# Normandy

Regiment/ Battalion Scale Game of Invasion: France, 1944

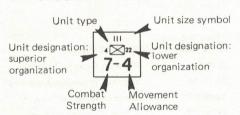
Second Edition Copyright 1971, Simulations Publications, Inc.

Normandy is a simulation of the historical events in the Anglo-American Allies' attempt to establish a beachhead on the coast of Normandy in June, 1944. The game covers the events of the first 6 days (June 6 through June 11) of the invasion, on a map covering roughly 75% of the Cotentin peninsula.

The Game Map: the 23" by 29" mapsheet portrays the portion of the Cotentin peninsula over which this battle was fought. A hexagonal grid is superimposed upon the map to regularize the movement and position of the Playing Pieces, and to clearly define terrain patterns. Each hexagon (henceforth referred to as hexes) represents about two kilometres (1.25 miles) from side to side.

The Playing Pieces: examine the sheet of colored die-cut playing pieces (henceforth known as units) supplied with the game. They represent the various forces used by each side in the Normandy battle. At the beginning of each game, and during the game, each side selects the units to be used in the game, as indicated on the Orders of Battle. Each Player is assigned a particular color for his units: the Allies use tan, the Germans use blue. It is highly recommended that players sort their units by type and color immediately after removing them from the sheet, and to keep them segregated, as this greatly facilitates subsequent setting up and playing of the game. The playing pieces are distinguished by type, strength, nationality, and mobility, as represented by the various numbers and symbols on the units' faces.

# TYPICAL UNIT



# Unit type symbols:

Armor

図

Armored Infantry

Ø

Reconnaissance

 $\boxtimes$ 

Infantry

 $\bowtie$ 

Parachute infantry
Glider infantry

X

Commando

·/

Anti-tank artillery

A

Anti-aircraft artillery

#### Unit Size symbols:

×

**X** Brigade

Brigades and regiments are identical for

game purposes.

III Regiment )
II Battalion

#### **Unit Origin**

Unmarked tan units are U.S. units; tan units with a "B" in the upper left-hand corner are British units; tan units with a "C" in the upper left-hand corner are Canadian units.

Blue units are German. All units are from the Wehrmacht, except the Parachute units which were run by the Luftwaffe, and units marked with the "SS" symbol, which were supposedly Nazi "elite" troops composed of political volunteers.

The only necessary information provided on the units is the unit's Combat Strength, Movement Allowance and unit type,

The other information is included purely for historical flavor. The unit designation to the left of the unit type is the superior organization's name (the division, if any). The unit designation to the right of the unit type is that of the unit itself (battalion or regiment). Most battalions have no designation. The German tank battalions are distinguished by the type of tank: IV- Pzkpw IV tanks; V- Pzkpw V (Panther) tanks.

Units with a "D" between the Combat Strength and Movement Allowance may only defend; they may never attack.

# **Definition of Terms**

Combat Strength: the basic offensive and defensive power of a given unit, expressed in terms of Combat Strength Points.

Movement Allowance: The basic movement ability of a given unit, quantified in terms of Movement Points. Basically, a unit expends one movement point of its total Movement (point) Allowance for each hex it enters in the course of a given Movement Phase.

**Armor Units:** reference is made in various rules as to restrictions on armor units. This refers **only** to armor units, and **not** to other units with similar symbols, such as reconnaissance or armored infantry units.

Game Charts and Tables: various visual aids are provided for the Player to simplify and illustrate certain game functions. The Combat Results Table illustrates the resolution of combat and explains the possible results, as resolved by a die-roll. The Orders of Battle dictate each Player's forces; this varies for the Germans. The Turn Record Chart provides an easy method of keeping track of the progress of the game; this is presented on the mapsheet. The Terrain Effects Chart details the effect of terrain on combat and movement, and also

illustrates all other movement costs. All charts are explained fully where presented.

# GENERAL COURSE OF PLAY:

Normandy is basically a two-player game, Each player moves his units, and executes attacks in turn, with the objective being to destroy Enemy units and gain territory, while minimizing Friendly unit losses. Combat is resolved by comparing Combat Strengths of adjacent opposing units, and expressing the comparison as a simplified probability ratio (odds); a die is rolled, and the outcome indicated by crossreferencing the die-roll result, and the odds column, is applied to the unit being attacked. Normandy is played in turns. Each Game-Turn is composed of two Player Turns. Each Player Turn is composed of three or four Phases. A typical Game-Turn would proceed as follows:

# 1. Allied Player-Turn

- A. First Movement Phase-Allied Player may move all of his units in any direction, up to their full Movement Allowance, within the restrictions imposed by the movement rules and the Terrain Effects Chart.
- B. Combat Phase is composed of three segments, which must be followed in order:
- (i) Attack Allocation Segment-Allied Player allocates Friendly units to attack adjacent Enemy units, at his option.
- (ii) Naval Gunfire Support Allocation Segment-Allied Player allocates available naval gunfire support among his ground attacks.
- (iii) Combat Resolution Segment-Allied Player resolves all combats which he has allocated; once allocated, they must be fought.
- C. Reinforcement Phase-Allied Player places reinforcements to be brought on in this Game-Turn on the numbered Invasion Beach boxes that he wishes. These units may move during the Second Movement Phase, with the beach hex being the first hex moved onto.
- D. Second Movement Phase-Allied Player may move all of his units in the same manner, and with the same restrictions, as in the First Movement Phase. This movement is in addition to that allowed in the First Movement Phase. No Combat Phase occurs after this Movement Phase

# 2. German Player-Turn

- A. First Movement Phase-German Player may move all of his units in any direction, up to their full Movement Allowance, within the restrictions imposed by the movement rules and Terrain Effects Chart. German Reinforcements for this Game-Turn enter during this phase where indicated; the first hex at the edge of the mapsheet where they enter is the first hex they move onto.
- B. Combat Phase is composed of three Seg-
- (i) Attack Allocation Segment-German Player allocates Friendly units to attack adjacent Enemy units, at his option.
- (ii) Allied Naval Gunfire Support Allocation Segment-Allied Player allocates available naval gunfire to support his defending units.
- (iii) Combat Resolution Segment-German Player resolves all combats which he has allocated; once allocated, they must be fought.
- C. Second Movement Phase-German Player may move all of his units in the same manner. and within the same restrictions, as in the First Movement Phase. No Combat Phase occurs

after this Movement Phase. Reinforcements may not be brought in during this phase.

3. Players indicate the passage of one Game-Turn on the Turn Record Chart by moving the marker forward one space. Each Game-Turn represents one day of real time.

# **GAME LENGTH**

All of the Normandy games last six Game-Turns; at the end of the German Player's sixth Player-Turn, the performance of the Players is evaluated in terms of the Victory Conditions.

# MOVEMENT

During the Movement Phase of a Player's Turn, the Player may move as many or as few of his units as he wishes. Each unit may be moved as many hexes as desired within the limits of its Movement Allowance, the Terrain Effects Chart, and the Zone of Control Rules.

#### Procedure:

Move each unit individually, tracing the path of its movement through the hexagonal grid.

#### Cases:

- (A) Movement is calculated in terms of hexagons. Basically, each unit expends one Movement Point of its total Movement (point) Allowance for each hex entered. To enter some types of hex more than one Movement Point is expended. See the movement section of the Terrain Effects Chart for a full list of these different "entry costs."
- (B) Movement is never required; it is always voluntary.
- (C) Units are moved individually, or in stacks, at the Player's discretion, in any direction or combination of directions. A unit may be moved as few or as many hexes as the Player wishes, as long as the Movement Allowance of a unit is not exceeded. Unused Movement Points are not accumulated from turn to turn, nor may they be transferred to another unit.
- (D) No Enemy movement is permitted during a Player's Movement Phase.
- (E) No combat (Enemy or Friendly) may take place during a Movement Phase.
- (F) Friendly units may pass into or through a Friendly stack in violation of the stacking limit, if at the end of the Movement Phase the stacking limit is not violated.
- (G) Units may never enter or pass through a hex containing Enemy units.
- (H) In a given Movement Phase, once a unit has been moved and the Player's hand withdrawn from the piece, it may not be moved again, nor may it re-trace and change its move.
- (I) Units may move over different types of terrain hexes in the same Movement Phase as long as they have enough Movement Points to expend as they enter each hex.
- (J) Units which are out of supply have their Movement Allowance halved (see Supply)
- (K) Units may not move to an out-of-supply position if they began a Movement Phase in

#### General Rule

supply, They may pass through hexes which would leave them out of supply, but may not end the Movement Phase out of supply. (Exception: Supply, Case G)

(L) Units which begin a Movement Phase out of supply may only move to a position which is closer to the nearest source of supply (assuming that such units are moved at all). They may not move further out of supply, or even to a position which is equally as far from supply as their position at the beginning of the Movement Phase. Units which begin a Movement Phase out of supply may only move towards the nearest source of supply; the "nearest" is determined by a direct line to the source of supply, ignoring any terrain or Enemy Zones of Control.

(M) Allied parachute units that are dropped to an out-of-supply position on the Invasion Game-Turn (Game-Turn 1) may **not** move until they are brought into supply. Once having received supply at any time, they are moved and behave just as other units.

(N) All units except armor units **may always move one hex**, even if the movement cost of entering a particular hex exceeds a unit's Movement Allowance. Armor units may always move one hex if they are in supply, although on occasion they may not be able to move if they are out of supply. This ability does not override the dictates of Cases K & L.

# COMBAT

#### General Rule:

Combat occurs between adjacent opposing units at the discretion of the Player whose Combat Phase it is; this Player is considered to be the Attacker, while the other Player is considered to be the Defender, regardless of the overall strategic position of the two players.

# Procedure:

Total up the Combat Strengths of the attacking units involved in a specific attack, and compare it to the total Combat Strength of the defending unit(s) in the hex under attack. State the comparison as a probability ratio: Attacker's Strength to Defender's Strength. Round off the ratio downward to the nearest "whole" number, to yield one of the simplified odds found on the Combat Results Table; roll the die and read the result under the appropriate odds column for that die result. Apply the result of that combat immediately before going on to resolve any other combat.

# Cases:

(A) During the Combat Phase of his Turn, a Player may only attack those units to which Friendly units are adjacent. Only those Friendly units directly adjacent to a given Enemy unit may participate in the attack upon that Enemy unit.

(B) Units adjacent to Enemy units are not compelled to attack, nor does the attacking Player have to use every adjacent unit if he does decide to attack. Attacking is completely voluntary.

(C) No unit may attack more than once per Combat Phase. No Enemy unit may be attacked more than once per Combat Phase.

(D) More than one Enemy-occupied hex may be attacked by a given attacking unit (or group of attacking units); that is to say, different defending units on different hexes may be treated as objects of attacks which might be made by a one-hex group of attacking units if the attacking units happen to be adjacent to two or more Enemy-occupied hexes.

(E) An Enemy-occupied hex may be attacked by as many attacking units as can be brought to bear. Conceivably, as many as six stacks of units could be brought to bear against a single Enemy-held hex.

(F) Defending units stacked in the same hex must be attacked as a single combined Combat Strength, i.e., you may not individually attack individual units which are stacked together.

(G) Combat odds are rounded off in favor of the Defender. For example an attack of 26 Combat Points against 9 Combat Points would round off to a two-to-one odds situation.

(H) If one unit in a stack is used in an attack, the other units in the stack need not participate in the same attack nor in any attack at all during that Combat Phase.

(I) Units which are out of supply may not attack, and have their Combat Strength (for defense) halved.

(J) Armor units may not attack any unit which is in a "Bocage" hex (see Terrain Effects Chart). Armor units may not attack, and have their Combat Strength (for defense) halved when not stacked with another type of unit. When stacked with a non-armor unit, they attack and defend normally.

(K) See the Naval Gunfire Support rules for other combat modifications

# NAVAL GUNFIRE SUPPORT

# General Rule:

The Allies have eight individual "gunfire support missions" available to them (per Combat Phase) from offshore ships, firing a varying number of Combat Strength Points. These ships are considered to be on any all-sea hex, and their gunfire has a certain range (in hexes) inland. This gunfire may be added to any Allied attack in range, and certain types may be used to assist Allied units defending.

# Procedure:

Trace the number of hexes, within the range of the particular fire support mission, from any all-sea hex to the **defender's** hex. This is so whether the firing mission is being used offensively or defensively. Each fire support mission may originate from a different hex, or from the same hex.

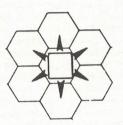
# Cases

(A) Naval gunfire may only be used when an Allied unit is involved in a combat, i.e., it may not be used independently.

- (B) These various missions may be used each Game-Turn, once offensively and once defensively. Unused missions may not be accumulated from Game-Turn to Game-Turn. As many missions may fire from a single hex as the Allied Player wishes.
- (C) Only one mission may be applied to a single hex during a given Combat Phase, no matter how many units are involved in attacking and defending (see also Case F).
- (D) Each Game-Turn, the Allies have available the number of Naval Gunfire Support Missions indicated on the Naval Gunfire Table.
- (E) These Combat Strengths must be applied in total for each individual mission. You may not split a single mission into two parts; it must all be fired at a single hex, and the Total Combat Strength must be used.
- (F) When a single-hex-group of Allied units is attacking more than one hex-group of German units, **one** naval support mission for **each** German occupied hex being attacked may support the combat. If the Allied hex-group of units is attacking **more** than one hex-group of German units (as one attack), the Allied Player may not be able to, nor wish to, add in more than one Naval Gunfire Support Mission; the Allied Player may **still** add the entire Combat Strength of the naval mission to his ground Combat Strength, and attack the total German Combat Strength with his total strength, even if the fire was directed against a single hex.
- (G) Naval Gunfire Support Missions need not all originate from the same hex. They may fire from different all-sea hexes, or, if desired, all could fire from a single all-sea hex. The position of the mission in one Combat Phase may be changed to any other all-sea hex in the other Player's Combat Phase, even within the same Game-Turn.

Example: 26 Allied Combat Strength Points are attacking 9 German Combat Strength Points, at a distance of six hexes from the nearest all-sea hex. The Allied Player has the option of applying a Medium or Heavy Naval Gunfire Support Mission to the attack, and thus having an Attacking Strength Total of 39 or 54. The chosen mission may not be used for attack again on the same Game-Turn, although it may be used for defense during the German Player-Turn of the same Game-Turn.

# ZONES OF CONTROL



#### General Rule:

The six hexagons immediately surrounding a given unit (or stack of units) constitute that unit's Zone of Control. These are semi-active Zones of Control which have an inhibiting effect upon Enemy movement but do not affect Enemy combat. Hexes upon which a unit is exerting its Semi-Active Zone of Control are called **controlled hexes**.

#### Cases:

(A) All units expend additional Movement Points when entering Enemy-controlled hexes;

Allied units must expend additional Movement Points when leaving Enemy-controlled hexes. These movement costs are cumulative, and are in addition to the cost of the other terrain in the hex. Thus an Allied unit leaving an Enemy-controlled hex, and entering another such hex, which contained Bocage terrain, would be forced to pay a movement cost of eight Movement Points: three for leaving the controlled hex, two for entering another, and three for entering a Bocage terrain hex. See the Terrain Effects Chart for a complete summary of movement costs.

- (B) If a hex is controlled by more than one Enemy unit, the movement cost for entering or leaving that hex is the same as if there were only one Enemy unit.
- (C) Zones of Control extend into all adjacent squares for all purposes. There is no way to block or interrupt Zones of Control.
- (D) Units may not trace supply **through** a hex that is also an Enemy controlled hex. This applies even if a Friendly unit is in that Enemy controlled hex. Supply may be traced **into** an Enemy controlled hex.

# NAVAL GUNFIRE AVAILABLE PER COMBAT PHASE

Mission type	hex range	Combat Strength per Mission			
and number of missions available		attack-support	defense-support		
Light-four	2	40	10		
Medium-one	6	25	5		
Heavy-three	10	10	0		

# STACKING (more than one unit per hex) AND UNIT BREAKDOWN

#### General Rule:

German and Allied units stack in an identical manner. The limitations on stacking vary with terrain. In any non-Bocage hex, units may stack as many as three high, although only two regiments (or brigades) may be in a stack, i.e., maximum stacking in clear terrain is limited to three battalions, or one regiment and two battalions, or two regiments. In Bocage hexes, units may only be stacked to a limit of two battalions or one regiment.

#### Cases:

- (A) Stacking limitations apply only at the **end** of a Movement Phase.
- (B) Units may break down into smaller units in the following fashion:









# Allied units

one 7-4 = three 2-4

one 5-4 = two 2-4

one 20-10 = three 6-10

#### German units

one 7-2 = three 2-2

one 5-2 = two 2-2

one 4-1 = two 2-1

one 15-6 = one 7-6 and one 5-6

one 16-6 = one 7-6 and one 5-6

one 18-6 = one 8-6 and one 6-6

one 10-6 = three 3-6

one 7-6 = two 3-6

one 14-6 = three 4-6

Other units not specifically detailed above may **not** break down into smaller units.

- (C) Units may be broken down at any time during their Movement Phase. They may not be broken down during the Combat Phase.
- (D) To replace the larger unit, simply remove it from the map, and replace it with its equivalent as given in Case B.
- (E) Units may be rebuilt from constituent parts at any time during the Movement Phase if the smaller units are all in the same hex. These need not be the same units as were originally broken down, but may be any units of identical strength and type. Replace smaller units with the larger one.

# SUPPLY

# General Rule:

Units must be able to trace a supply line leading from their position to a road hex, which must then be connected to a **supply area**. Allied supply areas are those numbered invasion hexes specified by the Allied Player in the Invasion Game-Turn (see Special Invasion Rules). For the Germans, all supply areas are

off the mapsheet, i.e., the supplying road must leave the edge of the mapsheet. Units which are unable to trace a line of supply are penalized with respect to movement and combat.

#### Procedure:

Units are determined to be in supply for movement and combat at the **beginning** of those respective Phases. If in supply, units may move their full Movement Allowance, and may engage (or be engaged) in combat at their full Combat Strength. Supply lines are traced a maximum of three hexes from the unit to a road hex, which road must lead to a supply area. The road portion of the supply line may be as long and as devious as necessary to reach a supply area. Once a supply line is is traced by road, it may not leave the road.

#### Cases:

- (A) Units out of supply have their Movement Allowance and Combat Strength halved, and may not attack.
- (B) Units may remain out of supply indefinitely, i.e., units are never lost through lack of supply alone.
- (C) Any number of Friendly units may be supplied through the same hex or path of hexes. This applies for both the first three hexes, and for the road portion of the supply line. One supply area or road may supply any number of units.
- (D) Supply lines may be interrupted in either of the following ways:
- 1. The presence of an intervening Enemy unit. or units;
- 2. The presence of an intervening Enemy controlled hex.

Enemy Zones of Control extend into **all** hexes, regardless of terrain or the presence of Friendly units. These two interrupting features prevent the tracing of supply through hexes thus influenced, whether the supply line is on or off the road.

- (E) Units may not move out of supply, nor may they move further out of supply (see Movement, Cases K and L for more details).
- (F) Allied parachute units which were not brought into supply (i.e., from the time they are dropped in the Invasion Game-Turn) may not move until they are brought into supply. They are destroyed at the end of Game-Turn 3 if they have not been brought into supply by that time. Once having been brought into supply (at any time), these units behave normally, even if subsequently put out of supply.
- (G) German reconnaissance and Allied commando units **may** voluntarily move out of supply, in contravention of case E. They are affected as other units by being out of supply, but may move without any restriction into and out of supply positions, and once out of supply, may move without regard to their distance from the nearest supply line.
- (H) Allied supply areas may never be used for any purpose if a German unit has entered the supply area hex. It is no longer considered a supply area and reinforcements may not arrive there. It may never thereafter regain its supplyarea status.

- (I) Any German unit is considered in supply if it can trace through uninterrupted hexes a three-hex supply line to the edge of the mapsheet; this need not be a road.
- (J) German units may not use as a supply line a road leading off the edge of the mapsheet if the Allies have exited any units off that road as a requirement of the Victory Conditions.
- (K) All units, except Allied parachute units, are in supply during all of Game-Turn 1, regardless of their position on the mapsheet and the rules of supply.
- (L) Allied units which are directly on a supply area hex are always in supply, even if an Enemy Zone of Control extends into that hex.
- (M) After Game-Turn 1, the Allied Player is restricted as to the number of attacks he may make in a single Allied Combat Phase. He is limited to four attacks (i.e., separate combats)

in each Allied Combat Phase. If he makes less than four attacks, he may **not** accumulate the unused number of attacks to be used in some future Combat Phase. This does not affect his ability to defend. The Allied Player may make as many attacks on Game-Turn 1 as he wishes. The German Player has no similar supply restriction.

# **ENTRENCHMENT**

#### General Rule:

Units are entrenched by placing a blank counter on top of them. This increases their defensive ability (see Terrain Effects Chart); however, entrenched units may not attack, and if they move, they lose their entrenched status. Units that are entrenched may not be examined by the Enemy Player without committing himself to attack them.

TERRAIN	EFFECT ON MOV Movement Point or for units with a Mo Allowance of:	EFFECT ON COMBAT addition to attacker's die roll when defender			
	four or less	is in terrain			
Clear	1	1 1			
Bocage	1	3	add 4 (C)		
City (A)	1/3	1/3	add 3		
Road (A)	1/3	1/3	depends on other terrain		
Fortification	depends on other t	add 4			
Enter Enemy Zone of Control	1 additional Movement Point, above ordinary movement cost	3 additional Movement Points, above ordinary movement cost	must be in Enemy Zone of Control to attack		
Leave Enemy Zone of Control (B)	1 additional Movement Point	2 additional Movement Points	none		
to cross: River hexside	2 additional Movement Points	4 additional Movement Points	add 3		
Flooded hexside	4 additional Movement Points	6 additional Movement Points	may not attack through Flooded hexsid		
All-sea hex (D)	Units may not enter	Prohibited			
Entrenched units	No effect	No effect	add 4		

# Notes:

- (A) This is Movement Point Cost when entered through a hexside with road passing through it; if entering through a non-road hexside, the unit must pay the movement cost of the other terrain in the hex.
- (B) The cost for leaving an Enemy Zone of Control applies only to the Allied units; Ger-
- man units pay no additional movement cost for leaving Enemy Zones of Control.
- (C) Armor units may not attack into Bocage hexes.
- (D) Certain hexsides on the mapsheet are allsea hexsides. Units may not move through these hexsides, nor may supply lines be traced through these hexsides.

#### Procedure:

At the end of a Friendly Player-Turn, a Player announces which units will attempt to entrench at the end of the next Friendly Player-Turn. The Enemy Player is aware of what units are attempting to entrench. If the unit which will attempt to entrench is retreated due to combat in the intervening Enemy Player-Turn, it may not entrench. In any case, the unit may not move or engage in combat in the next Friendly Player-Turn. If it has not been retreated by enemy action, it may attempt to entrench after this inactive Player-Turn (if it had been announced in the preceding Game-Turn). Units may only entrench if they are in supply. Units attempt to entrench by rolling a die. A regiment (or brigade) size unit must roll a "1," "2" or "3" on the die to successfully entrench; a battalion-size unit must roll a "1" or "2" on the die to entrench. Any other result yields no effect. Units may attempt to entrench on each Game-Turn, if they are in supply, have announced the attempt in the preceding Game-Turn, and have not been retreated. If more than one unit is in a hex, each may roll separately. When entrenchment is accomplished, place a blank marker (of the Player's color) on top of the entrenched unit.

#### Cases:

- (A) Entrenched units may not attack; when they are defending, the attacker must add four to his die roll before consulting the Combat Resolution Table. If entrenched units move, they lose their entrenched status. Entrenchments are completely immobile.
- (B) Players may not look under Enemy entrenchment markers without committing themselves to attack that position.
- (C) Units in a hex with an entrenchment are either all entrenched, or all not entrenched, i.e., entrenched and unentrenched units may not share the same hex. If units move into a position occupied by entrenched units, they automatically become entrenched. If a unit entrenches, all other units in that hex become entrenched at the same time. If a single unit attacks out of an entrenched hex, all units in that hex become disentrenched (remove the marker).
- (D) Entrenchments do not affect movement into or through a hex.
- (E) Units may **disentrench** at any time, without penalty, either by leaving the entrenched hex, or by removing the entrenchment marker.
- (F) A single unit in an entrenched hex may move out in a Movement Phase, and another move into the hex. However, entrenchment markers which are unoccupied at the end of a Movement Phase are destroyed (remove from map).

# PARACHUTE INFANTRY (paratroops)

# General Rule:

Only the Allied Player receives functioning paratroop units; the German parachute infantry units are treated as normal infantry. The Allied Player receives seven paratroop units at the beginning of the game; these units may be dropped anywhere on the map.

#### Procedure:

See "How to Set-up and Play the Game: Game-Turn 1."

#### Cases:

- (A) All paratroop units **must** be paradropped on Game-Turn 1, or they are lost for the remainder of the game.
- (B) Paratroop units are destroyed if they land on German units, or are scattered onto a German unit.
- (C) Paratroops may not attack in the Game-Turn that they are dropped.
- (D) Paratroop units may not move until they are brought into supply, i.e., they are immobile if they have never been in supply since they were dropped. If they have not been in supply from the time they were dropped, they are destroyed at the end of Game-Turn 3 (i.e., at the end of the German Second Movement Phase). Once paratroop units are brought into supply, they function as ordinary infantry.

# HOW TO SET UP AND PLAY THE GAME: GAME-TURN 1

There are many specialized rules which apply to the Invasion Game-Turn (Game-Turn 1) only; rather than burden the standard rules, which apply for all game functions in Game-Turns 2 through 6, with unnecessary exceptions and additions for the special Invasion rules, it was decided to make a separate Sequence of Play for the Invasion Game-Turn.

# Sequence of Play (for the Invasion Game-Turn 1 only!)

# 1. SECRET DEPLOYMENT OF FORCES

- (A) Allied Secret Deployment
- (i) Invasion force:

There are seventeen numbered invasion beach hexes on the mapsheet, each of which has a box connected to it. The Allied Player should inspect the mapsheet; he then chooses up to eight of the invasion beach hexes that he wishes to land his units on, and writes the invasion beach number and the forces allocated to it on paper (the forces are chosen from the Order of Battle for the Allied Player). He also writes the beach number (five at most) of the beaches that will function as supply areas for the remainder of the game, (Reinforcements arrive at these beaches, and supply is derived from these areas.) These beaches must be chosen from the beach hexes to be invaded. The German Player is not told during the game which beaches are the supply areas.

# (ii) Commandos and Paratroops:

The Allied Player then allocates on which hex numbers the commandos and paratroops will arrive. Note that there are lettered rows of hexagons on the map, and that each row contains a series of numbers, one number (divisible by five) for every five hexes; thus each hex on the mapsheet is assigned a "hex number." Commandos may land on any partially-sea hex, and move in that phase.

See Parachute Infantry rules for limitations on the paratroops landing. The Allied Player writes down the hex numbers and forces for each separate paratroop and commando drop zone and landing point. Paratroops may only drop in regiment-size units

# (B) German Deployment and Unit Placement

# (i) Choosing the German Order of Battle:

After the Allied Player has deployed his forces (on paper, without German knowledge), the German Player secretly writes the numbers "one" through "six" on a piece of paper, and assigns each of these numbers randomly to one of his Orders of Battle (lettered A through F). The Allied Player then rolls the die, which, by reference to the above list, dictates to the German Player which Order of Battle he will use this game; the Allied Player should not be informed, until after the game is finished, which Order of Battle the German Player is using.

#### (ii) German Unit Placement:

The Allied Player turns away from the map, and the German Player may place his units on the map as indicated by his Order of Battle. At the beginning of the game, all German units may be entrenched; thus the Allied Player is not precisely aware of the German defenses until he has committed himself to the attack. German units may not be deployed on partially-sea hexes.

# (C) Allied Unit Placement

# (i) Placement of invading units and Commandos:

The Allied Player returns to the map. He places his invading units in the appropriate invasion beach boxes, and the commandos on their designated partially-sea-hexes.

# (ii) Paradrop:

The Allied Player places each of the Parachute Infantry units, one at a time, on their specified drop zones. As each unit is dropped, consult these tables (depending on the terrain of the drop zones) for the scattering effect during the drop:

# SCATTER TABLE

Die-roll	Clear Terrain	Bocage or City	
1	0	0	
2	0	S	
3	S	-1,S	
4	S	-1,S	
5	-1,S	-1,S	
6	-1	-2,S	

# **Explanation of Results**

- 0: No effect; paratroops land safely.
- -1,-2: lose that number of battalions from the regiment.
- **S:** Scatter, roll die again, and move unit(s) one hex in direction shown by the Scatter Plan printed on the mapsheet. If units are scattered off the mapsheet or into the sea, they are lost.

# 2. ALLIED FIRST MOVEMENT PHASE

The units in the Invasion beach boxes land at the appropriate beach hexes. They may move no further if they are in an Enemy Zone of Control, but they may move their full Movement Allowance (counting the beach hex as the first hex entered) if they do not land in an Enemy controlled hex. The commando units may move their full Movement Allowance, but may not enter Enemy Zones of Control during this First Movement Phase; if they land in an Enemy controlled hex, they may move no further. The paratroop units may not move in this phase. The moving units must ignore any effects of the roads on movement, i.e., move at the cost of the other terrain.

#### 3. ALLIED COMBAT PHASE

The Allied Player then allocates his land units and Naval Gunfire to attack, and resolves combat. Units in an Invasion beach hex adjacent to an Enemy unit(s) must attack all those Enemy unit(s).

#### 4. ALLIED SECOND MOVEMENT PHASE

#### (i) Allocation of Reinforcements:

After resolving all combat, the Allied Player should divide his Second Movement Phase Reinforcements among the supply areas; no more than thirty Combat Strength Points may arrive in any single supply area. The Allied Player may then land his two Glider units. These units may land within four hexes of any paratroop unit, except that they may not land on or adjacent to a German unit.

#### (ii) Movement:

During the Allied Player's Second Movement Phase, all Allied units' Movement Allowances are halved. In addition, the Allied units may not use roads; the units must pay the movement costs of the other terrain in that hex. The Allied Player may move all of his units except for the just-landed Glider units, and out-of-supply paratroop units.

This ends the Allied Player-Turn of Game-Turn 1.

# 5. GERMAN PLAYER-TURN

The German Player then proceeds with his Player-Turn; movement and combat are as usual, with no special rules, except for the fact that all units are considered in supply on Game-Turn 1, regardless of position.

# **GERMAN ORDERS OF BATTLE**

The Germans have several "Orders of Battle" (mixes of forces), each of which is identified by letter and title. The units in an Order of Battle are identified by Strength and Movement number. Refer to the "HOW TO SET-UP AND PLAY THE GAME: GAME-TURN 1" on how to select the German forces.

The German Player may always withhold reinforcements, i.e., delay their arrival to some future Game-Turn. By doing this, he may be able to confuse the Allied Player as to which Order of Battle he is using.

All German Reinforcements arrive at the beginning of the First Movement Phase of the indicated Player-Turn. They arrive at the edge of the map indicated by the direction given. They may not enter the map directly into Allied controlled hexes. The units must be in supply on the first hex they enter on the map. The first hex moved onto is counted in calculating Movement Points.

# GERMAN ORDER OF BATTLE "A"

# "THE ARMORED RESERVE PLAN"

This plan would permit the Allies to come ashore and penetrate, before striking them with an armored reserve. It was favored by Runstedt, and ignored Allied air and materiel superiority.

# AT START

Anywhere on map: six 4-1's.

Within ten hexes of:

Falaise—one 15-6, two 7-6's, one 8-8. South edge of map—one 8-4, one 2-6. Coutance—one 10-6

Directly in Caen or St. Lo: two 7-2's, one 4-1.

# REINFORCEMENTS

Player-Turn 1: North—three 4-1's; West—two

Player-Turn 2: East-six 4-1's.

**Player-Turn 3:** South or East—two 15-6's, one 18-6, one 16-6, four 7-6's, four 14-6's, four 8-8's.

Player-Turn 4: South or East—one 18-6, four 14-6's, two 8-8's.

**Player-Turn 5:** South—three 10-6's; South or East—one 18-6, two 14-6's, one 8-8, three 10d6's, one 6d6.

Player-Turn 6: South—one 15-6, two 7-6's, one

# GERMAN ORDER OF BATTLE "B"

# HISTORICAL DEPLOYMENT

This is what actually happened; it is a combination of several people's plans, and historical happenstance.

# AT START

Anywhere on map: seven 4-1's, two 7-2's. Within ten hexes of:

Falaise—one 15-6, two 7-6's, one 8-8. South edge of map—one 8-4, one 2-6. Coutance—one 10-6.

# REINFORCEMENTS

**Player-Turn 1:** North—three 4-1's; West—two 7-2's.

**Player-Turn 2:** East—six 4-1's; South or East—one 18-6, two 14-6's, one 8-8, one 6d6.

Player-Turn 3: South or East—three 10d6's. Player-Turn 4: South or East—one 16-6, two

14-6's, one 8-8.

Player-Turn 5: None.

**Player-Turn 6:** South or East—two 14-6's, one 8-8, three 5-2's.

# GERMAN ORDER OF BATTLE "C"

# "FAST RESPONSE"

This OB assumes the Germans had more of their wits about them, i.e., someone was awake at the switch, and issued the necessary orders to move the reserves faster.

#### AT START

Anywhere on the map: seven 4-1's, four 7-2's. Within ten hexes of:

Falaise—one 15-6, two 7-6's, one 8-8. South edge of map—one 8-4, one 2-6. Coutance—one 10-6

# REINFORCEMENTS

Player-Turn 1: South or East—one 15-6, two 7-6's, one 8-8.

Player-Turn 2: North— three 4-1's; West—two 7-2's; East—six 4-1's; South or East—two 15-6's, four 7-6's, two 8-8's.

Player-Turn 3: South or East—three 10d6's, one 6d6.

Player-Turn 4: South-three 10-6's.

Player-Turn 5: South or East—one 16-6, two 14-6's, one 8-8.

Player-Turn 6: South-two 14-6's, one 8-8.

# GERMAN

# ORDER OF BATTLE "D"

#### "STRONG SEVENTH ARMY"

This presumes a strengthening of the army guarding Normandy, probably as a compromise, since Hitler had an intuitive feeling that this would be the invasion area.

#### AT START

Anywhere on the map: seven 4-1's, four 7-2's. Within ten hexes of:

Falaise—one 15-6, two 7-6's, one 8-8. South edge of map—one 8-4, one 2-6. Coutance—one 10-6.

#### REINFORCEMENTS

Player-Turn 1: North—three 4-1's; West—two 7-2's; South or East—one 15-6, two 7-6's, one 8-8

**Player-Turn 2:** East—six 4-1's; South or East—one 15-6, one 18-6, two 14-6's, two 7-6's, two 8-8's, one 6d6.

Player-Turn 3: South or East—one 16-6, two 14-6's, one 8-8, three 10d6's.

Player-Turn 4: South or East—one 15-6, two 7-6's, one 8-8; South—three 10-6's.

**Player-Turn 5:** South or East—three 5-2's; South—two 14-6's, one 8-8.

Player-Turn 6: South-two 7-2's.

# GERMAN ORDER OF BATTLE "E"

# "OKW PLAN"

This is what OKW would have liked to do in the event of an invasion; immobile troops on beaches, with a rapid motorized response. It represents about the best the Germans could have done with their original strategic deployment.

# AT START

Anywhere on the map: nine 4-1's, four 7-2's. Within ten hexes of:

Falaise—one 15-6, two 7-6's, one 8-8. South edge of map—one 8-4, one 2-6. Coutance—one 10-6.

# REINFORCEMENTS

**Player-Turn 1:** South or East—one 15-6, one 18-6, two 14-6's, two 7-6's, two 8-8's; West—two 7-2's; North—one 4-1.

**Player-Turn 2:** South or East—one 16-6, one 15-6, two 14-6's, two 7-6's, two 8-8's, six 4-1's, one 6d6, one 10d6.

Player-Turn 3: South or East—two 10d6's. Player-Turn 4: East—one 15-6, two 7-6's, one

8-8; South—two 14-6's, one 8-8.

Plaver-Turn 5: South—three 10-6's; South or

East—three 5-2's.

Player-Turn 6: South—two 7-2's.

# **GERMAN** ORDER OF BATTLE "F"

# "ROMMEL PLAN"

This is what Rommel would have done (or tried to) if he had been given a free hand in the West. It assumes massive redeployment on a strategic scale, as well as a commitment to put everything on the beaches as quickly as possible. It also assumes that the Allied air power was not diverted from bombing the Reich to break up France's transport systems.

#### AT START

Anywhere on map: six 4-1's, two 7-2's, one 8-4, two 7-6's.

Within ten hexes of:

Falaise-one 15-6, one 8-8. South edge of map-one 2-6. Coutance-one 10-6.

#### REINFORCEMENTS

Player-Turn 1: North-three 4-1's; West-two 7-2's; South or East-one 18-6, one 16-6, four 14-6's, two 8-8's.

Player-Turn 2: South or East-one 18-6, two 15-6's, two 14-6's, four 7-6's, three 8-8's.

Player-Turn 3: South-two 14-6's, one 8-8; East-one 18-6, two 14-6's, one 8-8, three

Player-Turn 4: East-two 15-6's, four 7-6's, two 8-8's, three 5-2's.

Player-Turn 5: South-three 10-6's; East-three 4-1's, two 7-2's.

Player-Turn 6: South or West-three 5-2's.

# **HOW TO WIN: Victory Conditions**

The winner of Normandy is determined by the number of Victory Points gained by the Allied Player by the end of Game-Turn 6. The Allied Player receives Victory Points for geographic gains and from the Victory Points added by the Order of Battle used by the German Player. As the German Order of Battle increases in strength, the Allies receive more Victory

Thus victory is not awarded on the basis of the historical campaign, but on the efficiency with which each Player uses the forces available to

The Allies receive Victory Points for certain cities if they fulfill all three of the following conditions:

1) the Allies must be able to trace a supply line to all hexes of a city at the end of Game-Turn

2) the Allies must occupy, or have been the last to pass through, all hexes in the city;

3) the Germans must not have a unit in, or adjacent to, any hex of the city at the end of Game-Turn 6.

These cities are:

City	Victory Points
St. Lo	2
Caen	6
Bayeaux	2
Cartentan	2
Falaise	2

The Allies also receive Victory Points for moving one division (three regiments or brigades, or their equivalent) off each of the mapsheet by road. At the end of the game, the Allies must be able to trace a supply line exiting off that road hex, or no Points are received for these exited units. The following Victory Points are received for this action:

Victory Points			
8			
6			
4			
12			

(a) Points are received for moving off the North edge of the mapsheet only if this is done before the end of Game-Turn 3.

In addition, the Allied Player receives Victory Points for the depth of the beachhead. The furthest supplied unit-penetration from the nearest partially-sea-hex is measured in terms of hexes, and one-half of a Victory Point is awarded for each hex of penetration. This is modified if more than one beachhead exists, i.e., if all supply areas are not connected by roads. If there are two beachheads, the number of Victory Points for penetration should be divided by two; if there are three beachheads. the number of points should be divided by three, etc. The furthest penetrating unit must be in supply.

At the completion of the game, the Allied Player adds up the Victory Points from all these sources, and adds (or subtracts) the Victory Points awarded to him by the Order of Battle used by the Germans. This is the final Victory Point total.

#### Levels of Victory

As we all know, victory comes in many varities, and what may be claimed as a current victory may be a long-term defeat. In the game of Normandy, an "historical" victory is gained by the Allied Player if he achieves 25 Victory Points from geographic gains. However, Players may rate their personal victories (i.e., how well they handled their forces) by including the additional points given by the German Order of Battle. This then enables one to rate Player Victories on the following scale:

Allied Victory Point total	Level of Victory
-5 to 9	German Decisive Victory
10 to 14	German Provisional Victory
15 to 22	German Marginal Victory
23 to 30	Allied Marginal Victory
30 to 39	Allied Provisional Victory
49 and over	Allied Decisive Victory

These are the Victory Point additions (or subtractions) that the Allied Player receives for the German Orders of Battle (see Victory Con-

German Order of Battle Employed	Victory Point effect		
A	-5		
В	0		
С	+5		
D	+10		
E	+15		
F	+20		



# ALLIED ORDER OF BATTLE / NORMANDY

The Allies have only one Order of Battle; this represents, in effect, the maximum effort of the Allies in putting troops ashore. The Order of Battle is divided into three sections: Invasion Force; Second Wave; and Follow-up

forces. The special Sequence of Play (how to set and play the game) will instruct the Allied Player on how to deploy the first two forces, which arrive on Game-Turn 1.



#### INVASION FORCE

These forces arrive at the beginning of the Allied First Movement Phase on Game-Turn 1.

Invasion Beach Assault Forces: eight 7-4's, eight 6-10's. Any of these forces which are not landed may be landed after Game-Turn 1 (follow-up forces).

Parachute Infantry: eight 7-4's (not seven as stated in the rules).

If the Commandos or parachute infantry are not landed, in the beginning of first Movement Phase, they may never thereafter be brought into play.



Commandos: eight 2-4's



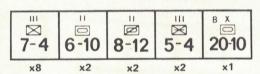
7-4

x8

# SECOND WAVE

These forces arrive at the beginning of the Allied Second Movement Phase on Game-Turn 1. They may be brought onto the map of the supply areas, at a maximum of 30 Combat Strength Points per supply area. See special Sequence of Play (Game-Turn 1) for landing of Glider units.

**Beach Landing Force:** eight 7-4's, two 6-10's, two 8-12's, two 5-4's, one 20-10. Any of these forces which are not landed may be landed after Game-Turn 1.



Gliders: one 7-4, one 5-4.

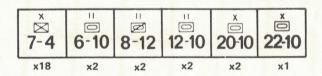
× 7-4	5-4
x1	x1

# FOLLOW-UP FORCES

These forces may arrive at the beginning of any Allied Second Movement Phase after Game-Turn 1. They may be brought onto the map at any of the supply areas, at a maximum of 15 Combat Points per supply area. As many or as few supply beaches may be used in a Player-Turn as the Allied Player wishes. To these Follow-up forces must be added any unlanded forces from the Invasion Beach Assault Forces and the Beach Landing Force.

**Follow-up Forces:** eighteen 7-4's, two 6-10's, two 8-12's, two 12-10's, two 20-10's, one 22-10.

For the units which are larger than 15 Combat Strength Points, it is possible to land them on a supply area; to do this, do not bring any reinforcements in on one Game-Turn; in the following Game-Turn, 30 Combat Points may be brought in at that supply area. Thus, the landing capacity of a beach is cumulative. If you brought no reinforcements in for two Player-Turns, you would be able to lift 45 Combat Points through that beach on the third Player-Turn.



Die Roll					Comb	at Odds						Rol
	1-2	1-1	2-1	3-1	4-1	5-1	6-1	7-1	8-1	9-1	10-1	
1	AR	AR	DR	DR	EX	EX	DX	DX	DX	DX	DX	1
2	AR	AR	DR	DR	DR	EX	EX	DX	DX	DX	DX	2
3	AX	AR	AR	DR	DR	DR	EX	EX	DX	DX	DX	3
4	AX	AR	AR	AR	DR	DR	EX	EX	EX	DX	DX	4
5	AX	AX	AR	AR	DR	DR	DR	EX	EX	EX	DX	5
6	AX	AX	AX	AR	AR	DR	DR	DR	EX	EX	EX	6
7	AX	AX	AX	AR	AR	DR	DR	DR	EX	EX	EX	7
8	AX	AX	AX	AR	AR	DR	DR	DR	DR	EX	EX	8
9	AX	AX	AX	AX	AX	AX	AR	AR	AR	DR	DR	9
10	AX	AX	AX	AX	AX	AX	AX	AR	AR	AR	DR	10

# **EXPLANATION OF RESULTS**

AX: Attacker Eliminated; all attacking units are removed from the map.

**DX:** Defender Eliminated; all defending units are removed from the map.

**EX:** Exchange; eliminate all of the defender's units, and eliminate an equal or greater number of the attacker's units, in terms of Combat Strength Points. The Attacker loses on the full Combat Strength basis of the

Defender, before allowing for supply and terrain modifications of that value.

DR/AR: Defender/Attacker Retreat; move Player's units back two hexes; units must end this retreat two hexes distant from the starting position of the retreat, and may not retreat across river, sea, or Flooded hexsides. Units may not retreat into all-sea hexes, or into Enemy occupied or controlled hexes. If units cannot meet these retreat requirements, they are destroyed (eliminated). The Enemy Player dictates the path of retreat.

# NAVAL GUNFIRE AVAILABLE PER COMBAT PHASE

Mission type	application of the	Combat Strength per Mission			
and number of missions available	hex range	attack-support	defense-support		
Light-four	2	40	10		
Medium-one	6	25	5		
Heavy-three	10	10	0		

# Designer's Notes: NORMANDY

"They must be stopped on the beaches." That's how Feldmarshall Erwin Rommel, the commander of the German troops defending Normandy in June, 1944, described the only "correct" solution for defeating the expected Allied invasion. His superiors did not agree with him. Still impressed by the manner in which German ground forces had defeated Allied armies in the open in 1940, they felt the same tactic could be made to work four years later. Rommel, however, had seen in North Africa that the Allies were no longer novices at mobile warfare, and for the invasion of the continent they had built up a superiority in all the forces which had given the Germans the edge in 1940: namely, tanks, aircraft and artillery. Rommel's plan of "stopping them on the beaches" did not mean that the Allies would not get ashore, although he would have liked to have had enough troops and equipment to achieve this. A second variant of this plan was to commit every available German mobile unit to the invasion area as soon as a major Allied invasion was confirmed. By throwing the Allied forces back into the sea, Rommel would achieve the same ends as if he had stopped them on the beaches. Would this have worked?

To solve this question, and many of the others that hinged on what the Germans "might have done," we have included six Orders of Battle for the Germans. One of these, of course, is the one originally used by the Germans. The other five are possibilities which the Germans were quite capable of carrying out. The basic German problem was not so much one of numbers, but rather the uncertainty as to where the Allies would strike. It was this uncertainty which made the Allied invasion possible at all. Although the Allies outnumbered the Germans by a considerable margin, this in itself would not guarantee a successful invasion. The Allied numerical advantage was: Men-1 million to 0.7 million; Medium and Heavy Tanks-5500 to 1400; Light Tanks and Assault Guns-2000 to 800; Field Artillery-4800 to 3200; Fighters and Fighter Bombers-4300 to 420; Bombers-4400 to 400; and, finally, replacements (primarily for infantry)-120,000 to 20,000, plus an additional 50,000 a month for the Allies versus only a few thousand additional for the Germans. In addition, the Allies had unquestioned control of the seas and, as the numbers have already shown, similar superiority and control in the skies. The Germans had a total of some 60 division-size combat units awaiting 58 Allied division (or equivalent) size units. Division for division, the Germans were no match for the Allies. What the battle came down to was who could get there first with the most. For the Allies only had enough shipping to land eight divisions in the first week; after that (assuming the bridgehead was secure), three more per week could be brought in, until the Allied superiority simply overwhelmed the Germans. The first week was going to be critical. The effort the Germans made was not the maximum they were capable of: thus the additional Orders of Battle. The Germans had an excellent chance of throwing the Allies right out of France before a bridgehead could be secured. All they had to do was make the correct decision and the required effort with what was available to them.

The Allies, of course, were using all they had, and then some. They did what the Germans considered impossible when they threw such a large and well-equipped force across the English Channel. Many of these advantages are not apparent in the game. For example, there is Allied air superiority. The most effective use of Allied aircraft was in disrupting the movement of German men and vehicles both in the combat zone immediately behind the firing line as well as further back in the communications zone (mainly off the playing map). This air cover prevented the Germans from moving their combat units during the day, they had to move at night and thus had to move more slowly than similar Allied units. The disruption of German supplies placed the Germans in much the same position as the Allies, who had to bring their supplies over the beaches with great difficulty. This is reflected in the limited attack rule. The congestion of Allied vehicles in the restricted beachhead is also reflected in the movement rate of the Allied infantry units, which did not have motor vehicles directly attached to them although they were always available. It was simply difficult to get the vehicles to the infantry, and then to move the mass of vehicles through the restricted road net. An Allied infantry regiment, for example, would occupy five road hexes on the map when moving by road. The Germans were no better off in this respect, except that they had more roads available.

Another major Allied advantage was their preponderance of artillery, which was used more often and more effectively than aircraft for attacking enemy combat units. To have included the actual units would have almost doubled the number of units in the game, and, with the extra rules needed to govern their use, would have practically created another separate game within the existing one. To solve this problem, we have computed into the combat strengths of the Allied units the advantages they would gain from their artillery. The extraordinary additional firepower available to the Allies from their invasion fleet had to be reflected in a special naval artillery rule.

What was the original battle like? In the game you will quickly see the importance of the first move. In other words, the "plans" of both sides can often decide the game. Both sides had to try and second-guess each other. What was committed before the game began could easily decide the game. In the original battle this became all too obvious after the first day of battle. Allied landings took place at five beach areas (Utah, Omaha, Gold, Sword and Juno, as marked on the map), with varying results. The landings at Utah (one division

supported by two parachute divisions) went off well, getting eight kilometers inland by the end of the first day. At "bloody" Omaha the story was far different. Running into an unexpected German division, the American assault forces almost didn't make it. By the end of the first day it was just barely ashore. The defending Germans, fortunately, were in worse shape. On the British beaches (Gold, Sword and Juno), the Canadian and British forces established a firm bridgehead the first day, penetrating ten kilometers on a wide (28km) front. This was accomplished with three assaulting divisions supported by one parachute division. For the next week, there was considerable fighting around Cartentan and Caen as the Allied bridgeheads joined up and began pushing out to make room for the dozens of divisions and mountains of supplies and equipment that would be needed to wear down the Germans and break out, By 11 June, the bridgehead was 38 kilometers inland at its deepest and over 50 kilometers wide. But it hadn't been easy and it hadn't been a sure

The Combat Strengths and Combat Results Table were computed from two sources of information. First, there was hard data, such as the actual casualty figures for both sides (about 22,000 for the Germans and 30,000 for the Allies), including the daily rate of loss for different units under different conditions. Also, there was the actual organization and armaments of units on both sides. Secondly, there was "soft" data, such as the tactics used by both sides which included the numerous tactical options allowed each player within the framework of the game. Man for man, the Germans were pretty much of a match for their Allied opponents. Although German manpower itself was somewhat inferior to the Allied, German superiority in most classes of weapons (except artillery) evened this up. This even applied to tanks. The two German tanks, the Pz IV and the Pz V, were vastly different. The Pz IV was somewhat inferior to the main Allied tank, the "Sherman." The Pz V ("Panther") was actually a heavy tank and had a considerable advantage over the Sherman. However, the Panther was still prone to numerous mechanical failures, and, because of its size and weight, was somewhat less nimble than the lighter and more mechanically reliable Sherman. In addition, the German tank battalions contained about 35% fewer vehicles than the Allied (except for the SS tank battalions, which still had fewer tanks than Allied units). Both sides usually fought in regimental or battalion size "battlegroups" each formed around a "maneuver battalion" (tank or infantry), and also containing portions of the supporting units (engineer, anti-tank, etc.) found in the division. The game system used for NORMANDY is, obviously, an abstraction from reality. But it works and it does recreate rather well the original situation as well as the possible alternatives. That, of course, is what a game is supposed to do.