GAME PROFILE AND OPERATIONAL ANALYSIS

A GAME OF BEACHES Storming Ashore in Atlantic Wall

by Thomas G. Pratuch

The Normandy invasion is, I'm sure, one of those topics about which games will regularly be produced every few years. Even as I write, a Certain Competitive Company in Baltimore is in the midst of hammering out the dents in *their* version of D-Day. *Atlantic Wall* has been well received by big-game, WW2 fans – and justifiably so. It's the work of Joe Balkoski, one of SPI's most talented designers. -RAS

Atlantic Wall (AtW) is the latest 'super' wargame (or grand tactical simulation, as S.P.I. prefers to call such games). It covers the first twenty-six days of the invasion of Europe by Allied forces in World War II. There are six scenarios with variable victory levels and one campaign game where the Allied player can select his goal for victory.

The Designer Joseph Balkoski has used his earlier game *Wacht Am Rhein* as the base for his rules in *AtW*. The result is a game remarkably free from design "glitches" despite the size. The game consists of five mapsheets and 2,000 counters with a 36-page rule book to explain play. Most players of the grand tactical games have (probably) realized that regular play-testing of such games is close to impossible and have become accustomed to the errata sheet follow-up. Such players will appreciate the development of a "clean" game design from an earlier high quality game.

This game is not just a straight repetition of the earlier *Wacht am Rhein. AtW* contains a significant addition to game design in the invasion stage rules. The Allied player cannot merely place his counters on the beach. He must successfully clear landing areas, 'swim' units to shore and fight to maintain a landing area for reinforcements and supplies.

Physical Layout

The game scale is one hex to one kilometer with daylight turns of $4\frac{1}{2}$ hours and a single night turn of $10\frac{1}{2}$ hours. This slight change from *WAR* was necessary to free the game from needless rules complications. At this scale the landing sub-beaches fit one hex exactly, and the effects of the tide can be incorporated with ease. This scale made it necessary to use five mapsheets.

The five mapsheets, when used together for the campaign game, do require a large playing area but it is actually smaller than the area needed for *Highway to the Reich* because of the way the mapsheets overlap. Each of the scenarios is played on a single mapsheet. The playing aids and charts are mainly found on Map A, but this does not present any real problems. In scenario play, Map A is not used at all and can be folded along existing lines to show just the charts. Map D also contains some playing aids and can also be folded for ease of use. A welcome addition to the playing aids is the presence of an abbreviated sequence of play list. This list is found on the back of the rule book and the scenario booklet.

the counters are standard S.P.I. design with a military symbol for unit type (on ground units), values for combat and armor strength, and a movement allowance. Unit designation is done by the historical letter/numeric markings of the actual unit. There has been some discussion by gamers of a need for a more readily identifiable technique for maintaining divisional integrity in play. There is currently so much information on the counters that any technique for keeping divisions separate (other than the current system) would probably require extensive and expensive color coding. The counters for the aircraft and ships are silhouettes.

The game is in box format. The smaller format, when compared to the plastic tray storage, makes it easier to store. The locking plastic tray covers permit safe storage in upright or flat position. One item, which will occur to anyone opening the box, is why only two trays? Yes, it is possible to fit all of the counters into the two trays. But three trays would have been better, and four trays gives an arrangement that allows immediate use with minimal sorting for play. Lest I be accused of simply wanting many trays - four travs are all that could be placed in the box with the other parts. I will even grant that probably only three trays fit in a new box (before counters are broken down) and that any trays added would have increased price. But the ease of storing a grand tactical game in a readily playable method after purchase has to affect the appeal of the game.

Rules

The rules are well written and almost totally free of any ambiguities. As stated before; this is the result of using an existing, highly popular game system as the basis for design. There are no historical notes incorporated in the body of the rules. I prefer the inclusion of such notes for the insight provided into the designer's intent/rationale for the rules.

The rules are divided into two major sections: general rules and invasion stage rules. At first glance the invasion rules and sequence of play will appear complex. As the players become more familiar with the game, ease of play rapidly improves. The only way that play will stay complicated is if the Allied player fails to establish beachheads on the 6th of June game turns (numbers 1-4). In this case he might as well quit the game and start over.

If the Allied player fails*to clear landing sub-beaches quickly enough, he will find that he has trouble getting the later waves of reinforcements ashore. The rules as written (Case 19.13d for those who own the game) allow the Allied player to determine which units get ashore safely. This seems unrealistic, and a simple modification to make the determination *a random selection* would seem to give a more accurate result.

The paradrop techniques used in this game are different from those found in *Highway to the Reich* and *Descent on Crete*. This is attributable to the fact that the Normandy drops were night drops, and the other two operations were in daylight. This, combined with the Allied pathfinder techniques, resulted in an airborne operation that varied greatly in results. This is reflected accurately in the paradrop techniques. While the paradrop determinations do require some time to perform, the fact that they occur only once in the game keeps them from becoming too tedious.

System Effectiveness

The exact point at which historical accuracy threatens to create adverse impact on playability is a rather imprecise area. I have found Atlantic Wall to be one of the best games I own for balance between playability and historical accuracy. An example of what I mean is in the step reduction handling of combat results. The all-ornothing combat Results Tables (CRT) found in older games always annoyed me, because they required so much firepower to have any effect on a target. On the other side of CRT design are results of one man/vehicle being hit in a company/battalion counter. The step reduction in AtW gives a better example of combat than the all-or-nothing approach. Some people might criticize that the third step of reduction does keep the original designation. Beside creating a game of nearly twice as many counters, the tedium of searching for exact counters would make step reduction as protracted in time as reduction by strength point.

One feature of combat that has often been given only token attention in past designs is the cooperaton between infantry and armor in the attack. The Armor Superiority Bonus rule as written merits praise. Besides showing that cooperation between the two combat arms is necessary, the rule also pays attention to the impact of infantry armed with anti-tank weaponry. The players must compare the armor in the attacking force to the anti-armor capability in the defender before determining the combat strength ratio. This forces the players to tailor their combat forces towards the target units instead of simply committing an improperly equipped attack. This bonus can result in benefits to the defender when the attacker has organized correctly.

The Regimental Integrity Bonus is a rule that would have benefited from a commentary in the rule book. There is definitely a need to require the player to maintain the correct subordination in his combat forces. The primary reason for this is historical accuracy and that often overused word, realism. Military units are not totally interchangeable chess pieces on that battlefield. The units must be in an organized pattern. The rule for regimental integrity rewards the player who maintains the correct organization to his forces.

The design intent of making the player keep his forces organized complements the player "requirement" for correct historical unit designations. This requirement is the secondary reason for the rule existing. Since players want correct historical markings on their counters, it is only fitting that a correctly marked historical combat unit should operate as subordinate to a correctly marked headquarters unit.

The rule does seem to need one modification. As written, the bonus for integrity is awarded to only four types of infantry. Commando, bicycle infantry and marine infantry do not benefit. I allow these three types to be included in the bonus rule.

The rules governing the movement are the best I've seen for showing the difference between movement when combat is imminent and movement away from possible enemy contact. The rules are easily implemented without creating additional informational counters thus keeping the map easier to read at a glance. The movement rule was written to avoid the March Mode technique seen in earlier games. Besides, I never liked having to lift up an information counter to see where or what unit to move.

The bocage terrain of the Normandy area is unique to the northwest portion of the French coastline. This terrain forced the Allies into a different form of fighting than what they were used to in past warfare. The bocage is an area of hedgerows, thick brush, and open fields that together make for fierce, short-ranged combat. Recognizing the difference between this terrain type and the traditional countryside terrain made it necessary to develop special game rules. The slow, intense fighting in the bocage is handled by rules allowing the German player to use delay counters against the Allied forces in bocage hexes. (These delay counters are a modified form of the ones found in Fulda Gap.) In the actual battle for Normandy, the Allies were constantly stymied by the ability of the German forces to form small pockets of resistance as they (the Germans) withdrew from the area. The Allied player will find that he is not able to simply sweep through an area previously occupied by a German unit. The beauty of the artwork for the bocage terrain could have easily produced an eyefatiguing view. Instead the hexes (which are best described as mottled) create an image that shows the compartmental nature of the terrain.

General Strategy and Tactics

The remainder of the article is devoted to tactics for each of the scenarios and some general comments about the campaign game. First, there are some comments which need to be said in general before going into the scenarios. (Why keep repeating the same thing over?).

The Mutual Air Allocation Stage Requires a good degree of care when both sides have aircraft available. While specific guidances is made in some of the scenarios, care has to be taken because the allocation made is what the player will have to live with the remainder of that day (four game turns).

The same care is needed in planning Naval Movement in the PM turns. Once again a careless movement will create problems for several turns before the player can change his arrangement.

The use of air and naval power presents something of a dilemma. Most players seem to prefer the idea that if all combat power isn't being used to destroy a ground combat unit then it is wasted. An analysis of most of the scenarios show that where both players have competing weaponry (air vs. air, naval ships vs. shore batteries) it is best to use one to neutralize the other. In the case of the aircraft, the short duration of the scenarios rarely permits destruction of the opposing side's airpower. The best plan is for the weaker player (in air power) to place all aircraft in air superiority role. The stronger player then places an equal number of air superiority points plus one point in that role. Air interdiction is relatively unimportant in the first three scenarios (non-invasion scenarios). The ground support use of the aircraft is best utilized on the defense with the artillery firing in support of attacks or general bombardment.

Naval fire must almost always be used against the shore batteries of the German player because of scenario requirements. The other primary use is blasting the resistance nests and strong points which hinder the securing of beachheads. If unneeded naval points are available, then they should be used in the same role as regular artillery up to the limit of their range (as marked on the maps). Such naval fire can be invaluable in support of Allied units isolated by strong German attacks from friendly artillery range.

The last general topic is the attention that must be paid to supply lines and the locations of headquarters units. The player who is careless can easily find that he has significant numbers of his forces on the map that are almost unable to fight because his opponent has cut off supply lines instead of attacking the forces. The player that leaves his HQ units unprotected or in a vulnerable location will also find a sizeable number of his forces unable to perform any significant attacks.

SCENARIO 33.1 The Fall of Cherbourg: Since the German has no airpower capability, all U.S. aircraft can be used in ground support. Naval gunfire is devoted basically to eliminating shore batteries.

U.S. Player: The US player has the 4th Infantry Div, the 9th Infantry Div. and the 79th Infantry Div. plus Corps support elements. Fighting in the bocage will be slow and too costly to guarantee success. The best plan is to attack along the eastern and western coastal areas with the 4th I.D. and 9th I.D. respectively. The 79th I.D. can be divided to secure the flanks. Limited attacks to cutoff supply routes from Cherbourg will hamper the German player from moving all of his forces.

German Player: A classic delay is the basic requirement for the German forces. Since there are not sufficient forces to create a solid line from one map side to the other, primary attention should be on the clear terrain coastal areas and the road nets in the bocage. If the Allied player breaks through the coastal areas or obtains a clear road/trail to Cherbourg, the German player will find himself hard pressed to move enough units into Cherbourg to prevent the Allies from gaining a couple of hexes.

SCENARIO 33.2 The Caumont Gap: The air battle is completely stalemated at night because the night fighter forces are evenly matched. The first player to use one in ground support will find himself losing all his night fighters in four night turns(for the Allied player) or two turns (for the German). In daytime, the Allied player puts three P51s on air superiority.

Allied Player: The scenario rules allow considerable latitude in the set-up of the Allied forces. The best approach is to form good defensive lines with the U.S. 29th I.D. and V Corps elements and the British 50th I.D. and 7th Armored Div. The U.S. 1st I.D. and 2nd I.D. are the attacking force through the area around Caumont. Care has to be taken when the attacking force goes into the turning movement necessary for trying to secure either Villers-Bocage or St Lo. Despite the requirement for the Allied player to determine support capabilities, he will generally have sufficient points to support the attacks of two divisions.

German Player: The German player has to set-up a linear defense by his forces leaving the inevitable gap around the town of Caumont. The 3rd FJ and 2nd Panzer Divisions are used to block the Allied forces from their goals. The 3rd FJ Div is slightly better suited for defending St Lo than for attacking. The slow commitment rate placed on this division by the special rules means that the initial setup should be a defense around St Lo. As units are activated, the line can be carefully moved outward from the city before the Allies arrive.

The 2nd Panzer Div is an attacking force both by composition and because its initial location gives it nothing to defend. If the German player can avoid getting the division locked in combat early in the game, the presence of such a strong, mobile force will greatly hamper Allied movements for fear of an attack in the flanks to cut-off supply.



The delay counters introduced in this scenario must be used in the gap as much as possible. This scenario is slightly unbalanced in favor of an Allied Marginal Victory because the Allied player knows there is a gap in the German lines around Caumont. This causes him to be considerably more aggressive then the original commanders.

SCENARIO 33.3 Operation "Epsom": The air battle here is controlled by the German player who can force the Allied player to dedicate all air assets to air superiority. The German player will start off with limited ground support capability that will increase as Allied air power is destroyed.

British Player: The British forces will have support for an average of six to seven Headquarters in a situation where he has nine initial HQs. Looking at the situation from the northeast area of the board to the southwest: 43rd I.D. secures flank along Caen along with 8th Corps anti-tank artillery and cavalry. Basically sits. 3rd I.D. (U.K.) attacks towards Caen supported by naval fire. 3rd I.D. (Canada) attacks towards Caen supported by I Corps artillery. Secondary mission to secure Carpiquet (victory condition). 15th I.D. and 49th I.D. attack into the bocage in the southwest area of the map as support permits. Artillery from 30th Corps available for help as is monitor class (only) naval gunfire. 11th Arm. D. screens west flank in the region of Tilly sur Seulles moving as necessary when support permits.

The engineer units will be best utilized in aiding river crossings on the Odon River below Caen.

German Player: The German player will be nothing less than ecstatic over the freedom in set-up. Recommended deployment is: Panzer Lehr Div. plus 3 anti-tank artillery cos. plus XLVII Corps units can form an excellent defense in and around Caen. 716 V.G. plus 9 anti-tank artillery cos. defend in the bocage south of hexrow 4500 and along the Odon River in entrenchments. 2/100/21 Pnzr Div Tank battalion and the 2/125/21 Pnzr Div. Mech. Inf battalion defend the town of Carpiquet. 12th Pnzr. Div. (SS) and I Corps (SS) make a strong, mobile force that may start in one of two locations. One possible site is in the gap between Caen and the bocage to the southwest. The other (and where I prefer) is near Tilly sur Seulles where a fast sweep up the clear terrain can cut-off and isolate British forces attacking to the south. The German units must be careful to avoid being trapped in the open because of combat.

There are two groups of reinforcements available to the German player that are significant. On the first turn of the game (#77) the 1st & 2nd Pnzr Div. (SS) should be brought on at D3 to aid in the defense of Caen. On the fifth turn (#81) the 9th and 10th Pz. Div. (SS) should arrive through D5 to support the attacks of the 12th Pz. Div.

Invasion Scenarios

The analysis of these scenarios can be dealt with in one section. One reason for this is that the tactics are limited by the short duration of the scenarios. The second item is a limitation on the Allied player. The Allied player must clear the beaches of the German barriers (this is done in the abstract) and must create a set number of clear areas (or gaps). The gap number drives the Allies. The scenarios are:

[33.4] Bloody Omaha (Gap number 45); [33.5] Gold, Juno and Sword (Gap numbers 20, 20 & 12 respectively); [33.6] Utah (Gap number 10).

The gap number after each scenario refers to the number of gaps that must be created, in total, on the sub-beach hexes for a particular beach. It is this gap number that drives the scenarios since the Allied player operates under several handicaps. First, he has only four Game-Turns, and gaps may only be blown during low tide (first and third turns). Secondly, if he fails to blow sufficient gaps he will not be able to land enough forces to secure towns/villages required for the victory conditions. Last but not least, drift along the beaches will scatter his landing forces. The German player does not have it easy because there are just so many Allied units coming at the beach.

If the blowing of gaps in the beaches is important, then the next area to address must be the demolition engineer situation. The Allied player can blow enough gaps in the beaches even though he is restricted to doing it in turns one and three (barring incredibly bad drift and German small arms fire results). The main question is, Can the Allied player blow enough gaps in Game-Turn one to assure landing of reinforcements? Reinforcements are defined as all units appearing after Game-Turn one. The answer is a qualified no. The Allied player will find that he can land most reinforcements as companies with some degree of safety. But he will not be able to bring them ashore as battalions (best situation).

The reason for the above situation is this: The Allied player gets three sea landing phases per turn as long as the number of gaps blown on a beach fails to equal the gap number. During each sea landing phase a set number of demolition engineer points are available for landing on a given sub-beach hex. Allowing a 50% probability of success for blowing of gaps by engineers, we arrive at Table I.

The reason for the range in gap numbers in each column (except of course the final column) is that the numbers do not work out as whole digits. If fractions are dropped, the lower value results. If fractions are carried, the higher number is reached.

So what does this table mean? It means that in half of the times that a scenario is played, each beach will have reached the total number of gaps indicated in the column so named. If you were to play the Bloody Omaha scenario 20 times, for example, you would have 26-29 gaps at the end of game turn one approximately 10 times. The other 10 times you would probably have a result higher or lower (equally likely) than 26-29. This leads to conclusion that, other than Sword and Utah Beaches, there is little chance that the gap number of a beach will be reached in the first turn. Historically Utah and Sword were easier to clear. (Note: Recent rules addition may alter these concepts.)

If the beaches are not going to be totally cleared, what will be the impact on reinforcements? The rules require that the player roll a die to determine whether or not the reinforcements land safely. If the die roll yields a value equal to or less than the number of gaps blown on a sub-beach hex where the reinforcements are to land, then the units are placed ashore. If the die roll is greater than the number of gaps blown on the sub-beach hex where the units are to land, the owning player selects (see my earlier comment in **rules**) a number of units, equal to the difference between the die value and number of gaps on that sub-beach, for elimination.

The probability of getting units to shore is obviously dependent on the number of gaps blown in a sub-beach hex. Again, the

	TABLE 1: Gaps Blown per Beach				
Beach	In Game Turn One Sea Landing Phase			Total At End of G-T One	Gap Nr.
	One	Two	Three		
Omaha	6-7	8-9	12-13	26-29	45
Gold	3-4	4-5	6-7	13-16	20
Juno	3-4	4-5	6-7	12-15	20
Sword	1-2	3-4	4-5	8-11	12
Utah	1-2	2-3	4-5	7-10	10

calculations were made to determine the values that would occur 50% of the time. The other half of the time the values will occur, with equal probability, either higher or lower than the numbers in Table 2.

TABLE 2: Gaps Blown on Sub-Beachesat End of Game-Turn 1

Beach	Sub-beach	Gaps		
Omaha	All	3-4		
Gold	King Red	2-3		
	Jig Red	2-3		
	King Green	3-4		
	Jig Green	3-4		
Juno	All	3-4		
Sword	All	3-4		
Utah	All	3-4		

The answer is that two to three companies will probably be lost per sub-beach except for King Red and Jig Red of Gold Beach. On those two landing areas the loss rate will be 3-4 companies. These losses only occur during the second Game-Turn (high tide). As stated before it is nearly a certainty that the Allied player will have reached his gap number for each beach on Game-Turn three.

Once each player becomes aware of this demolition problem there becomes one and only one tactical approach for both players. The Allied player needs to get his combat units off the beaches and attack the German units that are able to fire onto the beaches. The German player is, naturally, firing at Allied units on the beach *but* the fire should be concentrated on those hexes occupied by demolition engineer points.

Campaign Game

After playing the smaller scenarios, players will get the urge to try the full-length version. Since the campaign game is 104 Game-Turns long, it is best left until there is an adequate free time to play, like all summer.

The first step in playing the campaign is deciding which, if any, of the optional rules are to be used. Any Allied player that agrees to the Alternate June 6th Weather (34.4) should have a sanity check. The rules on Mechanized Infantry Movement (34.1), Saturation Bombardment (34.2), German E-Boats (34.5) and Varying Corps Attachment (34.6) are worthwhile additions to the game.

The next step is for the Allied player to select the victory conditions he will try to attain. The Allied choices are: the Historical Plan, Objective Brittany, and First Stop: Falaise. I find the Objective Brittany plan the best goal set. The Allied forces need to secure the beaches (for supplies) and then drive to the south and west. It avoids the protracted and costly fight necessary to secure Cherbourg.

The Historical Plan is a hard, long fight for both sides requiring most of the map area to be secured. The difficulty of this plan was best described by General Eisenhower in a telegram message he carried for public release during the actual operation. Summed up, the message stated that the Allies had gone through a tough fight but were unable to secure an adequate base on the European continent along the French coast. The third goal is the First Stop: Falaise choice. This victory set requires a strong British push for success.

Whatever victory goal is chosen, the Allied player is presented with a list of cities of which he must choose a number of them to clear of Germans. The Allied player is better off keeping the number of multiple hex cities to a minimum. When a multiple hex city is in a path of advance, the German forces occupying it should be cut-off and blocked in the city by a small force until later Allied operations free sufficient units for the long, hard fight necessary to clear the city.

Once the preliminaries are settled, the game will be a case of the Germans responding to the Allied actions. The first case of this is found in the Mutual Air Allocation where the larger Allied Air Force should be dedicated to Air Superiority then Air Interdiction. Ground support use of aircraft should only be done after the beaches are secured. Remember that the planning in this game is longer ranged than most simulations. The German player should dedicate at least $\frac{2}{3}$ of his air power to the air superiority role. The remainder should be used in ground support.

The Naval battle is strictly a decision problem for the Allied player. The German player simply attacks the longer ranged battleships and monitors, then the heavy cruisers (CA), and lastly the light cruisers (CL) and destroyers. The LCTs are only present for the first Game-Turn and do not have a long term effect on the Allied player if lost.

The Allied player should utilize his naval strength against targets in the following order of priority:

1. Static Batteries

2. Resistance nests/Strongpoints that are colocated with regular ground combat units.

- 3. Strongpoints
- 4. Resistance nests

5. Regular ground combat forces

After the invasion play is over, the postinvasion fight will follow the experiences of the players in scenario play. The Allied player should not exit any units required under the victory conditions until the game is almost over.

The only item that will have an impact on Allied player planning not found in the scenario games will be the Mulberry Supply rule. Since the number of supply points available in any Game-Turn equals the number of headquarters that can be supplied it is worthwhile to learn how many supply points are available and when. Table 3 presents this information.

In the campaign game, a *good* attack requires artillery which means that divisions must be supported by Corps HQ (besides the supply rule requirements for subordination). Generally an attack will require that two separate Corps participate in order to have sufficient forces. This means that at least seven supply points must be available (1 Corps -3 Div and 1 Corps +2 Div.).

TABLE 3: Mulberry Supply Point Schedule

Supply Points	Game-Turns
9-10	1-4
5-6	5-8
6-7	9-12
7-8	13-24
8-9	25-36
9-10	37-48
10	49-60
11-12	61-72
12-13	73-80
13-14	81-88
14-15	89 +

As in the previous tables, the values in Table 3 represent results for half of the games played. Values can be higher or lower with equal liklihood.

In terms of operations, the Allied player can make an initial push to secure the beachheads, then conduct a consolidation of the beaches. Around Game-Turn 13 he can start his breakout drive. Divisions that lose over half of their original combat power should be removed from supplied status after being moved to a garrison location (such as a city that could but is not subject to German attack) or in a position to secure the flanks of a Corps attack.

Closing Comments

I have been fascinated with *Atlantic Wall* since I purchased the game. The challenges presented to the players in this game are unique, and the play seems to be balanced. One of the advantages of the grand, tactical games is the difficulty in playing all scenarios and the campaign game to exhaustion. Each session has so many variables that play will rarely be the same between players.

One variation that I have made to the rules is the replacement rules. I allow the Corps HQs possessing replacement points to transfer the points to any subordinate divisional headquarters. Just because I like a game doesn't mean I don't think about possible corrections/changes to the rules.

I am sure that anyone who has wanted a quality simulation of the European invasion, or enjoys a WWII battle game, will be pleased with *Atlantic Wall*. This applies to the historian gamer or the player who just likes beating his opponent in a tough game. \blacksquare

