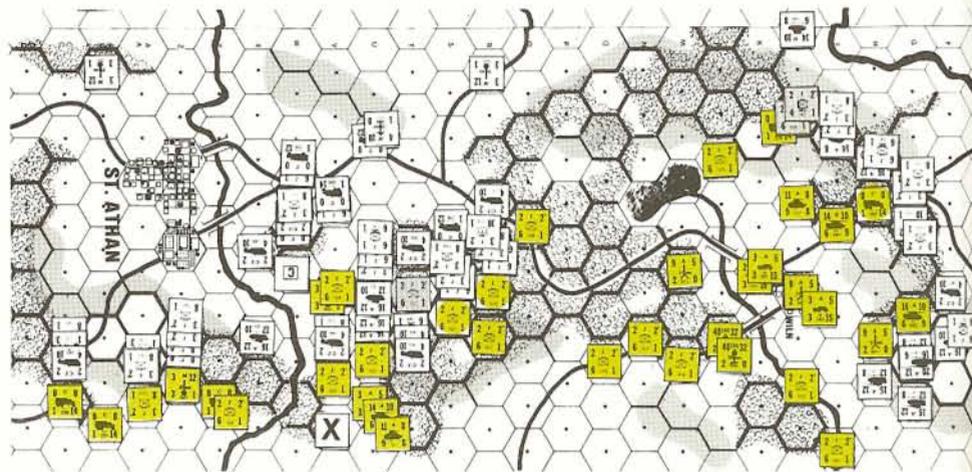
GERMAN TURN 3: The MG unit at J3 is eliminated in a 4-1 attack by the Wirblewind, Mk IV, and 20mm. The 1-1 CAT on the same hex comes up empty-handed. A 2-1 CAT on the St. Athan-Wiln road eliminates the rifle unit at Q5. "C" now represents unmounted rifle and engineer

units with a halftrack and Tiger. The concentration at "a" consists of two loaded halftracks, a halftrack and an unmounted rifle unit. The American is making the fatal mistake of meeting enemy concentrations everywhere with the smallest possible piecemeal defensive commitment.



AMERICAN TURN 3: The American withdrawal continues in full flight. Their Opportunity Fire on W5 with their 105's proves very ineffective. Even the 4-1 on the truck yields only a dispersal as do two of the other three 2-1's, with one rifle unit escaping altogether. The 81mm at Z9 fails to draw blood against the adjacent German rifle unit in a 1-

3 attack. The German Wirblewind, 20mm, and Mk. IV Opportunity Fire and do disperse the MG unit at J3 at 4-1 odds before it can join in the CAT against the Mk IV. Thus deprived of the MG support the rifle unit's CAT becomes a 1-4 and yields no result. The 1-3 CAT by three rifle units on the German engineers at S6 also fails.

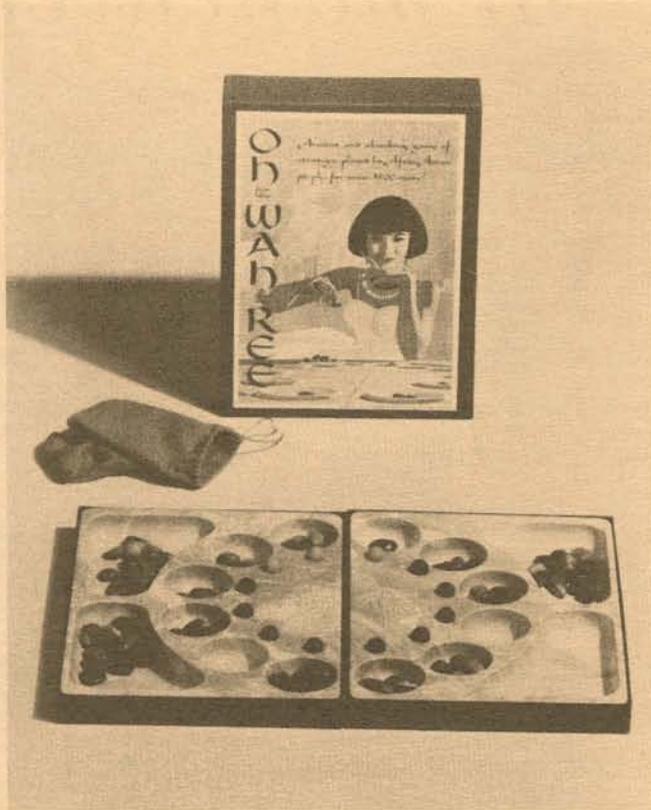


GERMAN TURN 4: The German advance is a virtual flood engulfing and overwhelming the defense. The German 120mm mortar Indirect Fires on J3, eliminating the truck at 4-1 but missing with a 1-1 on the MG unit and a 1-2 on the rifle unit. The 37mm and two rifle units direct fire on the American rifle unit at S7 dispersing it at 1-1 odds enabling the 3-1 CAT by two rifle platoons and an engineer to eliminate it easily. The rifle unit at V7 is untouched by two 1-1 attacks, one by an adjacent Panther and later by three CATing rifle units. The American mortar at V7 Opportunity

Fires on a loaded halftrack in U7 with no effect.

The rest of the German combat consists of CAT's as the German infantry closes for the kill. The truck at H5 is automatically eliminated at 4-1; the MG and rifle sections at J3 are dispersed again at 1-2 odds; the 81mm mortar at Z9 is assaulted at 1-1 with no effect, the rifle unit at I7 is dispersed at 2-1; and the rifle section at R7 succumbs to a 3-1 CAT led by German engineers. "C" marks the position of two King Tigers and two dismounted rifle units.

Oh-Wah-Ree...world's newest oldest game



OH-WAH-REE is a game with a history of 3500 years and many nations, brought up to date for modern tastes. In the game players make captures by "sowing" pebbles into the pits. In some versions player with the most pebbles at game's end wins. In other versions player with the most pits wins. Adults play thoughtfully, strategically; children play it as a swift game of capture. Playing time varies; average is 20 minutes.

OH-WAH-REE is for from two to four players, adults and children. Bookshelf case contains fold-away board, pebbles, pit markers, and instruction folder.

Object of the Game: To capture pebbles.

Setup: Players divide the circle of 12 pits equally. An equal number of pebbles are placed in each pit (amount varies with version being played). Since these will be moved around, they only *temporarily* "belong" to the player in whose pit they are sown.

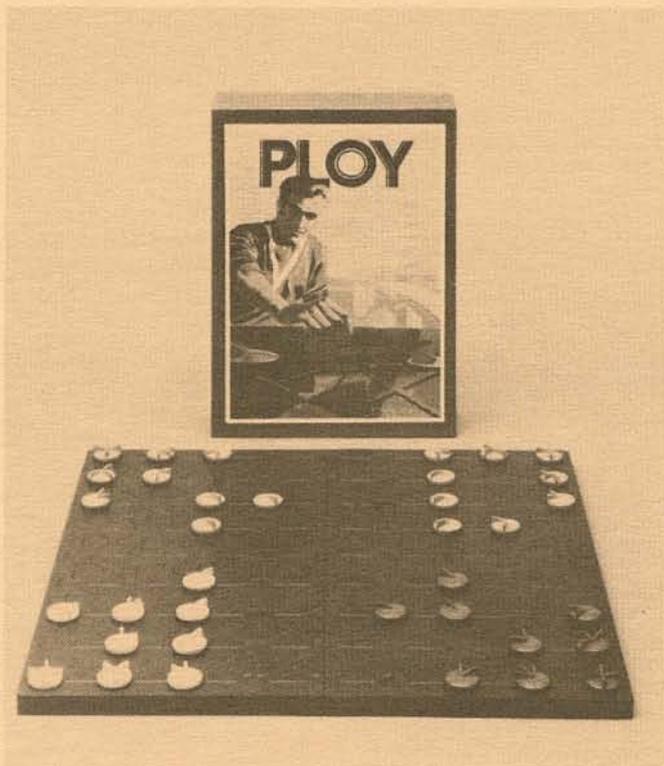
To Play: Each player in turn scoops all the pebbles out of any one of his pits and sows them clockwise by dropping them one at a time into adjacent pits.

Capture moves vary with the version being played. In Standard OH-WAH-REE, a player may capture pebbles when his last pebble is sown in an opponent's pit which contains two or three pebbles (*after* the pebble is sown). In

another version, a player may only capture if the last pebble he sows falls in an empty pit in his territory. Player sowing this pebble captures it plus the contents of the pit across from it. In Grand OH-WAH-REE, players capture pits as well as pebbles. The strategy of OH-WAH-REE is to sow from the most strategically located pit.

Scoring: At the game's end each player scores the number of pebbles (or pits) he has captured. High scorer wins.

The OH-WAH-REE instructions cover many of the pit-and-pebble games played throughout the ages in Africa and Asia, and include versions whose strategies are easily mastered and those whose strategies are very complex. Complete sample games are included with instructions.



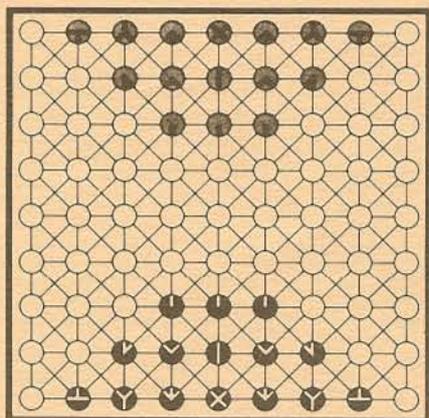
strategic game of maneuver

PLOY is the stimulating new space-age strategy game. The object? To capture the opponent's Commander or all of his Lances, Probes and Shields. Since pieces move only along paths in line with the indicators radiating from their centers, the strategy lies in knowing when to move and when to rotate a piece to change direction. Average playing time: 30 minutes.

PLOY is for two or four players, adults and children. Bookshelf case contains four sets of spacial playing pieces, futuristic playing board and complete instructions.

Object of the Game: Each player skillfully maneuvers his playing pieces along the paths of the playing board in an effort to capture either his opponent's Commander *or* all of his Lances, Probes and Shields.

To Play: Two players, using coral and green playing pieces, set up the board as shown:



Players move one piece per turn making either a *direction* or *motion* move. A *direction* move consists of rotating (turning) a piece so that its indicators point in different directions. A *motion* move consists of moving a piece over

unoccupied spaces horizontally, vertically or diagonally in the direction of one of its indicators. Lances may move up to three spaces, Probes up to two spaces and Commanders or Shields, one space.

To capture, a piece must move onto a space occupied by an opponent's piece; captured piece is removed from the board. First player to capture his opponent's Commander *or* all of his Lances, Probes and Shields wins!

When four play, turns are taken in clockwise rotation. If a player's Commander is captured, he is out of the game and his remaining pieces are used by the capturing player as his own on subsequent turns. If all his Lances, Probes and Shields are captured, player's Commander is removed from the board and he is out of the game. Last remaining player wins.

In partnership play, game ends when one partnership captures the opponents' Commanders or all of their Lances, Probes and Shields — *or* one opponent's Commander and all of his partner's Lances, Probes and Shields.

Feudal...the game of siege and conquest

FEUDAL, the exciting medieval war game, combines military strategy with chess-like moves as the armies of two feudal Kings battle to the death. Each army is secretly deployed, making every game different and challenging. The rough and mountainous terrain can aid or hamper attempts to thwart the enemy or lay siege to their castle. Average playing time: 1 hour.

FEUDAL is for two to six players, teens through adults. Bookshelf case contains playing board, divider screen, playing pieces—castles, kings, princes, dukes, knights, squires, sergeants, archers and pikemen—and instructions.

Object of the Game: Each player attempts to capture the opponent's Castle or slay his royalty—King, Prince and Duke—while strategically protecting his own Castle and royalty.

Setup (for two players): Each player commands an army. Coin is tossed—player winning toss will move first; player losing toss positions board, choosing any two adjacent quarters as his kingdom. Divider Screen is placed across center of board so players may secretly deploy (position) their playing pieces.

When positioning or moving pieces, the following rules must be remembered: No man may be positioned on, move onto or across a mountain (solid green space). Mounted men may not be positioned on, move onto or across rough terrain (patterned spaces). Castle piece may be positioned anywhere in kingdom but, once positioned, may not be moved. The only entrance to Castle is through Castle Green (unwalled part of Castle piece).

When pieces are positioned, Divider Screen is removed and play begins.

To Play: During his turn, each player may move any or all of his men; at least one man must be moved in each turn. Each piece has its own distinctive move and is allowed only one move per turn. Pieces may move only over unoccupied spaces on board. When moving to slay an enemy, attacker must move onto enemy-occupied space; slain enemy is removed from board.

Game ends when opponent's Castle is captured, or when his King, Prince and Duke are slain. To capture a Castle, invader must gain entrance through, and stop on, the Green. From Green he may enter Castle on next move—and win the game.

If more than two play, teams are chosen. Each team chooses one King, Prince, Duke and Castle and each team member commands an army. (If an odd number play, one player must command two armies as both forces must be equal at game's start.)

READER BUYER'S GUIDE

\$9.00

TITLE: CAESAR'S LEGIONS

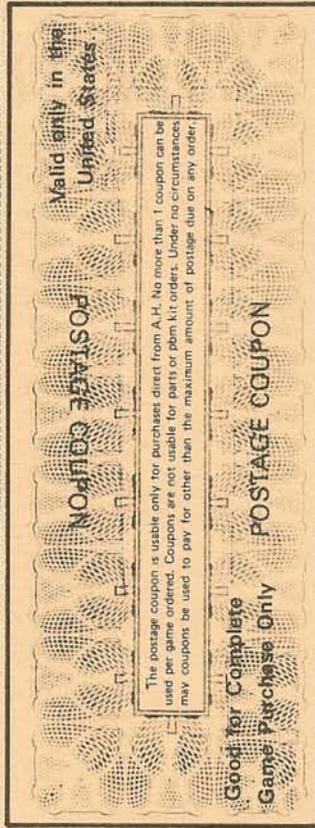
Roman Legions vs. Germanic Tribes on the Rhine frontier; 58B.C.-70A.D.

INSTRUCTIONS: Rate all categories by placing a number ranging from 1 through 9 in the appropriate spaces to the right (1 equating excellent; 5-average; and 9-terrible). **EXCEPTION:** Rate item No. 10 in terms of minutes necessary to play game as recorded in 10-minute increments. **EXAMPLE:** If you've found that it takes two and a half hours to play FRANCE 1940, you would give it a GAME LENGTH rating of "15." Participate in these reviews only if you are familiar with the game in question.

- 1. Physical Quality _____
- 2. Mapboard _____
- 3. Components _____
- 4. Ease of Understanding _____
- 5. Completeness of Rules _____
- 6. Play Balance _____
- 7. Realism _____
- 8. Excitement Level _____
- 9. Overall Value _____
- 10. Game Length _____

The review sheet may be cut out, photocopied, or merely drawn on a separate sheet of paper. Mail it to our 4517 Harford Road address with your contest entry or opponents wanted ad. Mark such correspondence to the attention of the R & D Department.

Game to be reviewed next: _____



A.R.E.A. RATING SERVICE

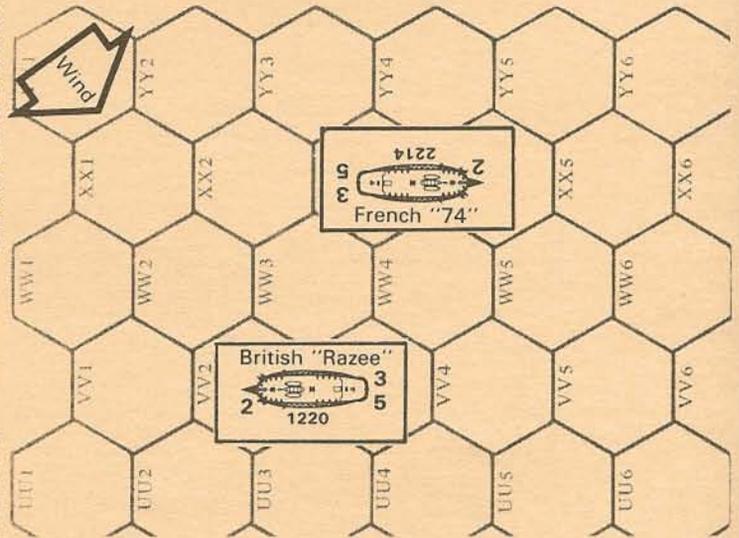
As outlined in The General, Vol 11, No. 5, Avalon Hill offers a lifetime service whereby players are rated in relationship to other game players. Return coupon NOW, along with the \$4.00 lifetime service fee, for complete details on the Avalon Hill Reliability Experience & Ability Rating.

- I don't object to having my name and address printed in The General with the rating lists. I rate myself.
- A—an excellent player
- B—a good player
- C—an average player
- D—a novice in my first year of gaming
- E—a beginner

I realize that my rating may change according to how well I fare against others. For now, please send me complete details and membership card—here's my \$4.00

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CONTEST NO. 72



Things are not always as they seem. The ships are about equal, the position is symmetrical—but the French have a won game! It could take as long as eight turns to reduce the British to helplessness, but the next two turns are the critical ones—write down the proper loading, firing, and movement for the next two turns and we will assume you've figured out the rest.

The British ship is a 50-gun RAZEE, the French a 74-gun ship of the line—both are in perfect shape as described on the "Napoleonic Period Specification Chart". Both ships still have their initial broadsides.

The ships have not yet fired in the position given above. Give us the French player's loading and target for this turn, and the French loading, movement and fire for the next two turns. At that point it should be mathematically certain that the British are doomed—even assuming the best British play and the worst possible French die rolls!

The French ship may be assumed to be loaded with whatever you want at the beginning.

Use all the advanced game rules except critical hits.

	Loaded	Target (Hull or Rigging)	Movement (Including full sails)
First Fire			
First Move			
Second Move			

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Afrika Korps = AK; Alexander the Great = Alex; Anzio, Baseball Strategy = BB St; Battle of the Bulge = BB; Basketball Strategy = BK St; Blitz; D-Day = DD; Football Strategy = FT St; France, 1940 = FR'40; Face-to-Face = FTF; Gettysburg = Gett; Guadalcanal = Guad; Jutland = JUT; Kjeppiel = Krieg; Luftwaffe = Luft; Midway = Mid; 1914; Origins of WWII = ORIG; Outdoor Survival = Out; Panzerblitz = PAN; Panzer Leader = Pan Ld; Play-by-Mail = PBM; Play-by-Phone = PBP; Richthofen's War = RW; 1776; Stalingrad = 'Grad; Tactics II = TAC; Third Reich = 3R; Waterloo = Wat.

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can still swing the game. It looks easy now, but phase two is very slow. I feel it has been a mistake to insist on keeping his units in the gully this way; he is obsessed with the fact that in one game he failed on three successive attempts to enter a stream hex.

TURN FOUR-GERMAN:

1. The IF should have been plotted for a target in the 'gap' area; his main point of attack. A dispersal certainly makes his upcoming CAT attack more powerful. Priority-wise, everything in the south is secondary to his main drive off the board in the center. Therefore, if he pins down four American units in C-J-3, he accomplishes as much as if he destroyed them. There is no need to waste IF on them.
2. The German player exploits the hole in the American line at C-U-7. I can't understand why the hole was left there! If it was for an AT fire trap using his armor, at least he could have located the target hex in a location that wouldn't halve his available fire. Totally unnecessary.
3. This position also illustrates the options available for the inevitable American 'armor sacrifice'. If he wants to place two American wrecks on the block, a halftrack or armored car would do as well. I believe that sacrificing his armor on the first or second turn would have paid more dividends in the long run.
4. The aimless placement of the American armor is again pointed out in the entrapment of the M10 at hex C-G-7. The American armor should be CONCENTRATED to have any value in either an active or passive role.

TURN FOUR-AMERICAN:

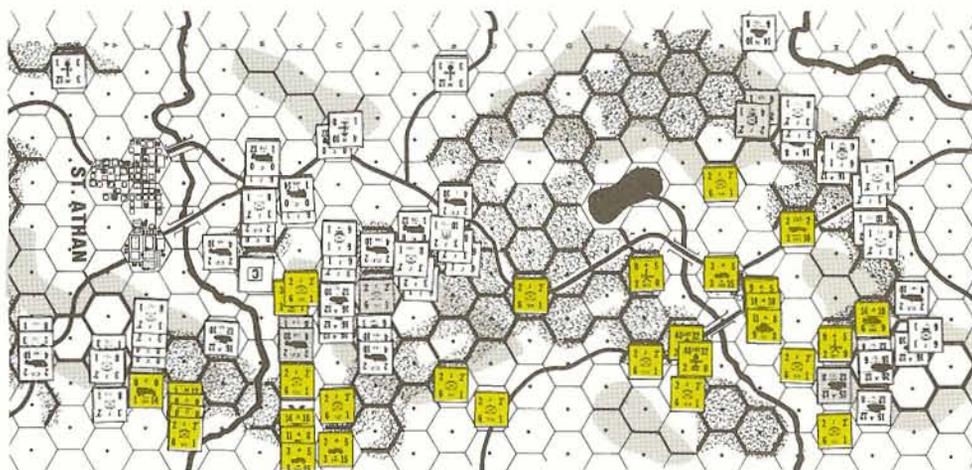
1. After wasting his infantry in the gully for three turns, I can't see the sense in moving it out of the gully now, especially southward! The German armor should overrun them easily. They could be used more effectively BEHIND the river to impede the advance of the German infantry.
2. For all his planning, the American player does not really have his forces where he wants them—at the points of the two German advances. For instance, the action in the north is a sideshow not worth the five American units tied down there.

German Turn 5:

Guessed wrong with my indirect fire, but being able to move my units towards the board edge is the most important item now. He should have tried to deny me hex C-Z-10 this turn; now the crossing of several units becomes a distinct possibility. The loss of the tank on C-G-7 is a serious blow to his chances, he does not have armor to spare. His position is disintegrating sooner than usual; terrain and time problems are my major concern now. Even without his units there, it is, as expected, too late to be able to remove the block now. Thus the only route available for exiting any significant number of mobile units is the bridge at C-K-8. I am loading up my guns as a matter of principle; they are really not going to be able to accomplish much.

TURN FIVE-GERMAN:

1. Again, very conservative German play. The half-track overruns the infantry in C-I-8 instead of a heavy armor unit. If the infantry unit had been blown away, at the cost of one or two Tigers, Wiln would have been invested or taken in the next turn. It might have drawn some Op Fire from the Americans which would have bagged some of that American armor. With such overpowering strength, the German player should be forcing the American's hand on all fronts.
2. The infantry units at C-Q-6 should have been moved to C-Q-7. These units just lost a turn.



AMERICAN TURN 4: The American withdraws as best he can but he is hindered by dispersals at J3 and T7 and a German advance which has already bypassed pockets of American resistance. The 57mm AT gun disperses the Tiger at H9 setting it up for a planned CAT. The Tigers at G9 and G10 Opportunity Fire at the advancing American rifle units at I-1 with no effect. The good luck is short-

lived however as the two rifle units fail to phase the H9 Tiger in a 1-3 CAT. The loaded German half-track at V8 is sandwiched by a 1-1 CAT which disperses it again but this is little consolation for what the American attackers are about to receive in return. The trapped M10 at G7 fails to even disperse the adjacent Tiger at 2-1. The American is about to receive grievous return fire.



GERMAN TURN 5: The German advance is going so well that most rearward units are mounting up or getting ready to do so. The accumulation at C represents a half-track and two trucks—all loaded with infantry. The bypassed American rifle unit at T7 is hit simultaneously with a 1-1 mortar attack and an overwhelming 4-1 CAT. The mortar at V7 is eliminated in a 4-1 attack by an adjacent King Tiger and rifle unit. Its companion rifle unit is dispersed at 2-1 by nearby AFV's which automatically dooms it to the follow-up 2-1 CAT. The tough MG unit at J3 defies the odds again but is dispersed in a 4-1 attack by the Wirbelwind, Mk IV, and 20mm. The

trapped M10 at G7 is dispersed at 4-1 by the adjacent Panther and finished off by a 2-1 CAT. The American strikes back feebly with Opportunity Fire from his 57mm's at H9—dispersing the King Tiger at I-1 but missing the half-track which continues on and disperses the exposed rifle unit at I8 in a 1-2 Overrun. The 57mm at H8 is dispersed in a 3-1 CAT by a SMG unit; the half-track at I5 is eliminated in a 4-1 CAT; as is the rifle unit blocking the road at P7. The truck at Z9 is dispersed in a 3-1 CAT but the stack at Y9 is unharmed by a 1-2 CAT. The rifle unit at K4 is not affected by a 1-1 CAT. The US force is vanishing in the face of concentrated fire.

American Turn 5:

Here I must decide whether I want to try and hold the town or withdraw and continue the delay. The delaying action is not going all that well, and in that light the town's defense might have better prospects than the delaying action. I, however, have rejected defending Wiln, since I really don't think that I can hold the town for five turns against the German assaults. He can bring up too much armour and infantry for this to be possible. Moreover, much of his infantry around Wiln is out of the action, if I do not fight for Wiln. There is clearly no way he can even begin to load and attempt to run with the infantry. Of course, part of the reason that the German has so much force here is to guarantee the taking of the town. At this point, it is reasonable to start using my tank fire power. I am firing from the block at a piece which can carry passengers off. When the inevitable

happens, and the tank is destroyed by counter fire, it will provide a wreck for the block. This is the reason I fired from that position. The final fights are beginning—too soon—and the Allied position looks even bleaker than the day the action really occurred.

TURN FIVE-AMERICAN:

1. Block or no block, wrecks or no wrecks, it is entirely evident that the German player will be able to exit ten units off the west edge in the 'gap' area. The 'frittering' of American infantry has left the most critical sector devoid of defensive units. The American armor, in the unlikely event it survives the upcoming 'Battle of Wiln', cannot effectively intervene against the exiting German infantry.
2. Given the position of his 105mm howitzers, his Wiln bridge defense is adequate. One wonders what the effect would have been had he created three



AMERICAN TURN 5: The American attempts to get out of harm's way by moving three units into the stream at I10 and Y10 but all three attempts fail. The American draws small consolation by eliminating a handful of German forces but it is too little too late. The Sherman at V10 destroys the

loaded halftrack on V8 at 4-1 but in so doing gives away its position. The halftrack at J8 is likewise eliminated at 4-1 by the 57mm in Wiln which will not long survive its target. Poor odds CATs at I3, T8 and I4 meet with limited success—dispersing the latter two.

wrecks on hex C-1-8 and defended it with the 105's at C-M-8 and the armor on the ridge/woods hex at C-L-10, with a single infantry unit at C-L-9. It might have proven very effective.

German Turn 6:

Abandoning Wiln was probably his wisest move. I was successful on the most critical combats, knocking out his antitank guns. I have now achieved the first of the objectives, having moved combat units through every town hex on board C. (Of course, I must make sure he cannot retake any of them. That should be no problem.) There remains the problem of getting ten combat units off the board. Perhaps I should have put a tank on the bridge, but I want to avoid having wrecks there. I plan to CAT from that hex, and have to avoid traffic jams again. Strange as it sounds when I have a position like this, my victory is not yet a sure thing.

American Turn 6:

Things look very bad, indeed; his luck has been too good, and his own play too efficient. Such a combination in this situation guarantees a German

win. We'll play it out another turn or two and see if the luck changes; if not, then I'll throw in the towel.

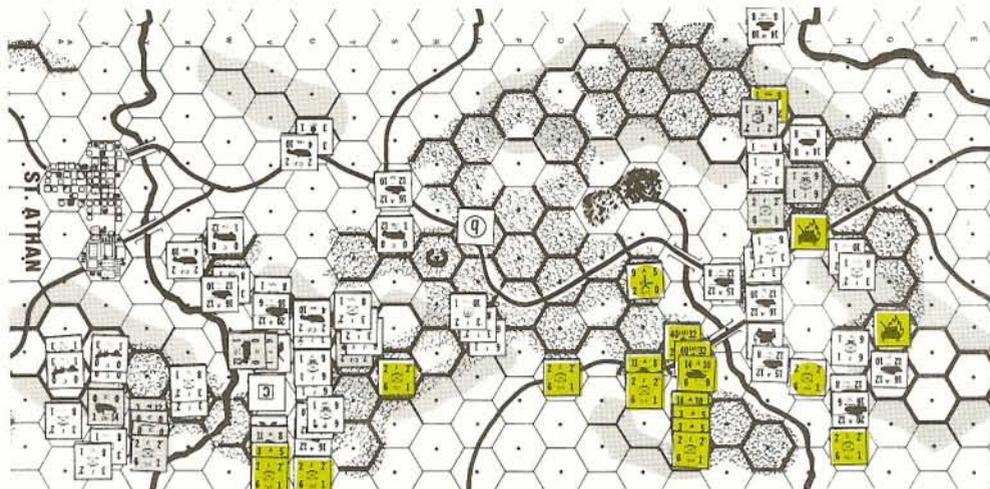
TURN SIX-THE END:

German victory is but a few turns away. In turns seven and eight, the German player merely continues his inexorable advance westward in the gap area and pounds the American positions defending the Wiln bridge. *Fini.*

SUMMARY:

In my opinion, this is not the way to manage a withdrawing defense. Certainly the American player does not have an easy task of it; but his situation is far from hopeless. The German player must be made to work for his victory; throwing units in his path won't suffice.

The American player lost in the first two turns of the game. His loss was not due to necessarily faulty execution, but to faulty conceptualization of his task and the methods at his disposal to facilitate this task. He was TOO defensive. His opening set up allowed for little counter-attacking or opportunistic exploitation. There is no question that a more



GERMAN TURN 6: The American 57mm guns at J7 and H8 are eliminated in 4-1 attacks by German tanks allowing advance into those hexes during the movement phase. The third 57mm at M6 is also eliminated at 4-1. The Sherman at V10 is dispersed at 4-1 by a King Tiger as is the ever persistent MG unit at J3 by its usual tormentors. The rifle unit at I10 is dispersed in a 3-1 Overrun by a Tiger and then eliminated in a 1-1 CAT.

The M8 and rifle section on V10 try to stem the tide with Opportunity Fire on V8 and manage to disperse a loaded truck but it is a pitiful gesture. The battle has become so lopsided that further resistance is hopeless. German CATs disperse the American forces on J5 (2-1), Y9 (1-1) and Z9 (3-1). "B" represents a loaded truck and halftrack while "c" harbors a loaded truck, a Panther, half-track and a rifle unit.

concentrated American set-up could have still executed—as a *LAST RESORT*—the type of delayed defense used by the American player. But, realize this: leaving single delay units in the path of powerful CATing infantry stacks will **not** delay the German advance **one iota**.

The time and place to delay the German advance is in front of the American defense in the 'gap' area **BEFORE** the infantry can dismount from the transports and deploy for an eight-hex waltz off the west board edge. If they can be kept more than eight hexes away from the board edge for two turns and if they can be forced to dismount more than eight hexes out, they will not get off of the board edge. A more concentrated, **ATTACK ORIENTED**, American disposition would have intimidated the German player during his initial advance, smacked a few loaded trucks and halftracks, and most importantly, forced the German to deploy infantry for a fight too far to the east. It would also have allowed for exploitation of German mistakes, making his task harder.

And the German player **DID** make mistakes! The American player should have been able to destroy the bulk of the artillery at D-BB-10 with direct and indirect fire. He should have decimated the northern attack force with a single M3 armored car. He should have drubbed the secondary attack at C-J-3 by jumping on the German Op Fire mistake. Throughout the game, the American infantry was **never** able to CAT attack at better than 1-1 odds—and there were only **TWO** CAT attacks at better than 1-3 odds!

That this type of defensive strategy is faulty is obvious from the Replay. To understand why this defense was formulated requires investigation of another aspect of wargaming: psychological intimidation. In examining the Replay in detail, this observer can only conclude that the American player was deeply intimidated by his German opponent, perhaps due to previous game experiences. He was absolutely inhibited by the German player from attempting an offensive posture or exploiting obvious German mistakes. This writer, who admits to a definite offense orientation in his own game play, can only conclude that the American player was half-beaten before the game began. Competent execution could not overcome a conservative, timid, totally defense-oriented mindset.



AREA TOP TEN

Rank	Name	Rating
1.	Tom Oleson	DEH2035
2.	John Garrett	DEI1455
3.	Joseph Halko	EA-1455
4.	Brian Lawrence	DB-1435
5.	Michael O'Donnell	CA-1410
6.	Gary Dayton	EDA1280
7.	Roland Vollbehrr	CA-1255
8.	Peter Christian	DB-1165
9.	Wayne Helie	CA-1145
10.	Tom McGrath	EGK1025

The above players represent the ten highest, provisional (11+ rated games) rated members of the 2,000+ member player pool. Future listings will give priority to individuals with a large rating base. An individual who plays only one or two opponents will eventually be dropped from the listing as will those who do not remain relatively active once on the list.

Occupation as The Key to Victory

OR
How To Win In 1776
by Keith Gross

Victory in any war depends on maximizing your own advantages while minimizing those of your opponent, and this is true in wargames as well. In the Campaign Game of 1776, the Americans and the British each have their own strengths and weaknesses. If you are playing the British, you have control of the seas, at least until French intervention, and can rapidly transport your armies great distances. Also, during late 1776 and 1777, you have a great strength advantage as well. On the other hand, the Continental Army has a large replacement capability and will build up as the game progresses unless you act quickly. Besides, the militias which make up much of the fighting strength in the game are usually on the side of your opponent — if you are in an area without controlling it. The trick, then, is to invade one area of the mapboard at a time, conquering it as quickly as possible so that strong rebel militia are active for as short a time as possible.

A major problem is the selection of the initial invasion area. Each of the four areas has something going for it. New England has a small area and is an important source of CA replacements, but it is too heavily defended at the beginning of the game. The Middle States have loyalist militia, but are difficult to hold because of the vastness of the area, the rough terrain, and the scarcity of ports.

However, the two Southern areas, especially the South Central, are much more promising, especially during the first few quarters. The winter movement restrictions do not apply in the Southern colonies, but the combat restrictions do — unsupplied attacks are not allowed. Since the Americans have no supplies in the South Central area initially, you are invulnerable to attack there, and all you have to do to conquer it is to move into the five cities there. Charlottesville is the only one that is difficult to reach.

Thus, the South Central area can be taken during the first quarter of the game, with the Deep South falling soon afterwards. By the time these operations are complete, you will be up to full strength, and will have only one front. The South will be secure, barring a major blunder, until French intervention, if the game lasts that long.

This plan assumes regular Campaign Game rules are being used, with all optionals except for Inverted Movement. Minor changes can be made if Variable Transport Capacity isn't being used.

In the first turn, evacuate the main British army from Boston. Convert the magazine to a supply wagon, destroy the artillery (since it takes up too much room on the transports), and load up three BR on the battle fleet (BF A) and 13 BR and the supply on the transport fleet (TF A). Move both fleets southward along the coast as far as possible, to QQ-38 and GG-36, leaving two BR and the one Tory to the wolves.

In January, feint an attack on Charleston by moving the Tories from Augusta, Salisbury, and Norfolk in that general direction, taking care not to move the Norfolk force too far south. Stack the Portsmouth Tories with those from Norfolk. This feint could conceivably prompt your opponent to pull rebels south from Virginia, keeping them from blocking you later.

In Canada, build a bateau in Quebec and start the Tories in Oswego north to help counterattack in the spring.

In February, you should:

1. Move the Tories in South Carolina into the fort at Ninety-Six to defend it.

2. Keep going through the Adirondacks, and build another bateau in Quebec.

3. Use the three TM in the South Central area to impede the movement of the rebels there. Try to keep him from occupying the two clear terrain hexes in front of Charlottesville.

4. a. If Alexandria is unoccupied, land the three BR from BF A there, march two BR up to HH-24, and attempt a forced march to GG-23, so that you can reach Charlottesville through the mountains next turn.

b. If Alexandria is occupied, unload BF A at HH-26 instead.

5. Land the bulk of the troops from TF A at DD-28, while putting a factor or two across the river at EE-28 if possible.

The invasion of the South Central area should be concluded in March:

1. Occupy the five strategic towns with one BR in each. If necessary, try several forced marches over the mountains to reach Charlottesville.

2. Attack RM units, and block their escape routes, with the supply wagon, eight BR, and the three TM. Keep these near Charlottesville if you can't occupy it, so that you can destroy the American replacements when they come in there.

3. If they are not needed, load two or three factors back onto the fleets and move back out to sea (GG-35).

4. Move the B fleets and their passengers, your March reinforcements, to Sea Lane hex M-23.

Assuming you have captured Charlottesville, you have several advantages during Spring interphase. The Americans get minimum rebel militia in all four areas, while you get maximum Tories in three. In addition, the Americans get three supply units rather than four. Take your new Tories at Ninety-Six, Philadelphia, and Hartford, if possible.

You should wait until the summer to actually invade the Deep South, as you are not strong enough to do so now. Therefore, spring operations should be oriented towards preparing for this invasion. There are four main objectives for this quarter:

1. Soften up the Deep South by using the seven TM in Ninety-Six and the seven BR on Fleet B to destroy the two CA, two supply units, and one artillery unit there. In June, move the BR back out to sea, and move the Tories and one supply wagon back to Ninety-Six. You can leave Charleston's fort vacant, since it can be easily recaptured with great losses to the Americans.

2. Mop up the American forces in the South Central area. Obviously, this will be much harder if you didn't capture Charlottesville last quarter. Don't use up your supply unit unless absolutely necessary.

3. Pick up the June reinforcements in Philadelphia. Land fleet A and two or three BR there, assisted by the four new Tories for the Middle States. After getting the new troops, leave. Send 16 BR and the supply unit south by sea, and march the rest overland to Head of Elk, where they can stop minor Yankee raids.

4. Use the May reinforcements to drive the Americans from Canada. Don't, however, go into

New York at this time, except possibly with Tories.

By July, the Americans will have six to eight strength points in the Deep South, while you have 16 BR on fleet A, seven BR on fleet B, eight BR and two TM in Virginia, and seven TM at Ninety-Six; also, you can take your August reinforcements at Charleston, giving you 24 more factors if you need them. Therefore, you can easily take over the Deep South in the summer quarter. Move the Virginia army south into North Carolina, while unloading the fleets at Charleston and various points along the rivers, surrounding or attacking the American forces. The first objective is to destroy American forces in the area; then in September occupy the cities.

The American player has three basic options open to him while you are invading the south. One of these is to keep the main army in New England or the Middle States and build up strength while waiting for you to come north. If he does this, he will have 48 factors of Continental regulars by the fall of 1776. However, much of this will disappear around Christmas-time. You should land a large army at one of the strategic towns in his area in December, so that he will lose 50% rather than 25% of his army. He will have only one month in which to attack this force and will probably not destroy more than a few factors before you break off battle. In early 1777, you can come down from Canada and up from the South to seize key cities in the Middle States and New England.

Second, your opponent can invade Canada in force. He will probably capture Montreal and St. Johns, but he will not be able to take Quebec if you defend its fort with your entire twenty factors. He will have to fall back before winter sets in or else lose 75% of his forces to it, allowing you to retake Montreal and St. Johns.

Third, he can march his main army south to liberate Virginia. However, it takes 36 movement points to get from Boston to Alexandria by the most direct land route (44 accounting for winter movement restrictions for February and March). Even unopposed, Washington's army can't cross the Potomac until July, assuming it spends January recapturing Boston. The Tories should be able to delay him until September or October by occupying river crossings and passes through the hills. You can bring your August and October reinforcements in at Alexandria, which will stop the American advance. When the Deep South invasion is completed, your armies there can come north, driving the Americans back into the Pennsylvania wilderness.

In general, you should regroup your forces in the fall, 1776 quarter, transporting them north by sea. Also, try to maximize American winter reductions.

Making even general plans of what to do after this is impossible because of the many variables involved. The war is by no means over, since the main American army is probably still intact and the northern states are still uncontrolled. However, if all has gone well, you now have the advantages of controlling two entire areas as well as Canada and of having taken few losses, so the remainder of the game should be all downhill.

In most games, occupation of enemy territory follows the destruction of his forces, but in 1776 the situation is reversed; if large areas can be

occupied, then the enemy army will automatically diminish. The key to victory as the British in 1776 is to make maximum use of the Tory militia, not activating the rebel militia, and using British seapower to transport British land forces to undefended areas. If you can occupy large amounts of territory while minimizing losses, an early victory will result.



★★★★★

A.H. Philosophy . . . Continued from Page 2

BISMARCK may or may not be the title of the naval game currently under development by Jack Greene. Actually two games in one, **BISMARCK** will provide both an extremely playable, albeit much more sophisticated, basic game à la the old **BISMARCK** plus an extremely detailed **TOBRUK**-type treatment of naval combat between German and English capital ships. As such, the game will include both a strategic search board and tactical battle board. The Basic Game is currently undergoing playtests on four continents. The advanced version and therefore the completed game is not expected prior to the fall.

ALESIA is developing very nicely and will be ready for release at **ORIGINS II** with mail order sales starting shortly thereafter. One of the few problems we've had with the game has been its name. Aside from a few ancients buffs and long time wargamers, Alesia holds no instant recognition value. Therefore, we are going to change the name to **CAESAR** with a subtitle encompassing Alesia.

CAESAR will utilize a new size mapboard (28" x 33") and over 400 counters. Don Greenwood, in collaboration with the game's designer Dr. Robert Bradley, has added several improvements to the classic game system including leader units, multi-player rules, improved off-board movement and missile fire. The situation is unique and without parallel in the history of warfare as the Romans attempt to hold a fortified position from attack from both within and without. **CAESAR** will be one of the few conventional wargames that plays every bit as well (in fact, better) with 3 or 4 players as it does with 2. Playing time is running from 4—8 hours depending on the number of players and relative success of the Gallic relieving force. **CAESAR** will sell for \$10.00

Hopes for a Pacific version of **THIRD REICH** rest squarely on the shoulders of Lawrence Pinsky. The problem in this one is to come up with a simple game system which does not water down the flavor of the subject matter. Larry reports making good progress along these lines and expects to include counters for every capital ship which saw action in the Pacific theatre. Completion is not expected before mid-'77.

We have still other games in the works in varying stages of development, but will leave discussion of them to a later time when we can be specific and more generous with our details.

3M GAMES

We receive many inquiries about the 3M games since our acquisition of that line several months ago. Avalon Hill currently carries 25 3M products and are shipping these products on an equal basis with AH merchandise. We are currently selling existing 3M inventory under the 3M label. This *does not* mean that we are

Continued on page 28, column 3

DESIGN ANALYSIS



ALEXANDER: KUDOS AND CLARIFICATIONS

By Richard Hamblen

It just goes to show that you shouldn't jump to conclusions. When I first heard about **ALEXANDER** a while back, my first reaction was active disinterest; historical accounts of the period were obscure and boring, and the Greeks always were portrayed as invincible. A few months ago I played my first game, and my conversion was absolute. I now claim that **ALEXANDER** is a game-player's classic—the first one in years. Consequently, when I recently became the newest addition to Avalon Hill's staff I was immediately given suzerainty over **ALEXANDER**, much to my delight.

It just goes to show that you shouldn't jump to conclusions.

ALEXANDER is an excellent game-player's game. Its strong points are its fast action, its subtlety, the decisiveness of accomplishing certain actions and the way that the "feel" of the battle is recreated. As is the case with all new games, it is not certain how balanced it is with best play, but so far it looks like the Greeks have a slightly uphill battle. That is only with best play, however. Even the subtlest errors in deployment open the way for disaster at the hands of a skillful opponent.

All of these points tend to make **ALEXANDER** an excellent game for serious competition. **ALEXANDER**'s weakest point is in its rules, however (the colors used on the mapboard are no winners, either), and clearly defined rules are ESSENTIAL to a competition game. The game system as a whole is laid out cleanly, but there are conflicts and ambiguities in a few important rules—particularly the rules dealing with missile fire.

Consequently, in the interests of tightening down the rules the following rules interpretations are offered as a supplement to the Second Edition of the rules. These interpretations are important—they clarify the ambiguities and remove the conflicts, and there are even some rule changes to remove flaws in the game.

Using these changes, **ALEXANDER** is a game well-suited for serious competition.

ALEXANDER has been added to the "old classics" that are to be played in the AH 500 tournament at **ORIGINS II**. The above interpretations are the official interpretations for **ALEXANDER**; be warned. These interpretations will be supplied at the tournament as well.

ALEXANDER is being included in the tournament at the behest of the AH 500 tournament director, who is me. I told you that my conversion was absolute.

A. Missile Units

1. Exactly when are missile units immune to adverse combat results?

When the unit is conducting "missile fire." A missile unit involved in combat is *always* assumed to be "missile firing" UNLESS: a) the missile unit is being attacked normally; or b) the missile unit is attacking in its turn and is announced to be making a normal attack on an adjacent enemy.

Note that a missile unit CAN "missile fire" at a range of one hex.

(Question "Q" in the "Questions and Answers" section of the 2nd edition rules thus has a different answer—).

"Q. May a non-attacked missile unit fire in the defensive phase at a unit at 1 hex range?
Yes."

2. What are the "adverse combat results"?

AE, ½AE, X, M, AR, AB1, AB2, etc.

3. Are horse archers cavalry for the purposes of charging?

Yes, but they must end their move with a normal attack in order to qualify for any charge bonus. They get neither the extra movement point nor the doubled combat factor if they missile attack.

4. May an attacker call off an attack if his battle odds drop a level (i.e., from 3-1 to 2-1) due to losses to enemy defensive fire or the addition of defensive support to the defending unit?

No. Once the attacker has specified the attacking and defending units he may not cancel the attack even if defensive support increases the defenders and/or defensive fire decreases the attackers. An attack, once announced, must go through.

Note, however, that the attacker does not have to announce most of his attacks until *after* defensive fire has been completed.

The play procedure is: a) the attacker moves all of his units; b) the defender announces all defensive fire; c) the attacker announces all attacks against missile units (thereby diverting those units' fire); d) defensive missile fire is resolved; e) the attacker announces all attacks; f) the defender announces all defensive support; g) odds are calculated and the battles resolved.

In the case of automatic victory, the attacker announces his attack during movement and the defender immediately gets to add any defensive support. The battle is resolved immediately only if it remains an automatic victory. Otherwise, treat it as an announced attack and resolve it with the other attacks after combat.

Using the Horse Archer rule, a split-move attack is announced during movement. The defender may immediately announce defensive fire (but NOT defensive support), and combat is immediately resolved.

5. In attacks that are 100% missile fire attacks, can the defender add defensive support?

NO! If an attack is composed entirely of missile fire, the defender may NOT add defensive support to the defender. This is of particular importance in split-move attacks and missile-versus-missile duels.

6. What type of unit does this symbol (☒) represent? These are the javelin units. They are NOT mercenaries.

7. Two "B" units back to back in the same hex form a sort of hedgehog. How many missile units fire at such a hedgehog?

Two "B" units back to back in the same hex use their frontal attack factors against all attacks. Missile units may fire at either unit, but that unit will defend with its frontal factor even if the attack comes from the rear.

B. Automatic Victory—

1. During movement can a unit occupy the same hex with an AV'd enemy unit? Can it attack from there?

Yes, if this does not violate stacking. Yes.

2. Using the Skirmisher Rule, may skirmishers pass through a fully occupied hex that contains an AV'd enemy unit?

No. The occupants must all be friendly units.

3. Must a "B" class unit occupying a hex with an AV'd enemy unit have parallel facing with that unit?

No. You may ignore the facing of an AV'd unit.

C. Combat—

1. When the combat results are 1/2DE-DR, do adjacent units still rout if the 1/2DE eliminates the (inverted) counter that was being attacked?

Yes. Each combat result takes place independently of any others.

2. A retreated unit has to "face the vacated hex." Is this the first hex vacated or the last vacated?

The retreated unit must face the hex it occupied during combat—i.e., the first hex it had to vacate.

3. Can a commander attack only once per turn? Or does he help all adjacent attacks and defenses?

No and no.

A commander helps in any battle involving a unit that starts the combat phase in the same hex with the commander. If the commander is with two units at the start of enemy combat, he helps both units in defense; if the commander is with two units at the start of friendly combat, he helps both attacks.

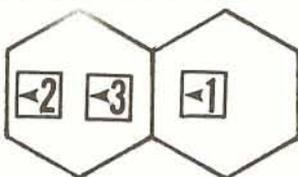
EXCEPTION: A commander NEVER affects a purely "missile fire" attack. A commander DOES affect morale and die rolls when he is DEFENDING against a purely "missile fire" attack.

NOTICE THAT THIS REPLACES SECTION "4" OF THE SPECIAL UNITS RULES ON PAGE 7 OF THE RULEBOOK! Section 4 of the Special Units rules is null and void.

D. Movement—

1. During movement, do "B" class units have a position in the hex?

This example illustrates the problem:



Unit 3 moves away. May unit 1 move into unit 2's position in the hex, or must unit 2 move out of the way first?

"B" units do not have a position within a hex during movement. A "B" unit may be shifted forward or back as desired during movement as long as it stays in the hex (and preserves its facing, in the Advanced Game). A unit has not started its move until it has started to expend movement points.

At the end of movement units do have a position inside the hex.

EXCEPTION: Melee'd "B" units may not move, shift facing, nor move within a hex.

2. Using the Cavalry Maneuver rule, does the 1 MP cost purchase unlimited facing changes in one hex or in all hexes moved through that turn?

The cavalry must spend 1 MP in each hex in which it makes unlimited facing changes.

E. Facing—

1. When during a turn must units in the same hex have parallel facing?

At the end of movement and at the end of combat. During movement—and during movement

after combat—parallel facing does not have to be observed.

2. Must a "B" class unit have parallel facing with an AV'd enemy unit in the same hex?

No. AV'd units affect only the hex capacity.

3. How may units advancing after combat change their facing?

Normally, in the Basic Game an advancing unit may change its facing by any amount. In the Advanced Game, an advancing unit may change its facing by 60 degrees for every new hex entered. In cases of advances of more than one hex, the additional movement may be used for turning instead.

It is important to note that the Second Edition of the ALEXANDER rules are changed by the above interpretations.

Section 4 of the Special Units rules is cancelled (see interpretation C.3 above). This was changed to allow commanders better defense against missile attacks; otherwise it is just too easy to bushwhack Alexander with the Persian archers.

The answer to question "Q" at the end of the booklet is changed to a simple "yes" in order to keep the missile rules self-consistent. See interpretation A.1 above.

Other than that the rules stand, as interpreted above. Actually, most of the points cleared up are trivial when it comes to the actual play of the game. The bulk of the action in the game is direct and straightforward. It is only the unusual cases and the fine points that have to be resolved for the rules sharks, so that the game will provide fair competition.

The mapboard: Remember that any hex containing any green at all is clear terrain, and that it is possible to move from clear terrain hex to clear terrain hex at a cost of only one movement point, even if the intervening hexside is entirely brown. In particular:

- T22 and V24 are clear terrain
- V11, T23, and B28 are rough terrain
- T25, U25, B33, B34, C34 and D33 are rough terrain.

It is possible to move from V18 to V19 at the clear terrain rate. It is also possible to move from S22 to T22 and then to U22 at the clear terrain rate.

Miniaturizing ALEXANDER:

First, the simple parts. Choose a convenient large hexsize and reproduce the map in this larger scale. Do not feel obliged to reproduce the game's color scheme, however. For added versimilitude, use cardboard, styrofoam or clay to create thick "rough terrain" hexes and place these on the rough terrain hexes. Slope terrain can be represented by hexes that have not been thickened so much, or hexes with thickened terrain that slants, or slopes can be indicated by color.

So much for the mapboard; now for the units. It is assumed that you can find the proper miniature figures and paint them to satisfy your own aesthetic demands.

The thing that makes it possible—and elegant—to convert ALEXANDER to miniatures is the fact that there is no real stacking of units in ALEXANDER. It is possible for a unit to have an "inverted strength," however, and since it would be silly to invert a miniatures counter (the visual impact of a Greek Phalanx is unfortunate when the unit is standing on its head) it is necessary to design the combat units so as to allow step reduction.

The best procedure is to have two counters (called "stands" in miniatures parlance) of figures to represent each unit—the stands move and fight together when the unit is at full strength, but after a "1/2 DE" one stand is removed and the remaining stand represents the unit.

In order to implement this, first select a size for your "Phalanx" units. They should correspond in scale to your increased hexsize, of course. "B" class units should be exactly 1/2 the size of "A" class units, with the same width of front but 1/2 the depth. Note that this makes a long, thin counter instead of the small, square "B" counters in ALEXANDER.

Each type of unit should be divided into two stands, one on the right and one on the left. These stands do not have to be equal in size, but they should be close enough so that the complete unit looks obviously different from the half unit. You might want the stands slightly different sizes to accommodate the positioning of figures on them.

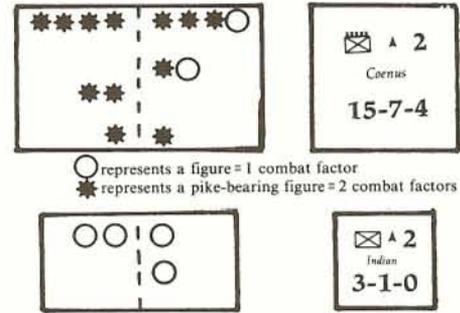


ILLUSTRATION: "A" unit, "B" unit

Placing figures: the stand on the left of each unit will represent the half-strength unit, and the stand on the right is the stand that will be removed when the unit is half-eliminated. Each figure on the unit will represent one combat factor. Place frontal combat factors along the front edge of the counter, rear combat factors along the rear edge, and flank combat factors in a row in the middle of the counter. On each left stand place the proper number of figures to represent the half-unit strengths; on the right-side counter place enough additional figures to bring the total strength up to the unit's full strength.

Special figures for combat units: it would be nice to differentiate between the types of counters as much as possible. Certainly cavalry units should contain cavalry figures. In addition, if you can find the appropriate figures archer units could contain figures of archers, javelin units javelin throwers, etc. The Phalanx counters should contain figures carrying the distinctive long pike or sarissa.

A little economy: the Phalanx units have a lot of combat factors and so require a lot of figures that take up a lot of space. In order to form units more efficiently I suggest that you treat pike-bearing figures as representing a combat strength of two factors. Even the biggest Phalanxes can be efficiently formed using a mixture of pike-bearers and regular figures.

If you can find them you can also place an appropriate standard bearer figure on the left stand.

Other figures: obviously, the commanders can be represented by individual figures on their own small stands. You can have fun finding appropriate figures; decorate them with a little style.

Don't forget that you'll need a baggage wagon counter, also. If you can't find any wagon figures (which are hard to find, especially in some scales) then you can build your own from scratch using cardboard or other materials (a process known as "scratch-building").

Baggage camps are a little trickier. If you can get some wagon figures, you might not want to mount them on stands at all. Just place a few in the appropriate hexes at the start of the game. This has a number of advantages: they are not fastened to the mapboard so the mapboard can be stored more



KINGMAKER ANALYZED

by Robert D. Harmon

KINGMAKER, a new release by AH, promises to be both different and popular, both as a party game (like Monopoly) and as a wargame for AH's traditional following. Wargamers, however, will find it wildly different than anything they have experienced before. For one thing, the element of chance will unhinge winning positions, or provide a boost to a previously-weak faction. But there are definite objectives, various strategies that can be used, and a necessity for sound diplomacy with other players. An analysis of the game can give insights into this.

The first thing that should be considered when approaching the game is the Event Deck, which poses the most dangers to a player. The Event Card Key (p. 7 of the rules) gives a good basic rundown on what the cards do. What they do *you* is something else again. Let us discuss them in the order that the Event Card Key displays them:



PLAGUE: Potentially the most devastating of the Event Cards. It will pretty much eliminate everything it touches, even in the Advanced Game. We can presume, of course, that it will strike only within the walls of the town or city involved, and that the player that has deliberately placed units in the square outside the protection of the walls will avoid the plague. However, it is sometimes necessary to enter a town or city to use its port or cathedral. However, players should be aware that, in the course of the Event Deck, every town and city on the map is liable to plague. Anyone getting the plague—except for nobles summoned just previously by an Event Card—pretty much deserves what he gets.



STORMS AT SEA: Being forced ashore on a hostile coast can ruin your whole day, especially when unfriendly armies or fortified ports are present. If you rely on sea movement as a part of your strategy, it may be worth your while to remember this when moving your ships. Shortening their movement to stay near safe havens may be in order.



RAIDS AND REVOLTS: These are the most dangerous of the Event Cards, if only because they are hard to avoid and so unpredictable. You do know what will eventually happen to you if you dally in a town. But there's no way of knowing if your strongest noble will suddenly get yanked away on the eve of a crucial battle, as often as not into the middle of enemy territory. About the only defense is carefulness in delegating Titles and Offices. You shouldn't, for example, delegate Chancellor of Cornwall, a locally powerful office, to Mowbray, who is apt to be whisked off to crush peasant revolts in eastern or northern England, where he is likely to be eliminated either on the scene or during the long march back to Cornwall. More on this as nobles and offices are discussed.



EMBASSIES: This makes having the sole King something of a disadvantage, particularly if you are relying on a locally-powerful office to maintain him. This is one of the reasons why island castles like Beaumaris, Douglas, or Carisbrooke are sometimes worthwhile, as the King and his accompanying nobles can't get misplaced while his faction fights it out in England. Of course, a ship should be on hand to take him to Parliaments in nearby ports—or to help him escape an enemy landing force.



PARLIAMENT: This card makes the value of the Chancellor of England office self-evident. It also is a reason for players with eligible heirs—and their enemies—to consider whether they should allow another King to be crowned or not.



WRIT: A necessity for a King's or Chancellor's faction to call a Parliament. They are also valuable, under the Commission rule, for mitigating the ravages of the Raids & Revolts cards. Indeed, in this guise it is even more valuable.

When setting up the game, the player is faced with the major decisions of delegating titles and offices to his nobles. This is usually contingent on the position and capabilities of the nobles he has been dealt. As no two games will be alike, it is

worthwhile to discuss each noble in turn, before discussing what should be dealt to them in the way of titles and offices. A discussion follows, starting with the strongest nobles:



PERCY, Earl of Northumberland: At 100, the strongest of the nobles. Both of his castles being on the Scottish border, he is difficult to get into play. As he is apt to be summoned back up to the Marches, it is best that no locally-strong offices be given him, if at all possible. An exception is, of course, Warden of the Northern Marches. Marshal of England is another possibility, if only because the resulting 200-strong force could survive almost anything.



MOWBRAY, Duke of Norfolk: Five castles means that his faction has the most options in entering him into the game—he is within range of virtually every Royal Heir in England. However, he personally is also called by no less than five Raid & Revolt cards. He should not be given a local office, obviously. Marshal of England might be worth giving to him, since you can't depend on either him or the Marshal's office anyway.



NEVILLE, Earl of Warwick: Of the top three nobles, he has the most personal votes in Parliament, and the least number of Raid & Revolt summons (one). His castles, Warwick in particular, are all in strategic locations, so his entry can be decisive, if timed right. Any office would suit him well.



CHART 1.

OFFICES AND BISHOPRICS

Office	Forces	Total Votes (town & city)	Summoned: Raids & Revolts	Comments
Treasurer of England	50	0	0	
Constable of Dover	50	0	1	
Steward of the Royal Household	50	3C	0	
Warden of the Cinque Ports	50	5C	2	2 ships
Admiral of England	50	6C	4	2 ships
Chancellor of England	50	(20C)	0	(calls Parl.)
Marshal of England	100	0	10/1**	Harlech/Edward
Warden of the Marches	(1)50	5C	6	
Chancellor of Cornwall	(1)50	8C	1	
Chancellor of Lancaster	(1)50	3C	1	
Chamberlain of Chester	(2)50	3C	1	
Constable of the Tower	(2)50	7C	1	London/K. Henry
Lieutenant of Ireland*	(2)50	0	0/1**	
Captain of Calais*	(3)50	0	0/1**	Calais/R. of Glos.
Bishop of Lincoln	0	2L/3C	0	
Bishop of Norwich	0	2L/4C	1	
Bishop of Carlisle	(30)	3L/3C	1	
Bishop of Durham	(30)	4L/3C	0	
Archbishop of Canterbury	0	7L/3C	1	
Archbishop of York	(30)	5L/4C	1	York/R. of York

*-Adv. Game only
 **-additional callup—Adv. Game only
 ()-applies only under certain conditions
 L—Lords
 C—Commons



BEAUFORT, Duke of Somerset: Fourth in line for the throne on the Lancastrian side, Beaufort is of no minor importance. He also has more Parliamentary votes than the remaining titled nobles. His one castle, although remote, is a highly convenient port.



TALBOT, Earl of Shrewsbury: Like Beaufort, Talbot is summoned only once—to his own castle. Since Ludlow is on the Welsh border, a strong office based in Wales—Chamberlain of Chester or Chancellor of Lancaster—is a strong combination since it guarantees that he won't be pulled away from his area of operations.



FITZALAN, Earl of Arundel: Both castles—in Wales and on the south coast—make good starting-points. He is summoned by two Event Cards, as are the remaining titled nobles.



POLE, Duke of Suffolk: He starts quite close to London—he and Stafford are the closest titled nobles to Henry VI initially. But Wingfield can be an embarrassing place to be called back to if a strong force is in the London area.



COURTENAY, Earl of Devonshire: The only titled noble in Devon-Cornwall—since he can be summoned back there twice, the office of Chancellor of Cornwall would be a good choice for him, particularly as any summons to that part of England pretty much removes him from active operations, since most fighting will be between London, York and Wales.



STAFFORD, Duke of Buckingham: His two castles make fair starting-points, depending on what office he receives. Unfortunately, he faces two peasant revolts near Leeds (three in the Advanced Game). That part of England can be very unhealthy unless he or his faction has the Constable of the Tower, which, incidentally, is a good title for him to have.

That ends the listing of the nine titled nobles. Having built-in titles helps in delegating offices, and can be quite convenient. However, their very titles give them various obligations under the Event Cards, and their offices should be delegated carefully. The untitled nobles are discussed below:



STANLEY: At 50 the most powerful of the untitled nobles. Also inconveniently placed on the Isle of Man. Getting him into play can be a problem. Warning: one Raid & Revolt card will pull him right back to Castle Douglas and start the problem all over again. Having a ship waiting there may be a good idea.



GREY, HOLLAND, ROOS: 20 troops and two castles each. The castles are in fairly good locations. However, Holland is summoned by Event Cards twice to Cornwall; Roos is called off to the North once. Holland's office, if he gets one, should be picked with care; Chancellor of Cornwall is good in his case. Grey faces no summons, but only his southern castle is in a convenient location.

There are ten remaining nobles, each with one castle and 10 troops apiece: **BERKELEY,**

CHART II.

NOBLES

Noble/Title	Forces	Parliamentary Votes	Times Summoned	Castles
PERCY, Earl of Northumberland	100	3L/2C	2	2
MOWBRAY, Duke of Norfolk	50	4L/2C	5	5
NEVILLE, Earl of Warwick	50	4L/3C	1	4
BEAUFORT, Duke of Somerset	30	3L/2C	1	1
TALBOT, Earl of Shrewsbury	30	2L/1C	1	1
FITZALAN, Earl of Arundel	30	2L/1C	2	2
POLE, Duke of Suffolk	30	2L/1C	2	1
COURTENAY, Earl of Devonshire	30	2L/1C	2	1
STAFFORD, Duke of Buckingham	30	2L/1C	2	2
STANLEY	50	2L	1	1
GREY	20	1L	0	2
ROOS	20	1L	1	2
HOLLAND	20	1L	2	2
AUDLEY	10	1L	0	1
BERKELEY	10	1L	0	1
CLIFFORD	10	1L	0	1
CROMWELL	10	1L	0	1
GREYSTOKE	10	1L	0	1
HASTINGS	10	1L	0	1
HERBERT	10	1L	0	1
HOWARD	10	1L	0	1
SCROPE	10	1L	1	1
BOURCHIER	10	1L	2	1
PLANTAGENET, Duke of York*	50	—	2	3
PLANTAGENET, Duke of Lancaster*	30	—	0	1

*—Adv. Game only

BOURCHIER, AUDLEY, CLIFFORD, CROMWELL, GREYSTOKE, HERBERT, HASTINGS, HOWARD and SCROPE. Berkeley, Bouchier, Hastings, and Howard are all within reach of London; all the rest except Herbert are within one turn's march of York. Herbert, of course, starts out in southern Wales. If he starts the game there, he is in a position to capture George of Clarence in nearby Cardigan, an open town.

Of these ten nobles, Scrope and Bouchier face Raids & Revolts; Bouchier twice, Scrope once. Bouchier has a castle that is in a particularly unhealthy position if the Constable of the Tower is unfriendly. If that office is unavailable it may be worthwhile not giving him any office or title.

There are two additional nobles of the PLANTAGENET family in the advanced game: the Duke of Lancaster and the Duke of York. Since control of those nobles is contingent on control of the #1 member of his respective family, it would be wise not to give them any awards.

Now that the two main chance elements of the game—Event Cards and Nobles—have been discussed, the problems of the Titles and Offices, and how they should be apportioned, can be discussed. Chart I shows their numerical strengths. Their less-apparent merits are discussed below.

CONSTABLE OF DOVER CASTLE: Like the other offices, it provides 50 troops under all circumstances. This particular office also provides a good port, especially as a haven in storms. However, the holder of this office is summoned there once, which may or may not be a good thing, depending . . .



TREASURER OF ENGLAND: Provides control of two royal castles, one of which—Beaumaris—is on the island of Anglesey off Wales and is a usable sanctuary as long as rival factions can't get to it. No summons by the Event Deck is an added advantage.

WARDEN OF THE ROYAL HOUSEHOLD: Another of the few offices that have no problems with Raids & Revolts. Control of the town of Newark yields some votes in Commons and gives control over part of the York-London road.

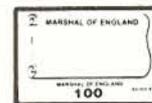


WARDEN OF THE CINQUE PORTS: This office gives the holder two good ships, a fairly good port in the south, and a large amount of votes in Commons—the most of any office, not counting the town and city vote. A few calls by the Event Deck—but not as many as the Admiral.

ADMIRAL OF ENGLAND: This office gives the two best ships in the game—important for eliminating sanctuaries such as Carisbrooke on the Isle of Wight, or Ireland in the Advanced Game. Four calls by Raids & Revolts could yank both Admiral and his ships out from under operations on the English coast. Fortunately, most of the areas are remote and the Admiral can leave on his own ships and return to the scene of action.



CHANCELLOR OF ENGLAND: The advantages of this office are mainly parliamentary. It provides both a means of calling Parliament, and a lot of clout once the Parliament is gathered. Since Parliament is the only means of handing out titles and offices in wholesale lots, and since a player with the No. 1 heir in either family will usually hasten to crown him, then this office is vital.



MARSHAL OF ENGLAND: The strongest of all offices, in terms of permanent troops. Also the most summoned office: 10 times (11 in the

Advanced Game). This office must be delegated with care, as it is as much a liability as a source of strength. One advantage: control of Harlech Castle comes with it—providing access to the No. 2 Yorkist, Edward of March, providing that Harlech hasn't already been stormed by someone else.



WARDEN OF THE NORTHERN MARCHES: This office is powerful in a somewhat remote area—one that doesn't really stand up as a sanctuary since it can be reached overland. Summoned six times by the Event Deck, making it almost as much a liability as Marshal of England, but can be depended on in the North, at least.



CHANCELLOR OF CORNWALL: Another local office, but not summoned much. The Devon-Cornwall area is rather remote, and mitigates the effectiveness of this office somewhat. Like the Warden of the Marches, of limited use as a means of retreat. The two towns this office provides gives it the most votes of any office in Commons.



CHANCELLOR OF LANCASTER: Another local office. Combined with a strong noble, it provides instant means for forcing Harlech and capturing Edward of March. Again, of limited use as a shelter for a weak faction, especially when confronted by the other Welsh office—Chamberlain of Chester.



CHAMBERLAIN OF CHESTER: A powerful office. 250 troops optimum and operable in all Wales—giving it dominion over the largest area controlled by any office—makes this a key office. Can make Wales a secure base of operation for any faction provided that the noble holding it isn't prone to summons from the Event Deck. Rivals should strive to eliminate the noble holding this office if he's ever caught outside Wales. This office provides easy means of forcing Harlech.

CONSTABLE OF THE TOWER: A key office, giving control of London (and, usually, Henry VI with it) and has an area of operations that ties up all of southeastern England. A big vote in Commons come with the office. Summoned to the London area twice in the Advanced Game.

***LIEUTENANT OF IRELAND:** (Advanced Game only) A rather remote, albeit strong, office. Useful mainly for holding Ireland as a sanctuary—or discouraging others from doing likewise.

***CAPTAIN OF CALAIS:** (Advanced Game only) The strongest of all the offices, in its own locale. Provides access to Richard of Gloucester, and a means of sanctuary. Invulnerable to direct assault (unless enemy factions can muster enough ships to carry 550 troops or better) but is vulnerable to any army that can be shuttled onto the Continent in relays (an alliance?) and then moved north. If anyone insists on barricading himself in Calais with this office, it is in the interests of all other factions to

ally and crush him, as the game will go on forever if he has any pretenders to the throne with him.

As for the awardable titles in the game, not much need be said there: the advantages are self-obvious. They provide weaker nobles with a measure of strength, and eligibility for high office. Some comments beyond this pertain, however.

Of the eight title cards, there are two 40's, four 30's, and two 20's (the latter of which come provided with one town each. The main criterion in selectively awarding these, when there is a choice, is their strength. The fact that the two weakest titles have a town with each of them means little unless you like hiding in towns. One additional consideration: the Earl of Westmoreland (a 40), the Earl of Kent (a 30), and both of the 20's—Duke of Exeter and Earl of Essex—are subject to Raid & Revolt callup. Each is called once—except for the Earl of Kent, which is called up twice. These four offices can be a liability, something to be borne in mind when awarding the initial deal, and especially when something has to go to Chancery.

A note on objectives and Optional Rules: the key to victory is, of course, getting control of the sole crowned King and capturing or eliminating all pretenders. This, and not killing off other nobles or taking places at random, is the primary and sole means of winning. Factions, however weak, don't go away readily, especially when the Optional Parliament rules are in force. Weak factions can still make trouble at Parliament, prevent the King's or Chancellor's faction from porkbarrelling their way to victory (with 3 or more players, getting a majority in either House of Parliament is almost impossible, so if any titles and offices get handed out, it will be with the acquiescence of other players. Highly negotiable).

The whole point of this is that players should worry only about grabbing up the royal heirs. They should only risk battle (and their nobles) only toward that end. And if a player lets a turn go by when he is not scrambling after royal heirs (or the faction harboring them) then he should ask himself why he's throwing the game away.

One note on tactics: it is a good idea for players to allocate awards only as necessary, once the game is under way. Since Crown cards can be played at any time, it is a good idea to only play them—particularly titles, offices, and mercenaries—just before a battle. The other cards—towns, ships, etc.—should also be kept free. A large pile of unallocated (face-down) cards will give a player's force quite a bit of respect.

An exception to this are the nobles themselves. Since they can't be expected to pop up on a battlefield (they appear at their own manor) it is a good idea to enter them during a player's own turn, and join them up with the faction. That way, you'll have both the benefit of their personal strength—and more opportunities for titles and offices.

Finally, a note on weak (or weakened) factions: no player is out of the game till somebody has won. A weak player can still make trouble at Parliament, and bushwhack stray nobles out on Raids & Revolts, and maybe even get some of his own Crown cards back. Further, when a dominant faction does emerge, it is in the interests of all the rest to ally against him. If the weaker players can present a common front—without any suspicion of treachery—then they can see that the game will continue. It will be up to the dominant player then to try and corrupt one of the opposition—or make the allies suspect each other. Players are reminded that, in any multi-player game involving alliances, treachery—creative, imaginative, devious treachery—is the final requisite for victory. The winning player, of course, will often be the player who can inspire treachery in members of opposing alliances—and still appear trustworthy, the honest

politician who stays bought. It is treachery—the final, incalculable element of an already chancy game—that will unhinge any strategy, and ruin virtually any power, and players of *KINGMAKER* should be prepared to implement it. And on that note, we shall close.

So much for the age of chivalry.

★★★★★

A.H. Philosophy . . . Continued from page 24

necessarily discontinuing those 3M games not currently on our order form. It *does* mean that we are temporarily out of stock on these items and that they will remain unavailable until such time as we can commence our own manufacture.

The 3M line is an extremely diverse one consisting of bookcase games similar to our own, gamettes which are much smaller card game versions of the bookcase, and plastic puzzles or novelty items. 3M also had a line of sports games in fold-around plastic boxes which also served as the playing board. These will be dropped although the better items will be reintroduced in bookcase format.

Mention of the 3M line in the *GENERAL* will be limited to an occasional ad so that we may maintain the *GENERAL* as primarily a wargaming magazine. However, the 3M line was a highly respected source of adult games and those who enjoy good quality games for game's sake shouldn't dismiss them out of hand. Among other things they make excellent gifts for the non-wargamers in your life. The 3M line will be available mail order from Avalon Hill with the usual postal charges. *GENERAL* shipping coupons will be usable for orders of 3M games.

AREA

This issue marks the first appearance of the AREA top 10 ratings lists. All correspondence dealing with AREA should be marked to the attention of the new AREA technician; Ron La Porte. We reserve the right to omit players from the Top 10 listing who do not play at least one rated game per year or who do not play a wide cross section of opponents.

As players pass the provisional level of rated games their records are transferred to a VERIFIED file. You can help us maintain the records by indicating whether you have played more than 10 rated games whenever filing a victory claim. In this manner, our technician will know which file to check to find your records.

ORIGINS II UPDATE

We have picked up three new exhibitors since last issue with the addition of The Little Soldier Shop, C-in-C miniatures, and Simulation Design Corporation. The Little Soldier Shop under the direction of Ed Konstant will also provide a Napoleonic miniatures demonstration from 1 to 4 on Saturday. This will be preceded by a 1 hour naval miniatures demonstration put on by the Potomac Wargamer's Association and the Washington Gamer's Association. At 4 P.M. Saturday, Don Greenwood will host a field of 36 entrants in a *SPEED CIRCUIT* tournament. *SPEED CIRCUIT* is a 3M racing game with extremely simple play mechanics so no prior experience is needed. Registration for this event will be accepted only

Continued on page 32, column 3

WINNING WITH THE UNDERDOG . . .

Use of the Tactical Results Matrix

—Joel S. Davis

During the last twelve years, an interesting paradox has developed. There are far more games on the market these days . . . there are a lot more players . . . there are many more publications and means for education. Yet, when all is said and done, the general quality of play has significantly dropped. I think this is because there *are* so many games . . . players will only play a game a few times before the novelty wears off, there are other games to be tried, and the player races on to the next. While this encourages a lot of game purchases, the subtle points of many games are left in the dust. *1776* may be collecting dust on a number of shelves now because the players who tried it decided prematurely that it was a sure win for the British. I pick up similar vibrations already about *CAESAR'S LEGIONS*—supposedly a sure win for the Romans.

I remember similar remarks made about *STALINGRAD* when it first appeared. Initially, the “common wisdom” was that the Russians didn't have a chance. Faced by the enormously powerful German army, the Russians were chewed up almost every time. That “wisdom” didn't last long . . . only until the quality of play went up on both sides. Ever since, we've been kicking around rule modifications just to give the *German* player a decent chance at victory! WAKE UP—as you begin to learn the nuances of a game, and begin to make use of tricks that aren't obvious the first time you play, you'll find that the defender generally has a lot of advantages if he/she plays well. Repeat—PLAYS WELL!!! The reason is simple—offensive strategy is simpler. Because the player on the strategic offensive generally possesses a relatively large number of troops, he/she can, in most situations, afford a few mistakes, because the defending player has inadequate forces to capitalize upon them. (There are, of course, exceptions to this rule. In *ANZIO*, for example, a small mistake by either side can mean instant catastrophe!) While both sides are making a significant number of mistakes, this balance works to the attacker's advantage. When both sides are making few mistakes, the balance often shifts.

Consider *1776*. It was once suggested to me that this game is heavily balanced in favor of the British, even with no winter reduction of the Continentals! (For those of you unfamiliar with this fine game, each game-year, the Americans lose up to 100% of their regular army to winter attrition.) The mind boggles. The Americans have a distinct edge in the optional-tournament version. With a maximum of about 120 factors of British Regulars and Tory Militia available at any given time, the British player must capture and hold 20 out of 22 strategic towns evenly scattered through the eastern United States. This works out to an average garrison of about six factors each. Even before the French arrive, the American forces are typically at least 25% this size . . . and are faster . . . and can exercise hidden movement. Hit-and-run tactics against isolated garrisons are the obvious American tactic, and constitute an enormous burden to the British player trying to guard everything at once. So great is this burden, in fact, that the British variable garrison requirement—which forces larger British garrisons in larger towns—was made optional, and—in the first edition—an extra optional rule called “British Fire Discipline” (essentially a freebie +1 die roll bonus) was added, even though the designer admitted that the effect was already factored into the combat factor per number of troops normalization!

The usual key to victory in *1776* as the Americans is simply to plan on winning in 45-60 turns . . . not the first twenty. Except for the first few game-months, when there's approximate force parity, the Americans should concentrate on being where the British *aren't* . . . surfacing only long enough to bushwack dragoons and small garrisons, or—in some circumstances—to force the British to use up supply units. Usually when an American player complains that he/she can't win, it's because that player gets ambitious or careless too early, squandering his/her meager troops to achieve a battlefield victory. The Americans can throw away their army killing twice as many British factors, thereby losing the game. Remember, for the first few years, *guerilla warfare* is the order of the day, and the key to this strategy is clever use of the tactical cards.

A classic example of proper tactical card use is illustrated by the following scenario. The Americans, with 12 factors and a supply unit, have just bushwacked a 3 factor British garrison in Fort Stanwix. Other than small garrisons, the nearest sizable British troop concentration is 11 movement points away. However, despite the risk of a ½-Elim, the concentration attempts a force march and succeeds. 20 British factors pounce on you. To make matters more difficult, assume a British supply unit was available at one of the nearer garrisons (e.g., Albany), so the British have a supply unit too. Finally, assume that—as is often the case—the American supply situation is pretty tight . . . you really don't want to use that supply unit more than once. What are your options?

One obvious possibility is to play an immediate withdrawal while you still have “free” use of your supply unit. The problem with this is that it is obvious . . . encouraging the British player to use frontal assault. A 3-2 with a +3 die roll bonus is remarkably similar to a basic 4-1. It's not too pleasant to be on the receiving end! I'm not necessarily saying that you *shouldn't* withdraw here . . . but the British player shouldn't be able to count on it. Let's assume that you withdraw in these circumstances about half the time . . . what are your options for the other half?

Another obvious choice is some kind of enfilade. You don't withdraw this time, but if the British has tried a frontal assault, he/she will find that a 3-2 (-2) looks a lot like a basic 1-2 . . . British expected losses are three times that for the Americans and there's a 1/6 chance of halting combat through a NE (No Effect) result. Of course, if the attacker pulls the right kind of REFUSE card, it's still +3 . . . but if he/she pulls the wrong kind, it's still -2. It's a 50-50 “crap shoot,” but if you think you're nervous, imagine the feelings of the British player. Aside from worry of high losses, if you—the defender—ever pull a “withdraw,” you get away, unless that very vulnerable **FRONTAL ASSAULT** card has been played. You'll find, after awhile, that *1776* is as much a game of psychological warfare as anything else . . . an essential element is exactly how paranoid you can make the other player.

Of course, if you try enfilades too often, the attacker will start playing enfilades too, or **RECON IN FORCE**. This is why you should occasionally play other cards. A REFUSE card turns attacker enfilades into 50-50 “crap-shoots,” and is relatively risk-free otherwise . . . and there is the bonus of a (-3) die roll adjustment if the attacker chooses the wrong kind of enfilade!

The main thing to remember is that if you're badly outnumbered, you'll always lose if you let the

attacker grind you down. In such situations, your only hope is to surprise the other player . . . and that means being unpredictable. *First*, decide what the best thing you'd like to have happen is. Generally, this will be a withdrawal on your part and something other than a frontal assault by the attacking player. In any case, decide what card you would have to play to achieve it. *Second*, only play that card about half the time. *Third*, if you don't play that card this time, decide what your most damaging response would be to the best card the attacker could play against your initial choice. Play that card about two thirds of the remaining times. *Fourth*, about one third of the remaining time, play something else—perhaps a good response to the attacker's best play against your second choice that isn't one of your first two choices.

If you're the sort of player that's frequently outguessed, you can reduce this to a simple chance table, based on a secret die roll:

- 1: Card which has potential for best result for you
- 2: Card which has potential for best result for you
- 3: Card which has potential for best result for you
- 4: Best card against attacker's best play against above tactic
- 5: Best card against attacker's best play against above tactic
- 6: Surprise tactic!

Using this table will keep the attacker worried . . . but if you really want to be a good player, you will have to develop some skill at second guessing your opponent. You WILL be able to pick this up, but it WILL take practice—a discipline in very short supply these days.

To fully illustrate these principles at work, a recent game of *CAESAR'S LEGIONS* provides a fine example. In a properly played game—no matter which scenario—the Romans should feel much like the French in Indo-China . . . forced to send massive force concentrations running around in the boondocks, chasing guerillas who never venture into clear terrain except to bushwack stragglers, and who fade away whenever you do catch them. Again, the key is in the system of tactical cards.

Except for the occasional clobbering of a few factors by a large stack at high odds, the usual situation is a large stack of units attacking a somewhat smaller stack at odds somewhere between 1-1 and 3-1. Usually the attacking player, already frustrated after a long chase, wants to eliminate your pesky units as quickly as possible. As defender, you usually want to get away—if not entirely away, at least so as to last one more turn—and, if possible, cause a lot of attacker casualties. The way the combat results table works, it usually takes three to five rounds of combat to fully eliminate a stack. Furthermore, except in the last round, it's generally possible for the attacker to suffer significant casualties if the tactical results matrix is unfavorable.

Think of the advantage! The attacker must destroy you! In *CAESAR'S LEGIONS*, the clock is against the Roman player. In *1776*, the British player is not only working against time, but must also contend with the fact that if the Americans *do* get away, they can outrun the British forces. You, the defender, have far more flexibility. You can run away immediately . . . or you can, for awhile, concentrate on causing casualties to the other side. If your opponent is after a knockout blow, he has to play a lot of frontal assaults . . . every time something else is played, the attacker runs the risk that you get away by playing a **WITHDRAW** card. Yet frontal assaults are highly vulnerable to enfilades, as well as to simple “stand and defend”

orders. If your opponent does use **FRONTAL ASSAULT** too frequently, there will be a lot of casualties—and most of them won't be yours!

This is the situation. A ten-cohort legion (55 factors), three 7-4 auxiliary units, and Caesar (totalling 77 factors and 17 combat loss steps) have attacked four 11-3 German mobs and one chief (46 factors; 9 steps) in the forest. The odds are 3-2 with no die roll modifications. The Roman player has three main alternatives:

a) **FRONTAL ASSAULT**—This forces combat to continue, but at these odds, the possibility of a (-2) on the die roll is highly unpleasant.

b) **RECON IN FORCE**—This kind of attack is often safer. The things you can do to endanger it are either highly dangerous to you too (e.g., Frontal Assault) or do little good if the attacker plays something else (e.g., Stand and Defend).

c) **ENFILADE or REFUSE**—Fancy maneuvers are chancy under all circumstances, but under these circumstances are usually the attacker's best bet if he chooses not to play a **FRONTAL ASSAULT** card. The Roman stands to gain far more by a (+2) or (+3) than he stands to lose by a (-2) or (-3).

As defender, what are your options? Note that your stack of German infantry has an excellent chance of lasting several combat rounds . . . most of the results are of the lose-one-step or lose-two-steps variety. Hence, you do not have to run immediately . . . and often you shouldn't—unless you're pretty sure the Roman player expects you to opt for a fight. Yes, I know, you don't want a fight . . . but you *can* fight and you *should* fight on some of these occasions if you think you can cause some casualties. Your real objective is to still be around at the termination of combat. You *won't* be if the Roman can count on your attempted withdrawal. Given all this, your options are:

a) **WITHDRAW**—Given anything except a frontal assault, you will get away. However, "withdraw" is exactly what the Roman knows you really want to do. *The Roman player shouldn't know that!!!* At most, your opponent should only realize that you'll probably withdraw sometime in the first few rounds of combat. Maybe you'll try it now . . . or maybe you'll play a card which would badly hurt a **FRONTAL ASSAULT** and withdraw later. Vary your tactics . . . keep the attacker uncertain. Only withdraw about half the time. Otherwise, do something else.

b) **STAND AND DEFEND**—This order will adversely affect frontal assaults, and will badly hurt **RECON IN FORCE** attempts. It is, however, very vulnerable if the Roman uses the "crap shoot" tactic of an enfilade.

c) **REFUSE THE LEFT/RIGHT**—The attacker will do a little extra damage with a frontal assault, and will get a basic roll with most other tactics. The Roman can do real damage with the right sort of enfilade (+2), but risks a (-3) penalty if the wrong kind is chosen. The way the table is arranged, that's a 50/50 shot at the Roman making a basic 1-3! That's why enfilades are such "crap shoots" for the attacker—sure, the (+2) bonus will zap you . . . but he pretty much expects to do that anyway. On the other hand, the (-3) penalty on a 3-2 introduces the chance of a 1/2 A-Elim. Is it any wonder that ancient Romans—like so many modern Americans—had more than their share of nervous breakdowns?

d) **ENFILADE LEFT/RIGHT**—In many ways, this card is as risky for you as it is for your opponent, except that you have less to lose. Enfilade tactics have the advantage of wreaking maximum havoc with frontal assaults. This is where the endless second guessing comes in. If you use enfilades too often, the standard attacker "cop out" is to step up his use of **RECON IN FORCE** cards, which still yield a decent set of results if you do pull a withdrawal.

OK . . . you try a **REFUSE LEFT** and the Roman—guessing right this time—shows a **REFUSE RIGHT**. There's no die roll modification, but a five is rolled. You're now down to 35 factors . . . it's 2-1! Do you run yet? The answer, believe it or not, should still be, "maybe." You're still strong enough to inflict casualties at little or no loss to yourself and it's fully possible that the increase in odds, with the prospect of further increases ahead, convinces the Roman that you'll withdraw this time for sure. You decide to try **ENFILADE LEFT** to meet the expected frontal assault . . . only to find you've been outguessed again! Not only does the Roman play a refuse tactic, the card was **REFUSE RIGHT**—+3! The fact that only a one was rolled (Defender Lose 2 steps) doesn't help your spirits much . . . you're down to 24 factors, 3-1! The only consolation is that if the wrong "refuse" had been chosen, the Roman would have lost two steps instead. Withdraw now? Again, maybe—on the other hand, 3-1 odds would encourage the hardest soul to bug out. You ponder . . . and you risk it—**ENFILADE LEFT**! At last, the Roman goes for the **FRONTAL ASSAULT** . . . (-2)! Again, a one is rolled—Attacker Lose 2 Steps. Very unpleasant. The Roman is down to seventy factors, 2-1 again. As you chortle with delight, your opponent now ponders—you fought at these odds before . . . will you do it again? If you do, what will you try next? Now indeed might be a good time to run . . . but today you're a German Barbarian—fearless in the attack! Once again, **ENFILADE LEFT**! Sure enough, it was the very card the Roman felt sure you'd never dare to try again. Again the Roman tries **FRONTAL ASSAULT**, (-2)! This time a three is rolled—Attacker Lose 1 Step. The Roman is down to 66 factors and knows there's going to be a fight! This time you do play **WITHDRAW**, as the Roman plays **REFUSE RIGHT**—no bonus or penalty. A four is rolled and you lose another eleven factors . . . but your chief, a mob of infantry, and whatever other units can join in will still be around to fight next turn. More time ticks by . . . and time is against the Roman!

If the above sequence of events seems unlikely, it was. It's based upon an actual situation, and any given sequence of events in real play is almost always unlikely. Both sides could have had better or worse luck at almost any point, or could have made much better or much worse selections of tactical cards *in light of hindsight*. But hindsight is exactly what neither side has!

The whole point is that almost every combat should be "unlikely." When actions are predictable, the side with superior force will win. It's that simple. Face the facts, the attacker will win a great many battles anyway . . . that's what being the attacker is all about. There's a big difference, though, between winning every battle and merely winning a lot of them. By keeping your opponent in perpetual uncertainty as to your current intentions, you may well cause enough casualties and enough delays to win the war, despite the battles you lose. And *that*, gentle reader, is what guerilla war is all about.

A lot of players don't like this kind of second guessing. Yet, the greatest generals were those who could outguess their opposition—capitalizing on weaknesses in the opposition's well-laid plans. The really intriguing feature about 1776 and **CAESAR'S LEGIONS** is that the Americans and Germans have, as a rule, several opportunities to second guess their opposition in every major battle, not to mention the entire campaign! They need only be right once . . . or even lucky once. Their opponent not only has to be right every time, but must frequently be lucky too . . . or the troops they're after just slip away to fight again another day. Good hunting!

Design Analysis Continued from Page 25

easily; other baggage camp placement can be experimented with; and it is possible to move a counter into the baggage camp (which would be impossible if the baggage camp was a three-dimensional counter).

Final note: if a unit's combat factor is "0" in certain directions, it is a good idea to print a large red "0" in the appropriate location on the appropriate stand. This is unaesthetic, but it avoids the confusion of blankly looking for figures that aren't there. You have to weigh these factors yourself.

Be warned. If you use 25mm scale figures, you will have a *BIG* game of **ALEXANDER**. You might want to work out your own system of representing combat strength; using the system I have indicated here, you will need 253 figures, plus wagons.

Good luck finding elephant figures.

★★★★★



LUFTWAFFE Continued from page 11

beat the shortage with synthetic fuels—and was able to fight on for a while. But, with the USAAF closing in on the refineries, the Luftwaffe became increasingly earthbound.

We cannot expect the Luftwaffe, in the game, to fight into '45 without having to consider fuel in addition to losses. The German's game forces—as in real life—are at their largest towards the end. But German resistance, except maybe for the jets, became increasingly feeble in the last months. So should it be in the game, for besides the obvious difficulties the German should have in getting fuel in a nation gutted by bombing—with few oil reserves to begin with—there is the fact that the USAAF has an inherent handicap, as the 1945 quarters usually see the largest German force, while the American player has to get the last targets that mean the difference between victory and defeat.

These **ENERGY RULES** can be incorporated accordingly:

1) Each refinery (Oil target) produces 10 units of fuel per quarter. Each chemical plant produces 15 units per quarter (that's not the actual proportion of fuel they turned out, but the chemicals they made were vital in synthesizing fuel). Production drops to 0 at each facility bombed. (Fuel on hand each quarter is computed at the start of each quarter).

2) Fuel stocks cannot be accumulated from quarter to quarter. Unused reserves will be taken by the Wehrmacht, Kriegsmarine, and other Luftwaffe contingents.

3) Each flight of a unit (regardless of time-in-air) consumes 1 unit of fuel. Each He162 or Me262 unit consumes 1/2 unit per sortie (they used a crude diesel fuel rather than the high-octane av-gas); the Me163 in the standard game—use 0 units. (Rocket systems did not use petroleum fuels, nor did they consume that much of the German chemical industry's output.)

4) German players may freely substitute He162s for new units, starting Jan '44, up to a total of 13 extra He162 groups (other than JG1).

5) The Germans may freely substitute Me163s for new units, starting Jan '45, up to a total of 2 extra Me163 groups (other than JG400).

6) German replacement factors cannot be used to produce jet or rocket units except for jet/rocket units already in the dead pile.

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Adding the Luftwaffe

AIRPOWER IN PANZERBLITZ

by Kenneth L. Benton

The introduction of airpower units in *Panzer Leader*, even in simple form, certainly makes *Panzerblitz* seem incomplete without them. What German player has not cried out for a flight of Stuka tank-killers, or an aerial reconnaissance "Owl" to spot for his artillery units . . . what Russian player has not gone into rhapsody at the thought of what Stormoviks could do to the Fascist artillery?

To see the importance airpower can play, it is only necessary to look at the performance of the IV Antitank Group during the Zitadelle offensive: A Russian Armored brigade was making a surprise attack against the rear flank of the 1st SS Panzer Corps. The IV Antitank Group, composed of Henschel-129 aircraft armed with a 30mm antitank weapon, repeatedly attacked the brigade, eventually destroying all 47 tanks and averting a serious situation from becoming fatal.

Furthermore the Luftwaffe was continually active on the Eastern front through April, 1945, even though the Russians unleashed a virtual armada of fighter and ground attack aircraft from the winter of 1943 through the end of the war. The importance of ground attack aircraft on combat operations during this period would be hard to estimate, but they exerted a definite influence on many tactical situations, and should not be neglected. So how do we put these units into *Panzerblitz*? That's basically up to the players themselves, but I'll suggest some deployment ratios, some German and Russian ground attack aircraft counters, a German reconnaissance aircraft counter, and give some general information on their employment, plus antiaircraft counters.

RECONNAISSANCE

The Germans conducted four basic types of aerial reconnaissance throughout the war: operational, tactical, battle and artillery observation. The only type that is suitable to *Panzerblitz* is artillery observation. The reason for this is that operational and tactical reconnaissance were on a much higher level, while battle reconnaissance was conducted as close to 6,600 feet as the aircraft could get and still see what was going on. Artillery reconnaissance was usually low level, as the observer had to see the strike of the rounds that he was directing. As the players virtually perform their own battle reconnaissance, (they can see the whole board), only the artillery observer is needed.

Artillery observation is furnishing target data, particularly against enemy artillery forces, to friendly firing batteries and the observation and adjustment of those fires and the reporting of their effect. German reconnaissance aircraft usually operated singly, but from 1943 on they usually operated with fighter cover or within range of protective antiaircraft artillery support. The information received was radioed directly to the artillery unit. In the interest of reality, only major units, or portions of major units, such as division artillery, could be directed by such observation. For simplicities sake, only those German units designated in *Panzer Leader* for indirect fire, with the exception of mortar, may be directed by aerial observation. Such weapons as mortars were not set up for use with aerial observation.

The principle German reconnaissance aircraft was the FW-189. The A4 model, introduced in 1942, was armed with two fixed 20mm cannons, a flexible machinegun in the rear, and 440 lbs of bombs. The strength is as follows:

Cannons	1 (I)
Bombs	6 (H)

Russian artillery reconnaissance is another matter . . . basically, they didn't. There was no special reconnaissance aircraft of a tactical nature produced during the war . . . the fighters and fighter bombers doing such work. Also, their aircraft had poor radio equipment and reconnaissance pilots were notoriously poorly trained. Also, the artillery units weren't set up to handle much aerial observation. For these reasons, no provision is made for aerial observation of indirect fire.

GROUND ATTACK

In contrast to their recon effort, the Russians had some superb ground attack planes, principally the IL-2, IL-2M3 and the IL-10. The basic difference between the IL-2 and the IL-2M3, for game purposes, is armament. The IL-2M3, which appeared in 1943, had four 23mm guns, while the IL-2 had two 7.62mm machineguns and two 20mm guns. The IL-10, which appeared in combat in 1945, had the same armament as the IL-2M3, but superior performance. Their suggested combat strength is:

	IL-2	IL-2M3
Machineguns/cannons	2 (I)	2 (A)
Bombs (880 lbs)	15 (H)	15 (H)
or		
Rockets (8 x 82mm)	20 (A)	20 (A)

In the German Luftwaffe, we find a parcel of aircraft used in the ground attack role. For simplicity purposes, since most of the scenarios are set in 1943 or later, we'll regard the FW 190G, the HS 129B2/B2R3, and the JU 87D/G1, as being the principal ground attack aircraft.

Rules for movement and combat are the same as in *PANZER LEADER*.

Now that we have the aircraft, what about their employment? After Zitadelle the strength of the Luftwaffe on the Eastern front continued to dwindle. However, the ground attack forces made their presence felt up to 1945. The number of ground attack squadrons rose from 14 in October, 1943, to over 24 by December of 1943. The monthly average for 1944 was 20-plus, while the figure for April, 1945, was 17.

As the German air strength continued to decline, the Red Air Force grew in dominance, but never subjugated the Luftwaffe, such as was the situation on the Western Front. As proof of this, the 85 Axis aircraft in the Crimea, though grossly outnumbered, flew 2,400 sorties during the first week of the Russian assault in 1944. The low point on the Eastern Front for the German air effort was during

the fuel crisis in the Fall of '44. On the 11th of September the Germans flew only 250 sorties as compared to the Russian's 2,000-2,500 for the same day. During October-December the daily average had climbed back to 500 sorties, finally rising to 1,000 a day in April, 1945, during the Battle of Berlin. Some German ground commanders, while admitting that the Red Air Force played a secondary role, were of the opinion that it was never a decisive factor in tactical operations.

While most of these later German ground attack sorties were directed at transportation systems and armored columns, they did have some effect on the numerically superior Red Air Force. In fact, one German Luftwaffe general observed that throughout the war the Soviet fighters and ground attack planes were "usually timid" when German aircraft were in the air.

ANTIAIRCRAFT COUNTERS

The principal Russian tactical antiaircraft units are 12.7mm machinegun units and the 37mm flak unit (which is found on page 9 of the Designers Notes and Campaign Analysis booklet). The German units with AA capability are the same as those listed in the *PANZER LEADER* booklet. The same rules and combat results table can be used; the only addition I would suggest is the use of the Russian Guard, Infantry and Engineer companies in the AA role.

Russian infantry-type units delivered antiaircraft fire in mass against low level attacking aircraft. The units were directed to lie down on their back and deliver concentrated fire against the attacker. This was often very effective and should be included. I recommend that Russian infantry type units fire at aircraft at one-third their regular fire power factor. The regular infantry unit AA factor is two. If used in this role, they cannot engage in any other type combat. They may only fire at aircraft in the hex they occupy or in adjacent hexes.

If you decide to add the dimension of air power to *Panzerblitz* and don't know the specific air support committed to a scenario, I recommend the following German-to-Russian ground attack ratio:

	German Aircraft Counters	Red Air Force Counters
1943	1	1
Jan 44-Aug 44	1	2
Sep 44-Apr 45	1	4

If a German recon unit is used, it should be within range of a friendly antiaircraft unit to provide cover against Russian fighters. A_H

While the weapon mix on the German a/c was variable, depending on the mission, weather and target, I have simplified it to the following:

	FW 190G	HS 129B2	HS 129B2R3	JU 87D	JU87G1
Machinegun/cannons	2-20mm guns (1) (I)	2-20mm guns 2-13mm guns (2) (I)	4 mg's (2) (I)	2-20mm guns (1) (I)	
AT guns		1-30mm gun (4) (A)	1-37mm (4) (A)		2-37mm Flak 18 (10) (A)
Bombs	2200 lbs (32) (H)			Flak 18 3,960 lbs (60) (H)	

Second Thoughts

A Briefing on the Changes in the new WATERLOO rules . . .

by Thomas E. Hilton

Negotiating their way through treacherous seas of spilt beer and over mountainous hills of pretzel, the hazards of Avalon Hill wargaming, Napoleon's Armee du Nord is making its final futile assault against Wellington and his regiments around the Belgian town of Waterloo. The Old Guard maneuvers into position for the last attack before the divisions of the Prussian Bulow smash into the French right flank routing them and making the world safe for Continental kings and British bankers. The blue, red, and green counters are swept into a tray already familiar with those pretzel crumbs and French defeats. The margin for victory in The Emperor's actual 1815 campaign was so small that Arthur Wellesley, also known as Wellington, considered the battle lost as the sun began to set on that day of 18 June. The campaign was a near thing, unfortunately for AH's *WATERLOO* it rarely is.

After years of analyzing by wargaming experts opinion is unanimous that *WATERLOO* is unbalanced against the French, at an approximately 3:2 proportion. This will increase or decrease depending on the expertise or inability of the players, incompetence being an equalizing factor in conflict simulations. Having second thoughts concerning the balance of the game, AH has revised the original *WATERLOO* rules which endeavor to give the French a somewhat easier time of it.

Ambiguity is no stranger to wargaming rules and mapboards, and *WATERLOO* is no exception. Besides the matter of balance, this problem is also addressed in the new rules. Grid coordinates and playable squares are clearly marked as is the famous "road between Charleroi and Fleurus" and the starting positions of the Prussians. Clarifications continue in the combat instructions, "every unit moved into an enemy zone of control must attack at least one adjacent enemy unit." This also makes *WATERLOO* less likeable for nit-picking players. Cities connected to primary roads are now considered themselves primary roads. Attacks at less than 1-6 are clearly defined as legal (benefiting the Allies slightly), even though most players knew this already. The manner of entrance for reinforcements is clarified, as is the non-use of headquarters units. Finally, movement on secondary roads through woods is fully explained and any remaining ambiguities on the mapboards eliminated.

It is not the minor clarifications that make the rule changes so significant on the course of the game. Outright changes in movement after combat and road and river movement give the attacker, and that means the French, considerable strategic and tactical advantage. The Allies can no longer take unfair advantage of road movement around the Quatre Bras crossroads, or anywhere else, since that movement must be traced through road hexsides and must be taken at one time, i.e., you cannot take part of the bonus, move off, and then move back on and take the rest. Example, Langen's division on Z20 is needed to help hold the hills south of Quatre Bras at AA26. Movement directly west three hexes to the road at Z23 is of course permitted, and the road bonus to Y26 is fine. But that bonus cannot be taken to Z26, nor can Langen use his remaining movement point to move to the same hex and there use the fourth road bonus point.

Movement concerning rivers is also significantly different as units no longer have to stop upon

entering a river hex so long as they do not attempt to cross. An example: it is 17 June and Marshal Grouchy with the French cavalry reserve is attempting to smash through a Prussian rear guard on the Allied left.

Positions, Prussian: Merwitz Q21; Treskow, Lutzow, H. Art., Sohr T20; Schulenberg, Thumen, Lottum S17.

French: I and IV H. Art., Roussel, Walthier, Chastel, Soult V19. Grouchy, Stroltz, III H. Art., St. Gery., L'Hertier T17.

The French do not have to stop upon entering a river hex so Stroltz moves to S16; Grouchy, L'Hertier, III H. Art. to S18. Walthier and IV H. Art. to U20. I H. Art., Roussel, Chastel, and Soult to T19.

Soult soaks off on Treskow and Lutzow and is forced straight back two hexes. Others destroy Sohr at 3-1 with a D back through forest. L'Hertier soaks off on Thumen and Lottum and gets an exchange. III H. Art. and Stroltz attack Schulen at 4-1 surrounded and destroy it with a D back. The French have taken advantage of movement up and down rivers without *crossing* to decimate the Prussians.

Concerning combat, stacking limitations apply even in retreat, and since the Allies will be doing most of the retreating the French are helped by this new rule. More important are the Movement After Combat changes. Previously, only when attacking units doubled on defense could such an advance take place, but now so long as any attacker is on a river or moving up a slope, that attacking unit can advance after combat into the hex formerly occupied by the undoubled defender.

Clearly, these second edition *WATERLOO* instructions do more than just clear up a number of annoying ambiguities. They change important procedures for movement and combat significantly aiding the French attacker, and therefore making the simulation considerably more balanced. It is the author's opinion that by increasing the peculiarly low ratings for Napoleon's Guard infantry *WATERLOO* can be made fully balanced. The Old Guard, Friant and Morand, can have their combat ratings increased at the player's option to "8", while the Young Guard, Duhesme, can be increased to "7". This is a net gain of only five factors which may well be the crucial French strength increase which, when combined with the new rules, yields a fully balanced game.



HEX SHEETS REVISED

The standard 5/8" (for use with 1/2" counters) hex sheets have been reprinted and now include the AH numbering system which features a combination letter-number identification number printed inside each hex. These sheets are 22" x 32" and sell for \$1.00 each or four for \$3.00 or twelve for \$7.00. Usual postage charges apply.

A.H. Philosophy . . . Continued from page 28

at Tournament HQ. On Sunday morning noted English naval wargamers Nathan Okun and Andrew Smith will join with American designer A. D. Zimm to present a WWII naval warfare seminar. The discussion will last until 1:30 or someone's voice gives out.

Conquest Game Co. will sponsor a tournament of *CONQUEST* to be held on Sunday at 10 AM. In addition, The Potomac Wargamer's Association will put on an American Revolution miniatures Demonstration at 1 PM on Saturday. Custom Cast will follow with a Civil War miniatures Demo at 5 on Saturday and follow that with a Fantasy Miniatures Demonstration on Sunday at 11.

The Potomac Wargamer's demonstration will be hosted by Lee Tucker and will consist of a 50 minute historical presentation of the Battle of Guilford Court House followed by a three hour demonstration game by six players. Custom Cast will bring their specially constructed tables and routines and can be expected to put on a polished and professional show. All of the demonstrating miniatures groups will field their own elaborately painted armies and figures and can be expected to present a beautiful panorama in addition to expert commentary.

We expect one of the highlights of the convention to be the Gladiatorial Combats which will be sponsored by IGB and judged by members of the Potomac Wargamers Association. There will be a field of 64 contestants doing battle with miniatures using the *GLADIATOR* rules of Hugh McGowan which are published by Fantasy Games Unlimited. These rules are quite brief and will be explained to contestants before the first round begins. This event has been tentatively scheduled for Sunday morning.

The game design seminars have proven to be highly popular and have already sold out. We wish we had more room to accommodate the demand but such is not the case. Those who have still to register should not select any of the SPI seminars. There will be numerous other seminars conducted during the course of the convention which are free of charge and require no registration.

The nominations are now in for the 2nd Annual Charles Roberts Awards. Every manufacturer and magazine editor in the hobby was sent a ballot and asked to list three choices in each of the four categories. The results were tabulated by Dr. Clifford Sayre and he came up with the following official nominations for this year's awards.

BEST PROFESSIONAL GAME:

BLUE & GRAY QUAD I SPI
CRIMEA GDW
FALL OF TOBRUK CONFLICT
KINGMAKER PHILMAR, LTD
MANSTEIN RAND
TOBRUK AH

BEST AMATEUR GAME:

BATAILLE DE LA MOSCOVA ME
SCHUTZTRUPPE JB
STELLAR CONQUEST MGC

BEST PROFESSIONAL MAGAZINE:

S & T SPI
The GENERAL AH

Continued on page 34, column 3

Gentlemen:

I read "The Paleveda Gambit" in Vol. 12, No. 5 of the *GENERAL* with great interest, and I appreciate Jon Lockwood's desire to find a new approach to *AFRIKA KORPS*. I readily admit that the play of the early turns of the game is often stereotyped, and trying new approaches certainly makes the game more interesting to many players. However, all too often the search for variety leads to inglorious defeat, and we would do well to remember that when a certain pattern of play has evolved, it is usually for a good reason, namely that it has proved to generally be the most effective. Thus any radical departure from the norm should be carefully scrutinized before it is adopted. Inasmuch as Mr. Lockwood has chosen to use my name to identify the standard German opening, I feel called upon to defend it and examine Mr. Lockwood's response to it.

Before getting into the specifics of the Paleveda Gambit it would be well to pause to determine exactly what our goals are. Obviously we must ultimately take Töbruch and Alexandria, but by what methods? Position plays a very important role in *AFRIKA KORPS*, more so than in many games, and can result in a tremendous tactical advantage. Indeed, many players regard April-June 1941 as a sort of mini-game, in which the object is to keep the Germans off the Töbruch heights until the June reinforcements arrive.

In the final analysis, however, *AFRIKA KORPS* is a game of attrition. For the German to win without virtually eliminating the British army is an extremely rare occurrence, possible only as a result of a "back door" play against a careless opponent. Thus the primary aim of the Germans should be to establish a favorable kill ratio. Position is important only in helping to reach this goal. It is important to drive the British off the Töbruch heights by June, not just for the sake of taking the position, but because it is difficult to kill massed armor and 2-2-6's in that position without suffering German casualties. The killing of enemy units should be the primary aim of every German player.

The above may seem obvious, but many players like to play position for position's sake. It is my belief that the Paleveda Gambit is typical of this style of play. It will probably prevent the Germans from bottling up the June reinforcements inside Töbruch but without those two 2-2-6's it is not feasible to establish a strong defense outside the fortress anyway. It is also much more difficult to establish a strong defense in the K36 area without 2-2-6's to anchor the line. Thus the British player may have delayed the Germans a turn or two but at the cost of giving him two free 2-2-6's, which would have been much more effective and harder to kill when utilized as part of a line with other British troops, rather than left in isolated pockets. *Afrika Korps* is a 38 turn game, the British cannot afford such a high price for every turn. Let's look at specifics.

To begin with I should mention that any proposed strategy outlining moves more than one turn in advance, of necessity assumes a conventional response, and an unorthodox one will of course call for an adjustment to the plan. Thus the April II move should look something like this: 21, 5-F17, 21, 3-C12, 21, 104-F9, Ariete & Brescia-G7, Pavia-E5, Savena-H3, Bologna-J3, Rommel-H9. In his discussion Mr. Lockwood does not seem to have anticipated the move of 21, 104. Not only does it keep the pass open for the Italians, it also threatens to surround 7/31mtr. The 7-7-10 keeps the British from a doubled position along the coast, while the 2-2-12 makes sure the 2-2-6s do not escape.

During the British April II move 7/3mtr must retreat to avoid being surrounded at 5-1. D8 is the best hex. Mr. Lockwood recommends that the 1-1-6's strengthen the Töbruch defenses. I might be inclined to the slightly more aggressive move of setting up a defense along the western escarpment, with 1-1-6's on F19, G19, and G20 to block the coast. The German May 1 move should be the same against either defense: 21/5-H16, 21/104-F17, 21/3-C12, Ariete-E11, Savena-C6, Brescia-F9, Pavia, Bologna-H12, 15/8, 15/115-M15, 15/33-M17.

The British blocking force is now in a dilemma. If it does not retreat, either unit can be surrounded at 5-1. If it pulls back, it must expose the supply unit. By stacking together it could force a 1-4 soak-off, an extremely small price to pay to capture a supply. Alternatively the British could destroy the supply unit, in which case the Italian infantry is in position to isolate the blocking force, while the entire German armor force and Ariete spend May II and June I picking off 1-1-6's around Töbruch, an attack by 28 factors, rather than the 12 estimated by Mr. Lockwood. The garrisoning

Letters to the Editor ...

of F17 ensures that the Germans will have an undoubted target, should the British defend along the escarpment line. If the British retreat to Töbruch, they effectively neutralize any advantage gained by the sacrifice of the blocking force, as the Germans will have no trouble cutting off Töbruch by June 1.

If the British do not destroy the supply, the position dominating the coast road can still be held, while sufficient forces are used to execute the appropriate attack and capture the supply unit, and there should be sufficient forces to enable elements of the 15th Division to outflank the escarpment line to the south. One of the 2-2-6's may still live but it can be isolated by Italian infantry in future turns, and we have a captured supply as compensation.

It is obviously impossible to discuss subsequent turns in any detail, as individual games vary too much. The overall situation should look good to the Germans, considering the weakened British defense facing them, and the possibility of having a captured supply.

Now that I have attempted to discredit the Paleveda Gambit, I would like to add that I do not think it is without merit. The element of surprise should not be entirely discounted, as many players do not react well to unexpected moves. If used as a standard tactic, however, I think opponents would soon learn to deal with it effectively. It also effectively stops a German southern advance, as the 21st must wheel north to deal with it. For those British players who have trouble dealing with a southern threat, or have an opponent that prefers it, the Paleveda Gambit provides an answer, although the Series Replay in Nov.-Dec. '75 illustrates a much simpler way to frustrate any German who uses an extreme southern opening.

In the final analysis, however, the 2-2-6's could probably be put to better use strengthening the main defenses, where their presence would delay the Germans more problems than the slight delay caused by this maneuver. I am sure that there will be those who disagree, but I think that a trial of several games will show that, even in this Bicentennial year, the Paleveda Gambit has not revolutionized the play of *AFRIKA KORPS*.

Tom Hazlett
Wheeling, W.Va.

★★★★★

Dear Sir:

The acquisition of the 3M line and Games Research by Avalon Hill is astounding news, indeed. Although I own a copy of many of the current AH wargames, my real preference is for your line of non-wargames which I find to be more playable, more fun, and more relaxing than the wargames. I am very glad, therefore, that AH is going into the non-wargame business in a big way.

In my opinion, the 3M line is one of the better adult game lines. In addition to the titles mentioned in the AH Philosophy column of the *GENERAL*, I think that *ACQUIRE, EVENTS, FOIL, IMAGE, POINT OF LAW, SLEUTH, SPEED CIRCUIT, TRYCE, AND WIN, PLACE & SHOW* are quite good. On the other hand, *EXECUTIVE DECISION* and *STOCKS & BONDS* are inferior, respectively, to *BUSINESS STRATEGY* and *THE STOCK MARKET GAME*.

I hope that AH will now adopt the fine compartmented packaging style used by 3M and cease the "throw everything helter-skelter into an empty box" policy as typifies recent AH titles. I also hope AH will reverse a recent tendency toward a cheapening of the quality of some game components, the so-called credit markers of *BEAT INFLATION STRATEGY* being a notable example of this. I would rather pay a little more and get better quality components and good compartmented packaging.

With your expansion into a large line of non-wargames, you may be planning to include coverage of non-wargames in the *GENERAL*. Better yet, why not start a new general gaming magazine. By doing so, you will eliminate a great void. Other than *GAMES AND PUZZLES* (which is not entirely satisfactory in the US market) there just isn't any general gaming magazine.

Luman E. Wilcox
Manchester, Missouri

ED. NOTE: The compartmentalization problem is one which we are currently working on. Unfortunately, solutions cost money. We plan to provide standard compartment systems for special mail order purchase. This will allow us to satisfy people such as yourself to whom price is no object, yet allow us to continue selling the games at their present price range.

The subject of a general gaming publication is something we've also thought seriously about. However, it would be an extremely expensive undertaking. Yet, it is a subject we'll bring up in a future feedback survey. In any case, the GENERAL will remain a wargaming magazine with only occasional mention of non-wargames.

★★★★★

38. FORTIFICATIONS—

38.1 This is an optional rule for the Tournament Game of *BLITZKRIEG*. Fortifications are engineered field placements for use by certain ground forces to beef up an area defensively. Their value lies chiefly in creating a defensive network inside enemy territory, but they may also be used as an offensive starting point for a local battle. The use of forts will enhance the mobility of the offensive units while helping to secure captured territory.

38.2 CONSTRUCTION AND OCCUPATION—

Each player may have as many forts as desired and as often as desired. Forts may be built in any country when needed.

38.21 Forts are built on clear terrain only and not in an enemy's zone-of-control. Forts may be built on any clear coastline hex that is not an invasion beach.

38.22 Only infantry and artillery units may become a fort. Simply turn it upside-down. Substitute units of like-type may also become forts.

38.23 There is no limit as to the number of forts built, the number of times you build a fort, or the number of times you build a fort with a particular unit.

38.24 A fort cannot move in the turn of its construction. However, a fort may be torn down and moved in the turn following its construction. A fort may not be torn down, moved, and rebuilt all in the same turn.

38.25 A fort may be occupied during the same turn of its construction by any one ground unit. The stacking rule does not apply to forts. Air units may not use a fort as an airbase.

38.26 Airborne, Ranger, and substitute Air Assault units may use a fort for a helicopter assault. The unit must begin its turn on the fort and may land up to 8 hexes away. The landing zone hex is any land hex not in an enemy's zone-of-control. Unit may move only 1 hex upon landing. Airborne and Ranger units may not move upon landing on a forest or a mountain hex. Substitute Air Assault units may not land on a forest hex and may not move upon landing on a mountain hex.

38.3 GROUND COMBAT—

A fort by itself has no combat value. However, the occupying unit gains certain advantages when on the fort.

38.31 A fort doubles the defensive value of the occupying unit.

38.32 A fortified unit is subject to the same supply rules as other units. However, a fort in an unoccupied country may not be used to trace a supply line. A fortification itself is not a supply source.

38.33 If the fortified unit is eliminated the fort is also eliminated. Otherwise, the fort ignores the results of the TGAT.

38.34 An unoccupied enemy fort may be captured and used by the opposing player.

38.35 Forts may be destroyed by any player after resolving normal combat if his unit begins its turn on the fort, does not move during its turn, and is not within an enemy's zone-of-control. Simply remove the fort from the board.

38.36 If a fortified unit begins its turn adjacent to an enemy unit it must attack. The combat factor of the unit remains basic in this situation.

38.4 AIR COMBAT—

Special conditions apply when aircraft rules are used.

38.41 Tactical Bombing does not undouble units on forts behind rivers. Losses to air units are resolved normally. (see 30.41)

38.42 Strategic Bombing of units on forts are resolved normally on the BBT. No ground units are used and there are no losses. (see 30.42)

38.43 An unoccupied fortification may be attacked as an Additional Bombing Mission by TAC and MDM bombers only. There is no A-A fire and no losses to the attacker. Attack is resolved on the BBT. Only a blank saves the fort. Remove the fort from the board if destroyed.

Ed. Note: Forts and Fortifications were not included in the redesign because of the expense of new counter sheets, both to Avalon Hill, and to the consumer, who would have to buy them. But they are interesting ideas for those interested in variants which is why we've printed your letter.

★★★★★

Gentlemen:

This is in response to your recent editorial in the latest *GENERAL* announcing your recent acquisitions and development plans. Frankly, I must say I'm astounded. I had been expecting a sales offensive by AH, but what you've done is more of a blitzkrieg. I'm heartened to see Avalon Hill take such bold steps. I'm greatly looking forward to seeing you bring out and handle *DIPLOMACY* and *RUSSIAN CAMPAIGN*; especially the latter. Long ago I wrote and suggested such a step, but while I'm sure my small voice had no influence in the actual decision, I'm very pleased to see it come to fruition. I regret to hear you're going to change the PBM CRT over to a 6-result form, however. I would much prefer to have seen it go the other way: add an extra die and use the PBM 2nd edition table for FTF play in the entire "classics" line. It is a very simple step (use 11=1 and 2 or 12=2) and yet makes important changes in practice: attacks are encouraged instead of conservative defense, and wonder of wonders a 2:1 is a viable attack!

In any case, a hearty BRAVO to you for these bold marketing steps.

John Michalski
Oklahoma City, Okla.

ED. NOTE: Many people have noted their dislike for the changeover to a base 6 system for PBM purposes. They feel, as do you, that the standard die roll CRT hampers the offense unduly and that many games are more balanced using the old PBM CRT. However, with the wide variety of games now available, it became necessary to standardize PBM procedures. Composing separate PBM CRTs for every game would be too confusing.

★★★★★

Dear Mr. Greenwood:

Your game "Wooden Ships & Iron Men" is an excellent game and definitely one of Avalon Hill's best. But I was disappointed and, being a Netherlands Antillian, somewhat hurt to notice the historical inaccuracy in the Design Credits on page 12 of the Rules book.

There the cover art on the game box, showing a French man-o-war saluting an American ship, is described as depicting the FIRST recognition of the American Flag by a Foreign Government, February 14, 1778.

But the first official salute to the American Flag was almost two years earlier: on November 16, 1776. On that day the guns of Fort Oranje on the Netherlands Antilles West Indian island St. Eustatius, at the orders of its Commander de Graaff, returned the salute of the American brig "Andrew Doria". Thus, the then Republic of the United Netherlands was the first foreign government to officially recognize the American Flag. The Americans were actually so pleased that they named two men-o-war after de Graaff and his wife.

In 1939 F.D. Roosevelt presented a plaque commemorating the event to the population of St. Eustatius, which plaque was affixed to the old walls of Fort Oranje.

I do hope that in the next edition of the rule book you will rectify the error (or even better, portray the real first recognition on the cover).

G. Smeets
Curacao, N.A.

READER BUYER'S GUIDE

TITLE: WOODEN SHIPS & IRON MEN

SUBJECT: Fighting Sail Era Game of single ship and fleet actions.

WOODEN SHIPS & IRON MEN was the 25th game to undergo analysis in the RBG but headed promptly to the head of the list with a cumulative rating of 2.34—the best ever chalked up in the RBG. Leading the assault on the records were best-ever performances in Play Balance (beating BLITZKRIEG by .18), Realism (over 1914 by .10), and Excitement Level (topping THIRD REICH by .07). The game also fared exceedingly well in Overall Value and Completeness of Rules where it placed third and fourth respectively. The game's worst performance came in Ease of Understanding where it placed 14th—not bad for a game claiming best-ever Realism honors.

We were especially interested in the ratings for Mapboard and Components because we had agonized at length over the graphics presentation made therein. Experimenting with the different shades of blue to give the feel of different depths while outlining land areas for certain scenarios has apparently been justified. Almost everyone prefers it to the plain blue mapboard of the earlier edition. Unfortunately, the planned geomorphic mapboard for "jumping" boards to catch running battles didn't turn out perfectly geomorphic because the hexes were not extended to the board edge. The elimination of names from the ship counters in favor of a uniform classification system à la PANZERBLITZ apparently has left no lingering side effects.

The volume of our "nut mail" has backed up the excellent rating for Completeness of Rules. Aside from a few typographical errors there has been practically no errata issued for the game. A complete listing of errata for W.S. & I.M. will appear in next issue's Design Analysis column.

The record play balance rating was a big surprise as we made no attempt to balance many of the historical scenarios. This rating is probably a reflection of the "Design Your Own" formula for picking balanced sides for mythical engagements.

Finally, the game Length rating should be treated as an average of the many scenarios rather than indicative of the game as a whole.

- 1. Physical Quality 2.40
- 2. Mapboard 3.07
- 3. Components 2.38
- 4. Ease of Understanding 2.88
- 5. Completeness of Rules 2.39
- 6. Play Balance 2.07
- 7. Realism 1.85
- 8. Excitement Level 1.88
- 9. Overall Value 2.10
- 10. Game Length 1 hr., 32 min.

THE QUESTION BOX

D-DAY:

Q. Are invading units required to establish their supply the first turn ashore or suffer immediate elimination under the Appendix Supply ruling #3?

A. No—invading units are like paratroopers, they come ashore with their supply as per the 1st week limitations, and are eliminated by two turns of isolation. The Appendix ruling refers to the bringing on of reinforcements in post-invasion turns.

Q. Can Allied reinforcements be placed on a coastal hex in German ZOC, and may such a hex be used for Allied supply?

A. No

Q. Can SAC attacks be used against coastal hexes adjacent to invading Allied units on sea hexes, if

the red arrow of the sea hex doesn't point to the SAC target hex?

A. Yes—although SAC attacks are disallowed in Allied Zones of Control, point I of Invasion Attack states that Allied units in sea hexes exert a ZOC only on the coastal hex pointed to by the red arrow of the sea hex. As such, invading Allied units cannot block German retreat into or through adjacent coastal hexes other than the one they are attacking.

Q. Is it legal to break up combat against German units on the same coastal hex into more than one battle?

A. Yes—providing at least 1 attack comes from an adjacent land hex. Invading units on the same sea hex must attack the same defenders.

WARGAMING T-SHIRTS

The wargaming t-shirts are now available and although these black and white photos do not portray the vivid colors and sharpness of the artwork you can take our word that these shirts sport an exact full color likeness of wargaming's most widely recognized box cover.

The back sports an enlarged, silk screened version of the Avalon Hill logo. The neck and sleeves feature attractive red collars to present a very pleasing overall appearance.

The shirts sell for \$5.00 each plus the usual postage charges based on the dollar amount of your total order. Be sure to specify size. Maryland residents add 4% State Sales Tax.

- _____ Small _____ Large
- _____ Medium _____ Xtra Large



A.H. Philosophy . . . Continued from page 32

BEST AMATEUR MAGAZINE:

- EUROPA
- JAGDPANTHER
- PURSUIT & DESTROY

These nominations will be included on a ballot to be sent to all pre-registrants for ORIGINS II with the convention program. Pre-registrants may then deposit their ballots in a special box at the con registration desk. Note: to prevent the possibility of ballot box stuffing only pre-registrants will be allowed to vote. No ballots will be handed out at the convention. The ballots will be counted by Dr. Sayre at the convention and the winners announced on Sunday.

RE-ENACTMENT EXTRAVAGANZA

Everyone around here is very excited about the line up on the Revolutionary War re-enactment which will be part of Saturday's entertainment. Don't look now, but this thing has REALLY mushroomed! As of this writing, our skirmish re-enactment will be one of the largest on the East Coast! If you've never seen one of these performances live, you can't imagine the excitement and spectacle that these shows generate. As of now, we have FOUR different regiments and units committed to do savage battle on the college green. We have been graciously provided with the privilege of seeing some of the finest historical re-enactment units in the country execute their

muster, go through their drills and marches, perform their evolutions, and fight out several live-fire battles. Muskets, rifles, cannon, drums, fifes, and bagpipes, along with beautifully accurate uniforms will all be on display for your inspection and edification when these units do their stuff:

American Side:

- The First Virginia Regiment and
- The Maryland Company of Wayne's Light Infantry Corps

British Side:

- 71st Afoot Regiment (Frazier's Highlanders) and
- 64th Afoot Regiment

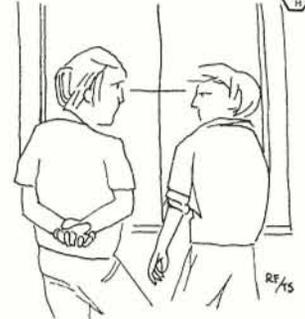
Whatever you do, don't miss this opportunity to witness a once-in-a-lifetime spectacle. This is first-class, top-notch entertainment. Bring your cameras!

Vol. 12, No. 6 of the GENERAL was a failure in the ratings even though it was loudly praised by Civil War enthusiasts. The overall rating of 3.42 for the issue was the second worst rating we have yet polled. The individual articles stacked up as follows in our 1200 point maximum scoring system:

- Four Roads to Richmond 453
- W.S. & I.M. SERIES REPLAY 344
- Weather or Not? 154
- AH Philosophy 85
- Design Analysis 83
- Stalingrad Scenario Strategy 81



HASN'T IT HAPPENED TO YOU? YOU SPEND SIX MONTHS RESEARCHING A "UNIQUE" GAME ONLY TO FIND OUT SOMEONE ELSE HAS ALREADY DONE IT.



JUST THINK... SOMEWHERE OUT THERE IS A DIE ROLL WITH YOUR NAME ALL OVER IT.

AVALON HILL RBG RATING CHART

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

	Cumulative	Physical Quality	Mapboard	Components	Ease of Understanding	Completeness of Rules	Play Balance	Realism	Excitement Level	Overall Value	Game Length
1. W.S. & I.M.	2.34	2.40	3.07	2.38	2.88	2.39	2.07	1.85	1.88	2.10	9.2
2. ANZIO	2.36	2.11	1.74	1.94	3.74	2.88	2.62	2.00	2.09	2.15	21.7
3. PANZER LEADER	2.50	2.41	2.17	2.34	3.65	2.60	2.67	2.19	2.34	2.20	13.1
4. RICHTHOFEN'S	2.52	2.28	2.62	2.12	2.63	2.94	2.60	2.66	2.39	2.45	6.0
5. 1776	2.56	2.16	1.76	2.45	3.27	2.62	3.08	2.72	2.63	2.36	33.4
6. 3rd REICH	2.57	2.12	2.47	2.34	4.15	3.22	2.59	2.24	1.95	2.05	34.9
7. PANZERBLITZ	2.58	2.00	3.00	2.03	4.03	3.00	3.06	2.05	2.07	2.05	14.0
8. CHANCELLORSVILLE	2.68	2.62	2.57	2.45	2.26	2.52	3.43	3.07	2.55	2.64	18.8
9. FRANCE 1940	2.82	1.75	2.05	1.85	3.30	3.25	4.05	3.00	3.40	2.75	16.0
10. JUTLAND	2.83	2.84	—	2.39	3.27	3.06	3.24	2.53	2.61	2.67	29.7
11. LUFTWAFFE	2.87	2.41	2.91	2.04	2.86	3.02	3.73	3.41	2.82	2.64	24.2
12. MIDWAY	2.88	2.75	3.12	2.56	2.78	2.90	3.66	3.08	2.37	2.73	15.7
13. AFRIKA KORPS	2.90	3.04	3.10	2.92	1.12	2.29	3.39	3.57	2.91	2.77	13.5
14. ALEXANDER	2.93	2.99	3.21	3.19	2.55	2.98	3.43	2.76	2.43	2.86	12.7
15. ORIGINS OF WW II	2.98	2.69	2.58	2.80	2.20	2.22	4.00	4.06	3.11	3.40	9.6
16. BLITZKRIEG	3.09	3.39	3.28	3.30	3.14	2.89	2.25	3.67	2.81	3.05	24.0
17. TOBRUK	3.10	2.85	4.68	2.13	4.32	2.77	3.06	2.11	3.00	2.96	21.6
18. WATERLOO	3.18	3.29	3.27	3.11	2.01	3.11	3.27	4.32	3.21	3.01	16.2
19. BULGE	3.21	2.93	2.80	3.31	3.08	3.40	3.53	4.11	2.81	2.95	20.0
20. D-DAY	3.43	3.72	4.54	3.69	2.56	3.09	4.38	4.90	3.60	3.56	17.8
21. STALINGRAD	3.44	3.43	3.74	3.40	2.07	2.52	4.37	5.15	3.28	3.04	20.0
22. TACTICS II	3.51	3.43	4.30	3.59	1.45	2.18	2.32	5.57	4.59	4.20	11.6
23. 1914	3.87	3.18	3.40	3.26	5.46	4.32	3.86	1.95	5.48	3.86	55.0
24. GETTYSBURG	3.88	3.59	3.84	3.54	2.68	3.39	5.08	4.51	4.34	3.98	12.5
25. KRIEGSPIEL	4.04	3.77	4.20	3.85	2.13	2.94	2.93	6.09	5.20	5.29	9.8

"Gen-Con West" boldly claims to be the largest wargame convention ever planned for the West Coast. Tentatively scheduled for September 4th, 5th and 6th at McCabe Hall in the San Jose Civic Center, Gen-Con West promises wargame tournaments, movies, club demonstrations, miniature figure painting competitions, military displays by the armed forces and much more. Interested parties should call Thomas Vaughan at 415-591-3548.

Interest Group Garden Grove, CA informs us that they are in full operation and are planning tournaments in 1776, WS&M, and FOOTBALL STRATEGY as well as a host of non-AH games. Interested parties should contact Mike Cohn at 11441 Rainier Ct., Garden Grove, CA 92641.

The Miniature Wargamers of Western New York will sponsor their Third Annual Convention on August 28th and 29th at the Adam Plewacki Post in Buffalo, NY. Although miniatures will be the feature attraction, a PANZERBLITZ tournament is also planned for AH enthusiasts. More information can be obtained from Richard J. Kohlbacher, 246 Stockbridge Ave., Buffalo NY.

BEST LAID PLANS DEPT.—Last issue's Civil War counters which were supposed to fit onto our standard blank counter sheet fit perfectly. Unfortunately, the parts dept. recently changed the die for their blank counter sheets without our knowing it, so . . . If you still want to mount those counters easily order a BLITZKRIEG counter sheet. The price remains the same; \$1.00 plus postage. Our apologies for any inconveniences this caused.

Tom Oleson, our devoted ANZIO redesigner, announces that his third edition of the ANZIO addendum (5 pp) is available from him for 25¢ (cost) and a stamped, self-addressed envelope. Tom can be reached at 1200 High Ridge Lane, Santa Barbara, CA 93103.

Prestigious GAMES & PUZZLES magazine picked DIPLOMACY third on their list of TOP TWENTY games in their Annual GAME AWARD competition in the December 1975 issue. DIPLOMACY placed right behind SCRABBLE and MASTER MIND and ahead of MONOPOLY in the ratings—an impressive finish for a wargame in a general gaming interest magazine. SLEUTH and ACQUIRE finished 16th and 18th in that same poll. DIPLOMACY is available direct from Avalon Hill for \$11.00 plus the usual postage charges. ACQUIRE is also available in bookcase format for \$10.00 plus postage. SLEUTH is available only in the smaller gamette version at the present time and sells for \$4.00 plus postage.

Followers of the 3M line of games will be happy to hear that we will continue offering updated sets of computer cards for their popular CHALLENGE BRIDGE game. Titled Volume II, this set comes complete with a 112 pp manual and 100 additional deal cards taken from actual ACBL tournaments and is packaged in a sturdy plastic overwrap. The set sells for \$10.00 and is available by direct mail order purchase only. Of course, one must first own CHALLENGE BRIDGE (\$17.00) in order to utilize Volume II to best advantage.

Infiltrator's Report

An interesting way to travel to Origins II is presented to us by Ross Callender and Ken Meyers. They are driving and hoping to cut expenses by staying the night at wargamers houses along their route. They should be a minimum of trouble to their host and will make it worth their while. Their route will take them through Alabama, Mississippi, Georgia, S.C., N.C., Maryland. Anybody that would be willing to accommodate these gentlemen should write Ross at 2601 Esther, Pasadena, TX 77502.

The Northern Ohio Wargaming Society announces their MINICON IV to be held at Baldwin Wallace College in Cleveland on October 2, 1976. Several Avalon Hill board-games will be among the many planned activities. For more information contact Art Lubell, 23351 Chagrin Blvd., Beachwood, OH 44122.

The Fort Myers Warriors will be traveling by car from Ft. Myers, FL to ORIGINS II at least four days prior to July 23rd. They invite all those gamers along their route (the eastern seaboard) to join them. Interested parties should write to the Warriors at 1154 Harbor Dr., N. Ft. Myers, FL 33903.

Robert Bailey writes to inform us of the existence of Interest Group Bangor, ME which claims 13 members with bi-weekly meetings at 80 Mount Hope Ave. in Bangor. Interested parties can contact Robert at the above address.

Michael Peterson of Interest Group San Francisco reports that their 30 members meet every month and are planning a Bicentennial wargames tournament in July based on the format of the AH 500 event at ORIGINS. Mike also reports that members now carry membership cards which give them special discounts at a local hobby shop. IGSF can be contacted by writing Michael at his 1919 The Alameda #36, San Mateo, CA 94403 address.

Cincinnati Games Con VI will be held at Thomas More College on July 10 and 11. Dorm rooms are available for \$12 per night. Among the many events being planned are tournaments in DIPLOMACY and KINGMAKER. Interested parties should address their queries to: Games Convention, c/o BOARDWALK, 1032 Delta Ave., Cincinnati, OH 45208.

The 1975-76 Team Championship Tournament has gotten off to a rocky start with the default of two US based clubs as OKH and USC have forfeit their opening games. The event now has four teams left fighting for a \$100 first prize as they test each other's prowess across the board in the AH classics. Each team has to field a representative to play each side in STALINGRAD, D-DAY, BLITZKRIEG, PANZERBLITZ, WATERLOO, AFRIKA KORPS, and ANZIO. Parties interested in next year's competition should write to Nicky Palmer, Lehwaldsvej 3, 8g, DK-2800 Lyngby, Denmark.

Old LE MANS diehards will want to take in the action at GEN CON IX where a giant 4 hour LE MANS style race is scheduled for August 21st. The game will be very similar to the original AH version with additional embellishments for mechanical problems and endurance. Modern cars with varying specifications will be used rather than the specs published in the early AH version. Each car will be handled by a driving team of two players which will allow for a maximum field of 36 contestants. Further details on this event plus all the other pageantry which usually surround GEN CON are available from Mike Carr, P.O. Box 756, Lake Geneva, WI 53147.

The contestant is faced with two distinct problems in order to win. He must: (1) try to eliminate the Union forces already across the river and; (2) prevent reinforcements from arriving. With but 39 combat factors worth of units at hand, he will not be able to guarantee the elimination of any of the Union forces even though they can be surrounded, and in turn risks quick loss of his own units if an Attacker Disrupted result occurs. Even concentrating against one stack is risky as Union defensive artillery fire has a good chance of lowering the odds. The best guarantee of preventing a Union breakthrough is in removing the pontoon bridge. This prevents the Union player from exploiting unsuccessful Confederate attacks and allows the Confederate to deal with the exposed Union forces at leisure. Those ten contestants whose entries gave the best probability of removing the bridge and eliminating those forces already across were judged the winners. Note that our solution gives a 100% chance of removing the bridge and preventing it from being replaced for at least one turn. The artillery on the right pounds the pontoon bridge at 5-1 while A. P. Hill attacks Griffin's position at 1-1. On the left the Union artillery is hit at 1-2 by the Confederate artillery and 1-1 by Early and the 7-4.



Artillery Fire Phase

Attacking Units	Target Units	Battle Odds
1. 3,3	6,6	3:1
2. 3,3	6,6	1:2
3.		
4.		

Combat Phase

Attacking Units	Defending Units	Battle Odds
1. 9,7	8,8	1:1
2.		

Those who came closest to our solution for Contest No. 71 were: L. Sullivan, Houston, TX; B. Dvorak, Encinitas, CA; M. Knautz, Saukville, WI; R. Whaley, Knoxville, TN; J. Schleifer, Collegedale, TN; R. Milczarek, Chicago, IL; D. McCormick, Chicopee, MA; E. Niemira, Staten Island, NY; E. Leggett, Columbus, OH; and J. Alsen, St. Paul, MN.

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SALE: 1914 used once. Highest bid over \$20... Wanted: original AEA 1914... Wanted: original AEA 1914... Wanted: original AEA 1914...