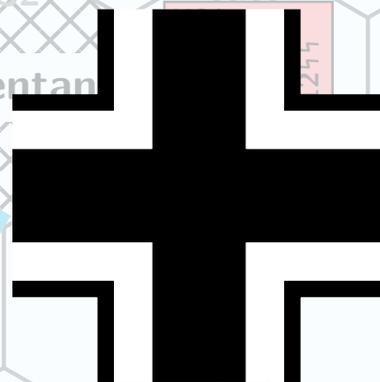


# D-DAY



Avalon Hill Game Company  
Compiled by Christian Holm Christensen

## Original Credits

Original Research & Design	Charles Roberts
Original Development	Richard Hamblen, Donald Greenwood
Third Edition Rewrite	Jim Stahler
Playtesting	Joel Davis, Robert Medrow, Robert Beyma, Don Howard
Typesetting	Colonial Composition
Printing	Monarch Services, Inc.

This version all text, illustrations, graphics, and layout by Christian Holm Christensen.



Typeset in L<sup>A</sup>T<sub>E</sub>X by Christian Holm Christensen using the package `wargame`. The sources of this document and supporting material is available from [Gitlab](#).

© 2022 Christian Holm Christensen. This work is licensed under [CC BY-SA 4.0](#). Last updated October 28, 2022.

**Preface**

This is a revamp of the game *D-Day* originally published by Avalon Hill Game Company in 1964. This rework is based on the 3<sup>rd</sup> edition from 1977. The original game has been out of print for a long time, which is a shame because it is a nice game.

All text and graphics in this edition is entirely original. In this rework, NATO App6(c) symbology is used consistently throughout, the rules have been slightly restructured, and explanatory examples are given. Unit counters are made double-sided with the back-side reflecting the out-of-supply state. Additional counters to record Allied captured supply hexes and second-turn isolation are also available.

The document contains the rules and tables. Auxiliary documents containing the board, counters, and overview chart are also available. The counters should be printed out and glued onto cardboard and cut out with a sharp razor. The board sheets can be glued together to make a paper board, or glued onto cardboard for a more sturdy playing surface. In addition, a single 6-sided dice is needed.

**Contents**

**1 Introduction** . . . . . **4**

**2 Components** . . . . . **4**

    2.1 The board . . . . . 4

    2.2 The units . . . . . 4

**3 Stacking** . . . . . **6**

**4 Definitions** . . . . . **6**

    4.1 Zone of Control (ZOC) . . . . . 6

    4.2 Occupy . . . . . 6

    4.3 Control . . . . . 6

**5 Game and turn sequence** . . . . . **6**

    5.1 Initial setup . . . . . 6

    5.2 German deployment . . . . . 7

    5.3 Turn sequence . . . . . 7

**6 Supply phase** . . . . . **8**

    6.1 German faction . . . . . 8

    6.2 Allied faction . . . . . 8

    6.3 Effect of out of supply . . . . . 9

**7 Allied invasion phase** . . . . . **9**

    7.1 Coastal invasion hexes . . . . . 9

    7.2 Invasion hexes . . . . . 10

**8 Allied airborne phase** . . . . . **10**

**9 Movement** . . . . . **11**

    9.1 Movement on the continent . . . . . 11

    9.2 Replacements . . . . . 12

    9.3 Allied reinforcements . . . . . 13

    9.4 Allied sea movement . . . . . 14

**10 Combat phase** . . . . . **15**

    10.1 Allied combat air support . . . . . 15

    10.2 Combat odds . . . . . 17

    10.3 Automatic defeat . . . . . 17

    10.4 Combat resolution . . . . . 18

**11 Allied tactical air support phase** . . . . . **20**

    11.1 Close air defence . . . . . 20

    11.2 Unit interdiction . . . . . 20

    11.3 River interdiction . . . . . 21

**12 Attrition phase** . . . . . **21**

**13 Victory conditions** . . . . . **21**

**A Considerations** . . . . . **22**

    A.1 General overview . . . . . 22

    A.2 The terrain . . . . . 22

    A.3 Allied strategy . . . . . 22

    A.4 German strategy . . . . . 22

    A.5 The real campaign . . . . . 22

**B Examples of combat odds** . . . . . **23**

# Rules

## §1 Introduction

This game simulates the Allied invasion into Western Europe in June 1944, and the following 50 weeks, where they tried to reach the Rhine and establish bridgeheads.

Although the game is based on historical events, it is not a precise and accurate simulation of the conflict, known as *Operation Overlord*. Indeed, the Allied faction (or player) has the option to invade all along the Western and Southern coast line of Europe, not just in Normandy, and units are available to both faction in a way that is not entirely historically correct. *D-Day* is a game that explores *possible* historical outcomes, while at the same time providing enjoyable game-play. That balance sometimes tips in an a-historical direction.

## §2 Components

The game consist of

- A board with a map of Western Europe.
- Counters
  - 101 Allied ground unit double-sided counters,
  - 73 German ground unit double-sided counters,
  - 10 Allied air force counters,
  - 4 counters, two for each faction, to record replacement points,
  - 63 counters to mark Allied captured supply points,
  - 21 Mulberry amphibious port markers to mark successful Allied invasions,
  - 3 German strategic installation markers,
  - 57 isolation markers, and
  - 1 double-sided turn counter.
- These rules.

A single six-sided dice is also needed.

### §2.1 The board

The board holds a map of the continental Western Europe, from North Germany to the South of France. On the land part are drawn field hexagons (hexes) meant to capture troop manoeuvres. Each hex has grid coordinates printed on it. These coordinates are used to identify the hexes. The various features of the map are summarised in table Table 1.

Most hexes are *clear*, but importantly some hexes represent *mountains*, *towns*, *fortifications*, and *fortresses*. These non-clear hexes, as well as river hex sides, provide a defender with advantages.

There are a number *ports* () , coastal or in-land, on the map. These play a crucial role for the Allied faction

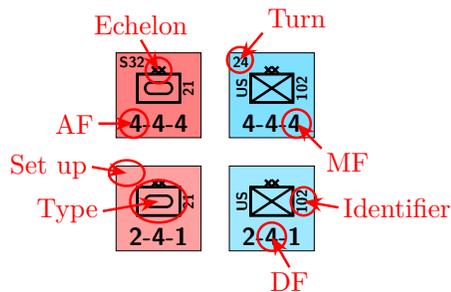


Figure 1: Elements of a unit

in that these are *supply points* (§6.2).

The western and southern coast lines are divided into *sections*, indicated by colours. These represent different invasion options for the Allied faction. For example, the historical invasion section of Normandy is coloured a dark cyan. On the sea side of these section borders are hexes with a white border. These represent areas from which the Allied faction can initiate an invasion. In these hexes are also a number and an arrow pointing to the coastal hex in which the invasion can take place. The number indicates the *supply* capacity of the invasion hex.

In some invasion sections there are also boxed numbers with an arrow pointing to an *in-land* port. These areas are *not* possible starting points for an invasion. Instead, the number indicates the *supply* capacity of the pointed to in-land port once *controlled* by the Allied faction.

Initially, *all* of continental Europe is controlled by the German faction. The Allied faction may, through movement and combat, capture and control more and more of the operational area. *Some* towns and fortified towns are placed in a larger perimeter which needs to be controlled by the Allied faction to control the town it self. These perimeters are indicated by dotted borders of the same colour as the printed name of the town or fortified town.

### §2.2 The units

In the game are a total of 174 counters representing troops (units) of either faction. These are the ground troops that took part in the historical conflict. The background colour of the counters identifies the nationality of the unit (see Table 2). Elements of the units counters are illustrated in Figure 1. The elements are

**Echelon** The size of the unit (Table 2).

**Type** The kind of the unit (Table 2).

**Identifier** The historical unit identifier.

**Parent identifier** The historical identifier of the parent organisational unit (e.g., division).

Hex	Move	Combat	ZOC	Other
Clear	1	—	—	German replacement
River	**	2× DF*	None across	French border French reinforcements
Mountains	Stop	2× DF	—	Invasion & supply Invasion area Supply point capacity
Impassable		None		Supply Supply point capacity
Fortification	1	2× DF	—	Port Reinforcement & supply point
Town	1	2× DF	—	V1 launcher 1 Allied RP
Fortress	1	3× DF	None	V2 launcher 1 Allied RP
Dyke	1†	None	Into	U-boot base 1 Allied RP

Table 1: Features of the map.

Size			
xxxx	T	Theatre	
xxxx	AG	Army group	
xxx	A	Army	
xx	D	Division	
x	BD	Brigade	
...	REGT	Regiment	
Type			
	I	Infantry	
	ST	Static	
	ABI	Airborne infantry	
	M	Armoured infantry	
	A	Armoured	
	HQ	Headquarters	
♠ German		♣ Allied	
	DE Heer		BR Britain
	SS Waffen-SS		US USA
			FR France
	CA Canada		PL Poland

Table 2: Unit sizes, types, and nationalities

**Set up** If the unit is present on the map from the beginning, then this gives the starting hex.

**Turn** If the unit arrives later in the game, then this gives the turn number at which the unit arrives.

**AF** The *Offensive combat factor* is the strength of the unit when it attacks other units.

**DF** The *Defensive combat factor* is the strength by which the unit defends against attacks.

**MF** The *Movement factor* represents the speed and manoeuvrability of the unit.

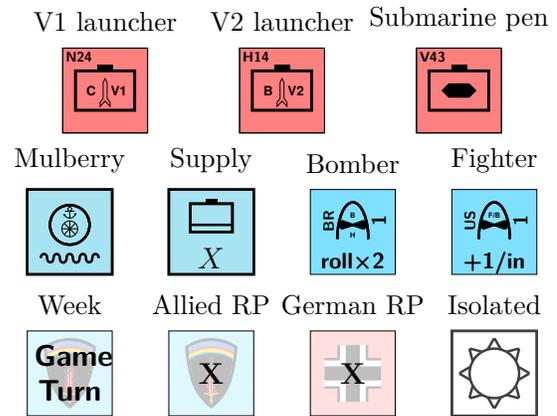


Figure 2: Air units and markers. The top row shows the three German strategic installation markers. The middle row shows Allied markers: amphibious port (Mulberry), supply, a British bomber unit, and an US fighter unit. The bottom rows is the game turn marker, Allied and German replacement point markers, and a marker to indicate second week of isolation of a unit.

Table 2 shows the unit sizes and types used in the game. A unit is identified by its parent unit (if any) and its own identifier, separated by a slash ‘/’, followed by the unit type and echelon. Table 2 gives the the abbreviations used to identify units in these rules (as per NATO standard).

### §2.2.1 Other units and counters

Figure 2 illustrates some auxiliary markers used in the game.

These markers represent German strategic installation. Should the Allied faction manages to capture

any of these, it means that the faction has additional resources to allocate to replacing troops (§9.2.2).

☉☐ These are the Allied markers used to indicate successful invasion hexes (§7) and controlled supply points (§6.2).

☁☁ Allied air force markers used for marking carpet bombing, close air support, and air interdiction (§11).

The bottom row of Figure 2 shows the game turn to keep track of time (§5), markers to keep track of replacement points (RP, §9.2), and a marker to indicate second week of isolation of units (§6).

None of these markers or units count toward the stacking limitations (§3).

### ☐ §3 Stacking

♣ The German faction may place up to *three* ground units (including headquarters) in a single hex.

♥ The Allied faction may place up to *two* regular ground units (non-headquarters) in a hex, or *three* units if at least one of them is a headquarter unit (☐). This also applies to sea hexes during an invasion.

These limitations *must* be met at the end of both the *movement* (§9) and *combat* phases (§10). That is, stacking limitations *may* temporarily be violated when moving friendly units through hexes or when retreating (§10.4.2) units through hexes occupied by friendly units.

Units can *never* enter a hex occupied by an enemy ground unit.

♥ Allied air units *do not* count toward the stacking limits. Depending on the type of mission flown by the air unit, it *may* be placed on top of German units.

Auxiliary markers and units, shown in Figure 2 do not count toward stacking limitations.

## §4 Definitions

In this section a number of definitions are given. The rest of the rules will rely on these concepts.

### ☼ §4.1 Zone of Control (ZOC)

Every ground unit excerpt a *Zone of Control* (ZOC) in the six hexes neighbouring the hex it occupies. Allied air units *do not* excerpt ZOC.

A unit is said to be *engaged* with an enemy unit if it is in that enemy units ZOC. If a unit moves out of enemy ZOC, it is said to *disengage*. If it moves back into enemy ZOC (of the same enemy unit or directly into a *different* enemy units ZOC) it is said to *reengage*. Enemy ZOC remains in effect *even if* occupied by a friendly unit.

*Exception* ZOC does not extend into impassable mountain hexes.

☐ *Exception* ZOC does not extend into nor out of a fortress hex.

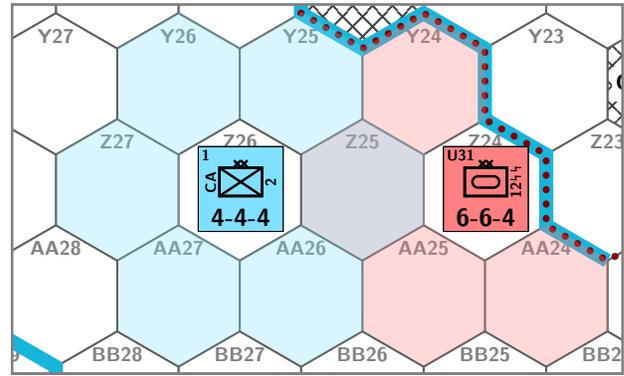


Figure 3: Zone of control. The Allied CA 2 ID unit excerpts control into the blue shaded hexes. The German ♣ 12 AD unit excerpts ZOC into the grey-shaded hexes. It does not excerpt ZOC on the other side of the Seine into Y23 and Z23. Note that the ZOCs overlap in Z25.

☐ *Exception* ZOC does not extend over a river hex side in either direction.

☼ *Exception* Allied ZOC from a sea invasion hex *only* extends into the coastal hex pointed to by the supply capacity number and arrow. German ZOC from a coastal hex extends into the sea invasion hex that points to hex. German ZOC *does not* extend into sea hexes that does not point to the coastal hex.

An example of ZOC is shown in Figure 3.

Enemy ZOC dictates if and how units must conduct combat during the *combat* phase (§10). Pay close attention to the rules involving ZOC.

### §4.2 Occupy

A unit is said to *occupy* a hex if it is *in* that hex. A unit does *not* occupy hexes in its ZOC.

### §4.3 Control

A hex is *controlled* by a faction if one of its units was the last to

- pass through or occupy that hex, *or*
- have that hex in its ZOC and the hex was free of enemy ZOC.

The opposing faction may regain control of a hex by the same conditions.

## §5 Game and turn sequence

### §5.1 Initial setup

Place the board on a flat surface. If the board is in multiple sections, it can be held together by paper clamps or the like.

Place all Allied and German units in the *Allied units available in Britain* and *Available German units*, respectively, boxes on the board.

♣ The German units can be placed in any way the German faction chooses. However, it is advisable to place a unit at its designated slot so as to make sure all unit counters are accounted for.

♣ Place the three German strategic installation markers on the designated hexes on the map. The V1 cruise missile installation (☒) at Boulogne (N24), the V2 ballistic missile installation (☒) at Rotterdam (H12), and the submarine pen (☒) at Brest (V43).

♥ The Allied unit counters need not be placed in their designated slot. However, an Allied unit *must* match the *nationality* and *type* (§2.2) of the slot it is placed into.

Both factions place both their ×1 and ×10 *replacement point* counters in the “0” slot on the replacement points track on the board. The *isolation* counters should be placed near by to board and accessible to both factions.

☒♣ The supply and amphibious dock (Mulberry) counters should be kept off-board but accessible to the Allied faction.

### ♣ §5.2 German deployment

The German faction *may* then deploy *all* of its units onto the board, within normal stacking limits, and observing the following limitations

- No unit can be placed in neutral countries, sea hexes, or impassable mountain hexes.
- ☒ All static infantry units *must* be placed on a coastal hex or an in-land port hex.
- ♣ The units
  - ☒ 44 9 AD,
  - ☒ 44 49 MBD,
  - ☒ 44 51 MBD
  - ☒ DE 3 MD,
  - ☒ DE 15 MD,
  - ☒ DE 25 MD, *and*
  - ☒ DE 106 ABD
 (these are marked with a ♣ in the upper right corner) *must* be placed in any German replacement hex.

Any remaining units *may* be placed anywhere on the board (though not in sea, or impassable mountains hexes, or in neutral countries). The German faction is *not* required to deploy all troops to the continent.

*Alternatively*, the German faction may choose to follow a rough historical deployment. In this case, the historical deployment *must* be followed in full. Place the German units in the hexes indicated in the upper left corner of each counter.

*When playing solitaire it can be useful to follow the historical deployment, since otherwise the Allied faction would privy to the considerations of the German faction (controlled by the same player).*

♥ Allied turn
Supply
Invasion
Airborne
Movement
Combat
Tactical air
Attrition
♣ German turn
Isolation
Movement
Combat
Attrition

Table 3: Turn sequence. The Allied faction start each turn and progress through the six phases of its turn. Then the German faction performs its three phases, and thus conclude the turn.

Once completed, the game start in earnest. The game progresses over 50 *turns*. Each turn represent a week of real time, starting on the 6<sup>th</sup> of June, 1944. The first step of the first week is for the Allied faction to commit troops to the first invasion: *D-Day*.

### §5.3 Turn sequence

Each turn follows the *turn sequence* shown in Table 3. First, the Allied faction executes its seven phases, in order, of its turn, followed by the German faction. The faction who’s turn it is, is called the *active* (or *attacking*) faction, while the other faction is termed the *passive* (or *defending*) faction.

The six phases are

**Supply** phase. The faction determines if any of its units are *out-of-supply* as detailed in §6.

♥ **Allied Invasion** phase. The Allied faction *must* in week 1, *and*, at the factions discretion *once* in weeks 9 through 16 (both included), perform an *invasion* (§7).

♥ **Allied Airborne** phase. The Allied faction assigns airborne drops (§8).

**Movement** phase. During this phase, the Allied faction may reinforce with units from Britain (§9.3), and may allocate air support units for offensive support. The active faction may spend *replacement points* during the movement phase, to restore previously eliminated units (§9.2). The active faction may move any or all of its units as explained in §9.

**Combat** All friendly units in enemy ZOC (§4.1) *must* attack, and all enemy units in friendly ZOC *must* be attacked. Each combat (§10) is resolved in any order chosen by the active faction, but *must* be fully completed before moving on to the next combat.

♥ **Allied Tactical air** phase. During the Allied turn, the

faction allocates available air units to tactical missions, such as defensive support or interdiction (§11).

**Attrition** phase. Any unit that has been out of supply for two weeks is eliminated (§12).

The *passive* faction is *not* allowed to move, attack, or otherwise manoeuvre during the *active* factions turn, except for retreats (§10.4.2) from an AR result. The passive faction should, however, not feel so complaisant as to not follow along the active factions turn.

## §6 Supply phase

A *line of supply* (or sometimes *supply line*) is a path of adjacent hexes originating at a unit and that

- terminates at a valid supply point for the units faction,
- *does not* pass through
  - enemy units or ZOC of enemy units,
  - impassable mountain or sea hexes,
  - neutral countries, *or*
  - the edge of the map.

The line of supply *does not* include the hex occupied by the unit, but *does* include the supply hex. Thus, a unit may be engaged with the enemy and still be able to trace a line of supply.

  As ZOC does not extend in or out of a fortress nor across river hex sides, it is possible to trace a line of supply past an enemy unit in a fortress or on the opposing side of a river.

A unit that *cannot* trace a valid line of supply is *isolated* or *out of supply*.

### 🇩🇪 §6.1 German faction

Valid supply hexes for the German faction are the hexes along the *east* edge of map, *north* of Switzerland. That is hexes A1, B1, C2, ..., W12.

 A fortress is considered a valid point of supply for German units *occupying* the fortress. Thus, German units occupying a fortress are *never* isolated, even if it cannot trace a line of supply to the east edge of the board. German units *outside* of a fortress *cannot* use a fortress, friendly occupied or not, as a valid point of supply, and *must* be able to trace a supply line to the east edge of the board.

### 🇺🇸 §6.2 Allied faction

 The Allied faction flips all up-side down fighter units in the *Allied units available in Britain* box to show their front face. Any Allied fighter unit on the continent are returned to their slot in *Allied units available in Britain* face-up. The six Allied fighter units are thus marked as available to fly missions (§10.1.1 and §11) this week.

 Up-side down Allied bomber units are *not* flipped. The Allied bomber units are *one-use* units and once spent (§10.1.2) they *cannot* be used again.

Allied units that start their turn in Britain (in the box *Allied units available in Britain*) are supplied for the entire turn, whether the unit invades (§7), lands (§9.3), or airborne drops (§8) into the continent. However, the Allied faction can not bring additional units on to the continent if it cannot be supplied on the following turn, irrespective of anticipated losses. That is, the Allied faction may not bring in more units than its current *total* supply capacity minus the number of units *currently* on the continent (see also §9.3).

Valid supply points for the Allied faction are *any* controlled coastal hex with a supply capacity indicator (with or without a port installation), or any controlled in-land port hex.

An *uncontrolled* coastal hex with a supply capacity indicator is a valid supply points *only* for Allied units *occupying* that hex. That is, an Allied unit occupying a coastal hex, but in German ZOC, *can* trace a (0-length) supply line.

Each supply hex can *at most* provide supply up to its *supply capacity* indicated on the map by coloured number and an arrow pointing to the coastal hex or in-land port. That is, a hex with a supply capacity of “2” can only supply two units.

Units *occupying* a supply point *always* counts toward that supply points capacity.

If more units than the hex’s supply capacity must trace their supply lines to the hex, then the surplus units are out of supply. The Allied faction may decide which units, save for the units *occupying* the supply point, that are out of supply.

Allied lines of supply *can not* stretch indefinitely long, and are subject to following constraints. The supply range, the maximum length of a Supply line leading to a hex, of a supply point is determined by the number headquarters in the hex or if the hex was successfully invaded during an invasion turn (as indicated by an amphibious doc marker). These are summarised in Table 4. The supply ranges are, in order or priority,

- A hex occupied by *three* Allied headquarter units has a supply range of 24 hexes.
- A hex occupied by *two* Allied headquarter units has a supply range of 16 hexes.
- A hex occupied by *one* Allied headquarter units has a supply range of 8 hexes.
- A hex successfully invaded during an Allied invasion week (§7) has a supply range of 8 hexes.
- A coastal hex, whether in German ZOC or not, has a supply range of 0. I.e., it supplies Allied units occupying that hex.

Supply point	Range
 3×HQs	24
 2×HQs	16
 1×HQ	8
 Invasion	8
Other*	0

Table 4: Allied supply ranges. The range is counted from the supply point (inclusive) up to the target unit (its hex *not* included). Supply points are coastal, or inland port hexes.

\*A coastal supply point *always* supply Allied units occupying the hex, *even if* in German ZOC.

*Note, a coastal hex that was successfully invaded has a supply range 8 even if occupied by a single headquarter unit. That is, the first headquarter does not improve the supply range of that hex. If such a hex is occupied by two or three headquarter units, then it has a supply range of 16 or 24 hexes, respectively.*

*A coastal hex in German ZOC cannot supply units, other than those occupying the hex, as the supply line would pass through (end) in a hex in enemy ZOC.*

*An in-land port in German ZOC cannot supply units, as the supply line would pass through (end) in a hex in enemy ZOC.*

### §6.3 Effect of out of supply

A unit that is *out of supply*, as detailed above, at the start of the Supply phase has reduced offensive and manoeuvre capabilities. Flip the unit to its reverse side to indicate this (half AF and MF of one). This stays in effect until the factions next weeks Supply phase.

If a previously *out of supply* unit has come into supply, then its offensive and manoeuvre capabilities are restored. Flip the unit over to its normal side, and remove any possible isolation marker.

⚙️ If a previously *out of supply* unit is still out of supply, then indicate that it is its *second* turn in that condition by placing and *isolation* marker underneath it.

If a unit starts its Supply turn with an isolation marker under it, and it has *has* not been brought into supply, then that unit has been *out of supply* for two consecutive weeks and is therefore *eliminated*.

## §7 Allied invasion phase

On week 1 and *once* between week 9 and 16 (both inclusive), may the Allied faction perform an *invasion*. The invasion at week 1 is *mandatory* while the second invasion is *optional*, i.e., at the discretion of the Allied faction,

On an invasion turn, the Allied faction chooses *one* coastal section to invade. This could for example be Normandy,

Bay of Biscay, or South France. Note that Wadden Sea is *not* an option for invasions.

A rough historical example of the Allied invasion into Normandy is given in Figure 4.

The Allied faction then deploys as many units as allowed by the chosen coastal section for the *1<sup>st</sup> Week* in the Allied invasion table (Table 5 and printed on the board). *Any* unit available in Britain can be used, up to the limitations given in Table 5, and Allied nations may freely be mixed and matched.

*For example, if the Allied faction chooses to invade at Pas de Calais, it may land two armoured (☒) and seven infantry (☒) units, and perform at most three airborne drops (☒).*

The sea hexes with a supply capacity number and arrow (§6) is called a *sea invasion* hex. The coastal hex pointed to by the supply capacity number and arrow is the associated *coastal invasion* hex.

The Allied faction places the chosen units in *sea invasion* hexes. *No more* than two units may be placed in each sea invasion hex. Sea areas without a hex outline, including those that point to in-land ports, *cannot* be used for invasions.

☐ Headquarter units may *not* participate in the first and second week of an invasion, but can be brought in as reinforcements at *other* coastal regions (§9.3).

☒ Airborne infantry units, up to the limit of the coastal region, may be dropped in-land or at coastal hexes, as detailed in §8. Airborne units may also invade from a sea hex into a coastal hex, in which case it counts toward the infantry (☒) limit of the coastal region.

### §7.1 Coastal invasion hexes

In the Allied faction's following movement phase, the invading units *must* move into the associated coastal invasion of the sea invasion hex it started in. The hex may be in German ZOC, in which case the invading Allied units *must* attack the German units as per normal *forced combat* rules (§10).

If the associated coastal invasion hex is occupied by German units, then *all* Allied units *must* conduct *combat* against *all* German units in the coastal hex in the following *combat phase* (§10). That is, the full stack of German units *must* be attacked as a whole.

Other adjacent Allied units, i.e., *not* in a sea invasion hex, *may* participate in the attack against German units in a coastal invasion hex, but *must* attack the *full* German stack as a whole. The Allied units *not* in a sea invasion hex *may* split the attack as per normal *combat* rules (§10). If the German units are *not* being attacked from a sea invasion hex, then normal combat rules apply.

If the Allied units wins the combat and clears the invasion coastal hex from German units, then the Allied units *must* advance into the coastal hex, even if in Ger-

Coastal sector	1 <sup>st</sup> week			2 <sup>nd</sup> week			3 <sup>rd</sup> + weeks	
	☐	☒	☒	☐	☒	☒	☐*	☐
Wadden sea	<i>Only for supply</i>							
North sea	—	6	3	2	4	1	9	
Pas de Calais	2	7	3	4	5	—	12	
Le Havre	—	6	3	2	5	—	10	
Normandy	—	6	3	2	4	—	9	
Brittany	—	4	2	2	2	1	6	
Bay of Biscay	—	3	1	1	2	1	4	
South France	1	6	1	2	5	2	8	

Table 5: Allied invasion table. 1<sup>st</sup> week is the week of invasion, 2<sup>nd</sup> week is the following week, and 3<sup>rd</sup>+ week are the subsequent weeks. Note that airborne units (☒) that invade from sea to a coastal hex count toward the infantry (☒) limit. 3<sup>rd</sup>+ week limits: These are for *any* combination of divisions and headquarter units. The limits apply to the coastal region *only* and airborne in-land landings are *not* subject to these constraints.

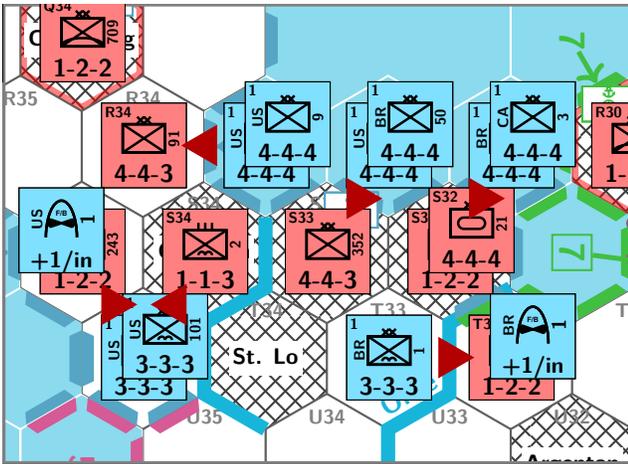


Figure 4: Roughly historical Allied invasion in Normandy. US 4 ID and US 9 ID invade into R34 (Utah beach), US 1 ID and BR 50 ID invade into S33 (Omaha and Gold beaches), while CA 3 ID and BR 3 ID land at S32 (Juno and Sword beaches). The US 12 ABID and US 101 ABID parachute into T35, while BR 6 ABID drops to T33 (§8). The sea area east of S32 and west of S30 is *not* a sea invasion hex for either Normandy or Le Havre invasions. The red triangles indicate subsequent combats during the Allied 1<sup>st</sup> week combat phase (§10). The DE 2 ABREGT in S34 *cannot* nor *need not* be attacked by US 4 ID and US 9 ID, but *must* be attacked by either of the two US airborne division. Likewise, both DE 711 ST and DE 243 ST need to be attacked by either US 12 ABID or US 101 ABID and BR 6 ABID, respectively. The heavily fortified DE 346 ST in R30 (Le Havre) *cannot* nor *need not* be attacked by CA 3 ID and BR 3 ID. The Allied faction has allocated *close air support* (§10.1.1) to the attack on T32, which gives a +1 AF bonus. With this, the attack is 3+1 versus 2×2, or 1:1 (§10.2). If no close air support was allocated to that battle, it would have been a 1:2 attack. Likewise at S35, where the close air support brings the odds to 2:1.

man ZOC. If the Allied units *does not* manage to clear the coastal hex, and therefore can not advance into it, then all attacking Allied units are *eliminated*.

Allied units in an invasion sea hex, as Allied ZOC does not extend into other coastal hexes than the associated coastal invasion hex, *cannot* and *must not* attack from the sea invasion hex into *other* coastal hexes. This also means that the Allied units are *not* required to attack other adjacent German units than those in the associated coastal hex.

The Allied faction *may* allocate air support (close combat support, or if possible, carpet bombing support) to combats against German units in coastal hexes (see §10.1).

## ☐ §7.2 Invasion hexes

If an Allied unit manages to move into the coastal hex (with or without a port), either because it was unopposed or because of combat, then that hex becomes an *invasion hex*. Mark it as such by placing an amphibious port (Mulberry) marker in the sea hex pointing to the coastal hex. Also place a supply capacity marker of the appropriate kind on the sea hex (§6). *Invasion* hexes has special significance for Allied supply (§6.2).

☒ If a German unit later *occupies* the invasion hex, it losses its status and the amphibious port mark (☐) is removed from the associated sea invasion hex. The hex then losses its Allied supply significance.

## ☒ §8 Allied airborne phase

During this phase the Allied faction *may* perform airborne drops on the continent subject to the following limitations

- The airborne unit *must* start its turn in Britain (the box *Allied units available in Britain* on the board),
- Airborne units may be dropped *no more* than 5 hexes (4 intermediate hexes) from a friendly unit (non airborne dropped in this phase) on the continent, or dur-

ing the 1<sup>st</sup> invasion weeks (§7), in a *sea invasion* hex.

- No more than *three* airborne divisions may be dropped in a single week.
- Airborne units may *not* be dropped on
  - hexes occupied by German units,
  - mountain hexes (impassable or not),
  - neutral countries, *nor*
  - sea hexes.
- Airborne units *may* be dropped into a hex in German ZOC. In this case, the airborne unit is *forced* to conduct combat in the following combat phase (§10).
- During the 1<sup>st</sup> and 2<sup>nd</sup> invasion weeks (§7), no more airborne divisions than allowed by the coastal section (see Table 7) may be dropped into that invasion area. By *invasion area*, is meant the five hex range counted from the invading forces.

Note that on the *second* optional invasion in weeks 9 through 16, a total of three airborne divisions may be dropped, provided that these are dropped no more than five hexes from non-invading Allied units.

*The Allied faction chooses to perform its second invasion in Bay of Biscay which only allows one airborne division drop. The Allied faction may still drop two more airborne divisions as long as they are count their range from units on the continent and that do not invade in Bay of Biscay. See also Figure 5.*

*On the first invasion in Week 1 it is not possible to drop more airborne units than allowed by Table 7, since there are no Allied units on the continent to otherwise count the five hex range from.*

An airborne unit may be dropped any number of times during the 50 weeks, but only *once* per turn.

Airborne units *cannot* move in the following *movement* phase (§9) of the week they were dropped. Airborne units, as any other unit starting in Britain, is considered supplied for the remainder of the week they were dropped.

## §9 Movement

Several operations may be conducted by the active faction in its movement phase.

- Regular movement of ground units on the continent (§9.1)
- Placement of replacement units (§9.2).
- ♣ Placement of Allied reinforcements (§9.3).
- ♣ Allied sea movement (§9.4).

These operations may be carried out in any order or even mixed in order, according to the active faction's wishes.

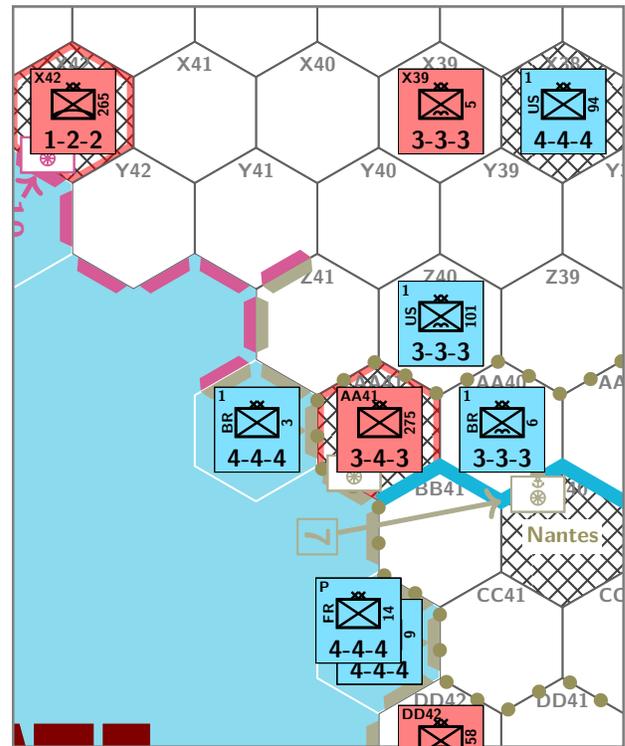


Figure 5: Airborne drops. The Allied faction is performing its second invasion in *Bay of Biscay* using FR 9 ID, FR 14 ID, and BR 3 ID. The one allowed airdrop happens in AA40 by BR 6 ABID, counting its range from BR 3 ID. The Allied faction *also* drops US 101 ABID at Z40, based in US 94 ID in X38 (Rennes). Since this second airborne division does not count its range from any of the invading forces, it does not violate the restriction of one airborne unit from Table 5.

### §9.1 Movement on the continent

A faction *may* move as many or as few units during its *movement* phase, in *any* order, as it desires. Units may, within movement allowance, and terrain and ZOC limitations, move in *any* combination of directions, between neighbouring hexes.

Each unit has a movement allowance equal to its *movement factor* MF (§2.2). Movement factors are *not* transferable between units, *nor* can they be saved for later turns.

#### §9.1.1 Terrain effect

Units can *never* enter *impassable mountains* or *sea* hexes directly from the continent, neutral countries, or move off the board.

Upon entering a *mountain* hex, the unit *must* immediately stop and can do *no more* movement on that turn. No penalty is incurred upon *leaving* a mountain hex other than those of the hex moved into. Thus a unit can move through a mountain range at a speed of one hex per week.

To enter a *clear*, *town*, *fortress*, or *fortification* hex one

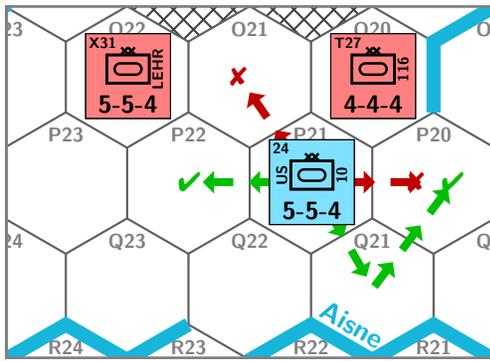


Figure 6: Effect of enemy ZOC on movement. US 10 AD is in the ZOC of DE 116 AD. It *can* move to P22 because it is in a *different* enemies ZOC, but *not* O21 since that is still in the ZOC of the DE 116 AD unit. Likewise, it can move to P20 *via* Q21, since it first *disengages* only to *reengage*. It *cannot* move *directly* to P20 since that would be moving in an engaged units ZOC.

movement factor is spent. Crossing river hex sides *does not* impose additional costs.

Ⓐ *Exception*: A hex with river hex sides may be *interdicted* by an Allied interdiction mission (§11.3). When *any* German unit crosses an interdicted river hex side of that hex (in or out of the hex) it *must* stop and can move no further that week. This *does not* affect advances, retreats, or combat.

### §9.1.2 Dyke in Holland

The dyke between D10 and E12, north of Amsterdam, *can* be used for regular movement. Thus, to cross from D10 to E12, or vice versa, will require a unit to spend 2MF.

A unit *may not* end its movement phase on the dyke. This means that a unit *cannot* attack from the dyke into D10 or E12. A unit *can* retreat (§10.4.2) across the dyke.

### §9.1.3 Stacking effects

A unit may move *through* a hex containing friendly units and *temporarily* violate *stacking* limitations (§3).

However, *at the end* of the factions movement phase all ground units *must* comply with the stacking requirements. Any excess units in a hex are *eliminated* (the faction chooses which units to eliminate).

### §9.1.4 Effect of enemy ZOC

When a unit enters enemy ZOC, it *must* stop movement, and can move no more during that week. The unit is *engaged* with the enemy unit. A unit can *never* move into or through a hex occupied by enemy combat units. An *engaged* unit *cannot* *reengage* (§4.1) an enemy unit in different hex without first completely *disengaging* that unit first. An engaged unit *can* engage a *different* enemy

Faction	From week	Per week
♣ Allied	9	1 RP/(  )*
♠ German	16	5 RP

Table 6: Accumulation of replacement points. The Allied faction gains 1 RP per captured German strategic installation. This is *not* lost should the German faction regain control of the relevant hexes.

unit in a different hex *if* it disengaging from the first unit.

In other words, a unit *cannot* move from a hex in an enemy units ZOC to *another* hex in the *same* units ZOC without first moving completely out of the enemy units ZOC. A unit *can* move from one enemy units ZOC directly into *another* enemy units ZOC as long as the new hex entered is not in the first units ZOC. See also Figure 6 for an illustration.

The presence of friendly units, or not, has *no effect* on enemy ZOC.

### §9.1.5 Strategic movement

A unit using *strategic movement* has its movement allowance *doubled*. To use strategic movement a unit *must* be in supply (i.e., it is not inverted).

A unit of the appropriate kind that *neither*

- start its movement phase in enemy ZOC, *nor*
- enters enemy ZOC during its movement

may use strategic movement.

♣ *All kinds* of Allied units may employ strategic movement, including headquarters.

♠ *Only* German (Heer and ) armoured () , armoured infantry (), or *airborne* () units may perform strategic movement.

♠ Ⓐ *Exception*: A single German unit may be *interdicted* by an Allied interdiction mission (§11.2). An interdicted German unit (as indicated by an Allied fighter unit marker on it) may *may not* perform strategic movement. Regular movement, combat, and retreats are not affected.

Strategic movement *cannot* be used to overcome terrain effects (§9.1.1).

## §9.2 Replacements

Starting on week 9 and 16, the Allied and German factions, respectively, start to accumulate *replacement points* (RP). The number of replacement points received per week is summarised in Table 6.

Replacement points are accumulated over the weeks. Use the RP track on the board to record the available RPs for each faction. There are two markers (§2.2) for each faction available for this purpose. Use the ‘×1’ and ‘×10’ marker to indicate ones and tens of RPs.

If the German faction has 23 RP, then place the ‘×1’ on the ‘3’ slot and the ‘×10’ marker on the ‘2’ slot on the RP track.

Replacement points can be used to replace previously eliminated units. To replace a unit, as many RPs *must* be spent as the unit has *attack factors* (AF, see §2.2). Replacement points *cannot* be borrowed from the future. When RPs are used to replace a unit, adjust (down) the available RPs on the factions RP track.

☐ Headquarter units may *never* be replaced.

‡ §9.2.1 German replacements

Starting in week 16, the German faction receives 5 RP per week, *irrespective* of the status of German replacement hexes.

German replacements arrive at *any* German replacement hex which was *not* last *occupied* by an Allied unit. Obviously a German replacement unit cannot be placed in a hex currently occupied by an Allied unit.

German replacement *can* be placed in Allied ZOC, in which case they cannot move regularly (§9.1) that week, and *must* conduct combat in the following *combat phase* (§10).

A German replacement unit *not* placed in Allied ZOC may move as normal (§9.1) in the turn of arrival.

♣ §9.2.2 Allied replacements

Starting from week 9 the Allied faction *may* receive up to 3 RP per week.

☐☐☐ One RP is received per German strategic installation captured. These are the V1 cruise missile installation (☐) at Boulogne (N24), the V2 ballistic missile installation (☐) at Rotterdam (H12), and the submarine pen (☐) at Brest (V43).

These installations are captured by an Allied unit moving into or through these hexes. Remove the installation counter from the hex and place it next to the Allied RP track on the board. However, RPs due to the captured German strategic installation does not begin to accrue until the week *after* capture.

Once the Allied faction has captured either of these installations, it *does not* lose the associated replacement points, *even if* the German faction later gains control of those hexes.

☐☐ The Allied faction may *only* replace infantry and armoured divisions. Replaced units arrive in Britain and are placed in an appropriate slot in the *Allied units available in Britain* box on the board. The replaced units are available as regular reinforcement units (§9.3) from that point on.

♣ §9.3 Allied reinforcements

During its movement phase, the Allied faction may reinforce its units on the continent using units available

	☐☐☐☐	☐☐
Max/week*	12	3

Table 7: Allied reinforcement limitations.

\* Available units, coastal sector, and supply may further limit the number of reinforcement units.

in Britain (the box *Allied units available in Britain* on the board). These can include units that have not previously been deployed to the continent, replaced units (§9.2.2), or units that have used *sea movement* (§9.4) to return to Britain.

Reinforcement units arrive at the continent at

- ☉ an *invasion coastal hex* (§7.2), i.e., one that was captured during an *invasion* turn and has an associated amphibious port marker, that has not since been *occupied* a German unit,
- ☐ a coastal port that is *occupied* by an Allied unit and *not* in German ZOC, *or*
- ☐ an in-land port controlled for reinforcement purposes by the Allied faction (see §9.3.2).

*Exception* Embden (B5) and Bremen (C2) *cannot* be used for reinforcements.

Coastal and in-land ports *must* be controlled for reinforcements at the start of the *supply* phase (§6) to be used for reinforcements. Thus, the Allied faction *cannot* move a unit into a port hex during the movement phase and then use that hex for reinforcements on the same week.

A reinforcement unit *may* be placed in German ZOC, in which case it *cannot* move normally (§9.1) that week, and it *must* conduct combat in the following *combat phase* (§10).

*It is only possible to place a reinforcement unit in German ZOC on invasion hexes, as other reinforcement hexes are required to be free of German ZOC.*

A reinforcement unit *not* placed in German ZOC can move normally (§9.1) on the week of arrival.

§9.3.1 Limitations on reinforcements

The number of units that the Allied faction can reinforce troops on the continent is limited by several factors.

- The units *must* be available in Britain at the start of the movement phase, possibly as replacements (§9.2). Units that have not become available yet *cannot* be used as reinforcements.
- *At no point* may more than 12 units reinforce via sea (to a coastal hex, port, or in-land port), and *no more* than three units may reinforce via air (§8). However, airborne units brought in via sea count as regular infantry divisions for these purposes. See also Table 7.
- The number (and type) of units that can be brought in through coastal sector is determined by Table 7, *irrespective* of whether an actual invasion was per-

formed in that sector, or if the landing sites were later captured.

- The available *supply capacity* (§6) also limits the number of units that can land or air drop to the continent.

Reinforcement units may be brought onto the continent via multiple coastal sectors, as long as there are valid reinforcement points in a sector.

Each coastal sector limits how many units that can be brought in through that sectors, as shown in Table 7. Which column applies to a *particular* week depends on whether a invasion is, or has just, been performed.

**1<sup>st</sup> week** *On the week* of invasion the first column limits the number and type of units that can be brought in through that sector.

**2<sup>nd</sup> week** The week *immediately* following the invasion week is subject to the constraints given in the second column for that sector.

**3<sup>rd</sup>+ weeks** On any subsequent weeks after the second week of invasion, the third column applies. If a sector was never invaded, then this column also applies.

Note that the first and second column *only* applies to coastal sectors that are actually being invaded. Other sectors are *not* subject to these constraints and use the third column only.

☐ *At no point* may the Allied faction bring more units into the continent, either by sea or air, such that *more* units will be out of supply on the following *supply* phase (§6), *irrespective* of anticipated losses. This means, that the Allied faction cannot bring in more reinforcement units than the total available *supply capacity* minus the number of units already on the continent.

*In rare cases, this limitation may require the Allied faction to determine supply lines (§6) to see if more reinforcement units can be brought in. However, most often it will be obvious exactly what the excess supply capacity is and where it is available for the reinforcement units.*

Reinforcement units, like any other unit arriving from Britain, are considered supplied for the remainder of the current week.

### 🏰 §9.3.2 In-land ports

In-land ports are ports not directly on the coastline. The town name of an in-land port is coloured, and the associated perimeter is indicated by a dotted border of the same colour.

*Exception:* Bordeaux (LL44) This port is considered an *in-land* port for reinforcement, and sea movement purposes. However, the Allied faction *may* perform an invasion into Bordeaux.

*Note that some perimeters overlap (i.e., between Amsterdam (G13) and Rotterdam (H14), and between Rotterdam and Antwerp (L17)). Also note that the*

*perimeter of Amsterdam (G13) extends beyond the dyke to D10.*

For Allied reinforcement purposes, an *in-land* port is controlled if

- it is *occupied* by an Allied unit, *and*
- no German unit *occupies* its perimeter.

### 🏰 §9.3.3 French forces

If, starting at week 28, on any *one* week at the start of Allied turn, France *south* of the indicated border line defined by the Seine, Dijon, Saone, Vesoul, Bescanon, and the Swiss border is free of German units, then the Allied faction has available five Free French reinforcement units in Paris: one armoured and four infantry divisions. These *do* count toward the overall twelve unit limit of reinforcements.

The five units, indicated by *Paris* in the *Allied units available in Britain* box on the board, are placed in *any* Paris hex (U26, V26, and V27) *not* occupied or in German ZOC. Each of the five units may be taken as reinforcements only *once* during the entire 50 weeks, and no earlier than the 28<sup>th</sup> week. The Allied faction may take as many of these units as desired as reinforcements in a given week, provided that France south of the border is free of German units.

Once the these five units has arrived at Paris, they *cannot* later arrive as replacements in Paris, nor can any other Free French unit arrive as replacements in Paris.

The five units may be used for *replacements* (§9.2) *only if* they arrived on the map and has since then been eliminated (place them in their *Paris* slot *up-side down* when eliminated to indicate this).

Should German units occupy any hex south of the border *after* the Free French reinforcement arrives in Paris, it *does not* effect those units present on the continent or those available as replacements.

### 🛡️ §9.4 Allied sea movement

An Allied unit that *either*

- *begins* its movement phase in an *invasion hex* (§7.2), i.e., one with an associated amphibious port marker, regardless of whether it is German ZOC or not,
- *ends* its movement phase in an *invasion hex* (§7.2), or coastal port *not* in German ZOC, or
- *ends* its movement phase in an in-land port controlled as described in §9.3.2

*may immediately* transport back to Britain, and *must* end their movement phase there. Place the unit in the *Allied units available in Britain* box on the board.

*Any* number of Allied units may return to Britain in a week in this way, and it *does not* affect arrival of *reinforcements* in any way.

Units transported back to Britain can enter the conti-

ment at some later week as regular *reinforcements* (§9.3).

*Note that an Allied unit must return to Britain and end its turn there. This means that an Allied unit cannot use sea movement to move from a coastal hex or port, or in-land port to another coastal hex or port, or in-land port.*

*For an airborne unit that was previously deployed on the continent to be redeployed by air, first needs to transport back to Britain.*

*A unit that moves into a coastal invasion hex in German ZOC cannot use sea movement. Instead, it must conduct combat against the German unit(s).*

## §10 Combat phase

Combat happens between adjacent units of opposite sides. All units of the defending faction in enemy ZOC *must* be attacked. All units of the active faction in enemy ZOC *must* attack. Combat is *never* voluntary. See also Figure 7 for an example.

As a consequence of ZOC not extending out of or into a fortress, or over river hex sides, there are three important exceptions:

⊠ *Exception* Units in a fortress are *not* required to attack adjacent enemy units. If the faction *does* choose to do so, then *all* adjacent enemy units *must* be attacked by *some* of the units in the fortification. That is, *not all* units in the fortress are required to attack.

⊠ *Exception* Conversely, units adjacent to a fortress are *not* required to attack the fortress hex. However, if the faction chooses to, then *all* units in the fortress *must* be attacked by *some* adjacent units. That is, *not all* adjacent units need to attack the fortified units.

⬡ *Exception* Units behind a river hex side are *not* required to attack enemy units on the *other* side of the river hex side. If the faction *does* decide to attack across the river, then *all* adjacent units on the opposing bank *must* be attacked by *some* adjacent units.

Any unit attacking *must* use its full *attack factor* (AF, see §2.2). Any unit defending *must* use its full *defensive factor* (DF, see §2.2). Combat factors, offensive or defensive, *cannot* be transferred between units *nor* saved for later turns.

The attacker decides which, adjacent, units attack which defending units. *All* attacking units *must* be adjacent to *all* defending units. Attacking units in the same hex *need not* attack the same defending units, *nor* does all defending units in a hex need to be attacked as a whole.

*Exception* In the case of an Allied invading units attacking German units in the invasion coastal hex, *all* defending German units in the coastal hex *must* be attacked as a whole.

However, *all* defending units *must* be attacked by some

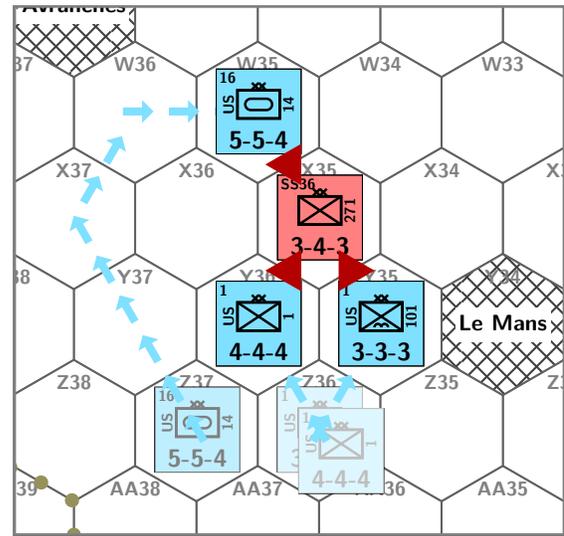


Figure 7: Example of a combat. The three units US 101 ABID, US 1 ID, and US 14 AD are moved into the ZOC of DE 271 ID. US 14 AD circles around the German unit to W35 to cut off the German unit from retreats. Had US 14 AD moved to X36 to attack, it would leave a viable retreat route through W34. The odds of the combat is 12 to 3, or 4:1 (§10.2).

attacking units. A combat unit may attack into multiple hexes, but the attacking units *must* all be adjacent to *all* attacked hexes. See also Figure 8.

A unit can only attack *once* during its factions combat phase. All defending units can only be attacked *once* in a combat phase.

### 🛩️ §10.1 Allied combat air support

During its combat phase, the Allied faction may allocate a single *air support* unit to a combat. Only *one* air support unit, fighter (🛩️) or bomber (🛩️) may be allocated to a single combat. Air support units are allocated to a combat by placing the relevant air support unit (from the *Allied units available in Britain* box on the board) on the *defending* units hex.

If the Allied faction is attacking into multiple hexes, then the air support unit applies to *all* hexes and can be placed in any of the defending hexes.

There are two kinds of combat air support missions that can be flown by the Allied faction: *Close air support* (CAS) or *carpet bombing* (CB). The rules governing each kind of mission is detailed below.

#### 🛩️ §10.1.1 Close air support

Every week, the Allied faction has six fighter units available. These units may be allocated to fly *close air support* (CAS) missions (as well as other tactical missions, see §11). The conditions for a CAS mission are

- *one*, and only one, fighter unit may be allocated per combat,

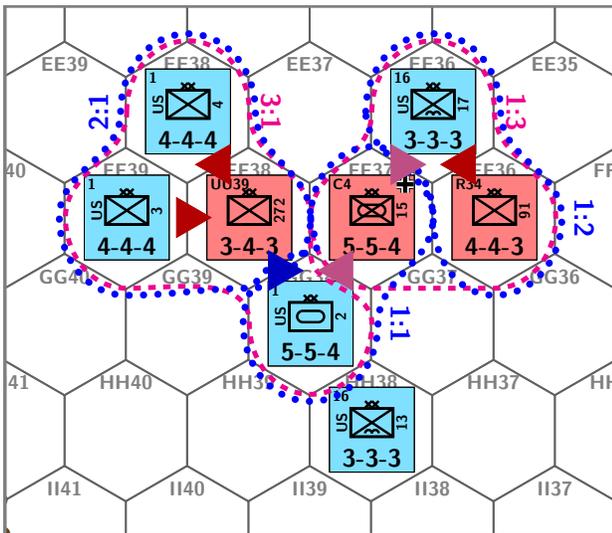


Figure 8: Example dividing attacks. The Allied faction can divide its combats in two ways as illustrated by the magenta-dashed and blue-dotted lines: two attacks at 1:3 and 3:1, or three attacks at 2:1, 1:1, and 1:2, respectively. Note that US 2 AD cannot combine with US 17 ABID to attack DE 91 ID and DE 15 PGD since it is not adjacent to the former German unit. Also, since US 13 ABID is not *engaged* (not in enemy ZOC), it *cannot* participate in any attacks.

- CAS missions apply to a *single* combat even if more than one attack is made against the same hex, *and*
- some Allied ground units *must* participate in the combat (Allied fighter units *cannot* attack on their own).

CAS is indicated by placing an Allied fighter unit on the defending German units. If more than one attack is performed on a single hex, then as many fighter units may be applied, but each fighter unit affects *only one* combat. If the combat supported is against multiple hexes, then the fighter unit may be placed in *any* of the attacked hexes.

A CAS mission adds +1 AF to the total Allied AF for that combat.

The fighter unit is removed from the hex once the combat result has been determined, but before advanced (§10.4.3) and retreats (§10.4.2). The fighter unit is placed back *up-side down* on its slot in the *Allied units available in Britain* box on the board. This marks the fighter unit as spent for this week, and it *cannot* be used for further tactical missions (§11).

A fighter unit *does not* excerpt ZOC, and its presence *does not* influence retreats. Fighter units *does not* effect the doubling or tripling of German units DF.

See also Figure 4 for an example of close air support.

### §10.1.2 Carpet bombing

The Allied faction has four bomber units available to it over the course of the 50 weeks of the game. These can

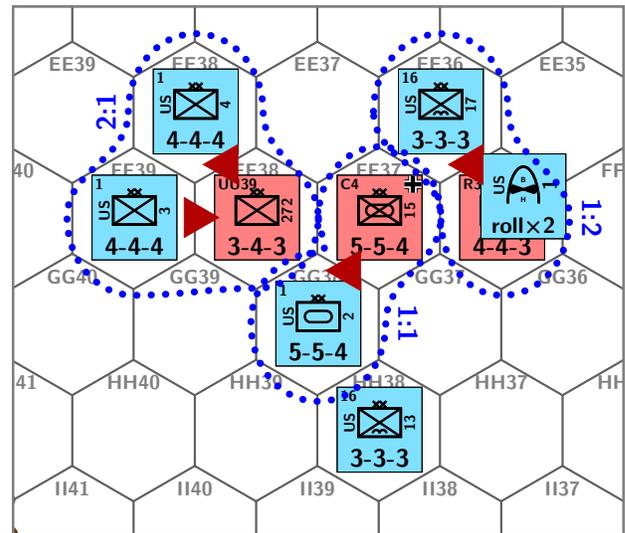


Figure 9: Example of carpet bombing. Continuing the example from Figure 8, the Allied faction has chosen the three attack option (blue-dotted line) with three attacks at 2:1, 1:1, and 1:2, respectively. However, to increase the changes of a beneficial outcome, the Allied faction has allocated a *carpet bombing* (§10.1.2) to the attack against DE 91 ID at odds 1:2. Thus, instead of 1 in 6 chance of a DR result, the Allied faction now has a one third chance of that result.

Note, had the Allied faction chosen the two attack option in Figure 8 (magenta-dashed line), it could not allocate a CB mission to the attack against DE 91 ID and DE 15 PGD since that attack is spread out over two defending hexes.

be used to provide combat support *once*. That is, once a bomber unit has been used it *cannot* be used at any later week.

The Allied faction may allocate a *single* bomber unit to fly a *carpet bombing* (CB) mission on a single combat during its combat phase. The conditions for CB missions are

- the Allied faction has an available bomber unit,
- only *one* CB mission may be flow per week,
- *no* invasion (§7) may take place during the week,
- *no* air drops (§8) may take place during the week,
- CB missions affect exactly *one* hex,
- the hex CB'd *must* be attacked by Allied ground units, *and*
- the hex CB'd *must* have been attacked by Allied ground forces on the previous week.

A CB mission is indicated by the Allied faction placing a bomber unit on the target hex containing German units attacked by some Allied ground troops.

Note that it matters *only* that the target hex of the CB mission was attacked on the previous week. The German

Die roll	Odds													
	1:7	1:6	1:5	1:4	1:3	1:2	1:1	2:1	3:1	4:1	5:1	6:1	7:1	
1	AE	AE	AE	AE	AE	AE	AE	AE	EX	EX	DR	DR	DE	
2	AE	AE	AE	AE	AE	AE	AE	AR	EX	DR	DR	DE	DE	
3	AE	AE	AE	AE	AR	AR	AR	EX	DR	DR	DE	DE	DE	
4	AE	AE	AE	AR	AR	AR	EX	EX	DR	DE	DE	DE	DE	
5	AE	AE	AR	AR	AR	EX	DR	DR	DE	DE	DE	DE	DE	
6	AE	AR	AR	AR	AR	DR	DE							

Table 8: Combat resolution table

units attacked on the previous week and German units attacked on the CB week need not be the same.

CB missions can only apply to *one* hex. If the ground attack is against two or more hexes, then the CB mission has *no* effect.

CB missions affect *all* attacks, individually, on the target hex. If the Allied faction attacks the hex in multiple battles, e.g., three attacks against three defending units all in the same hex, then the CB mission affect all three attacks.

CB and CAS (§10.1.1) missions *cannot* be combined.

The Allied faction may roll the combat resolution dice *twice* when resolving a combat with a valid CB mission. The Allied faction may then choose whichever outcome from the two dice rolls. For example, in 1:1 attack with rolls 1 (AE) and 5 (DR) the Allied can choose between either outcome, presumably choosing DR.

The bomber unit is removed from the hex once the result of the combat has been determined. The bomber unit is placed in its slot *up-side down* on the *Allied units available in Britain* box on the board. The bomber unit is thus marked as spent and is not available for further missions for the remainder of the game.

### §10.2 Combat odds

The full attack factors (AF) of *all* attacking units in a combat are summed to give the total attack factor (total AF).

Ⓐ An Allied CAS unit allocated to the combat (§10.1.1) gives a +1 AF bonus to the Allied total attack factor.

Any defending unit in an fortification, town, or mountain hex have their defensive factor (DF) doubled, *irrespective* of the terrain occupied by the attacking units.

Defending units which are *solely* attacked from the opposing side of a river hex likewise double their DF. Defending units in a fortress have their DF tripled, *irrespective* of the terrain occupied by the attacking units. See also Table 1 for a summary.

Terrain defensive effects are *not* cumulative. For example, a unit in a fortress *always* have 3× DF, no matter if the unit is attacked from across river hex sides.

Ⓐ An Allied CAS unit allocated to the defending Allied units (§11.1) gives a +1 DF bonus to the Allied total defensive factor. The +1 DF bonus applies to *all* attacks

Total AF	Total DF	Odds	Total AF	Total DF	Odds
2	11	1:6	11	4	2:1
1	4	1:4	16	4	4:1
3	5	1:2	14	2	7:1
6	5	1:1	21	2	7:1

Table 9: Examples of combat odds calculations. Note that odds larger than 6:1 are treated as 7:1. Odds smaller than 1:6 are not permissible.

against the Allied ground units in that hex. The CAS bonus is *not* doubled or tripled due to terrain effects. Once all German attacks against the hex that had CAS are resolved, return the fighter unit to the *Allied units available in Britain* box on the board, face-down.

*Since the combats are resolved during the German combat phase, there is no need to flip the fighter units face-down. The fighter units would anyway end back in the box face-up at the start of the following Allied turn.*

The full, possibly doubled or tripled, DF of *all* units defending in a combat are summed to give the total defensive factor (total DF).

The *combat odds* are determined as the ratio of the *total AF* to the *total DF*, rounded down to the nearest ratio in the *combat resolution table*, Table 8. Examples of combat odds calculations are shown in Table 9.

Combat odds greater than or equal to 7:1 are treated as 7:1, and always result in DE (§10.4). Combat odds less than 1:6 result in *automatic defeat* (§10.3).

The attacking faction may divide attacking units in any way it pleases as long the above rules are observed. See Figure 8 for an illustration of this.

#### Calculation of odds

Mathematically, if  $o$  is the total AF,  $d$  the total DF, and

$$r = \frac{\max\{o, d\}}{\min\{o, d\}},$$

then the odds  $O$  are given by

$$O = \begin{cases} 1:\lceil r \rceil & d \geq o \\ \lfloor r \rfloor : 1 & d < o \end{cases},$$

where  $\lceil x \rceil$  and  $\lfloor x \rfloor$  rounds  $x$  up and down, respectively, to the nearest integer.

#### Soaking off

Sometimes, it may be beneficial for a faction to attack at low odds to either gain better odds in another combat, or because not enough supply units can be brought in to sustain all attacks. This is called *soaking off*, a fairly common tactic, and is illustrated in Figure 10.

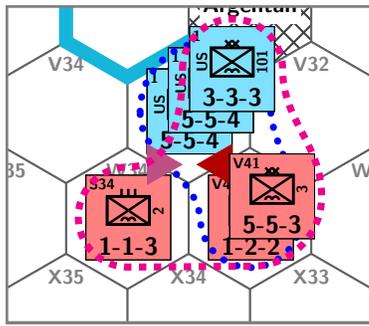


Figure 10: Example of “soaking off”. US 101 ABID attacks DE 3 ABID in W33 and DE 2 ABREGT in W34 at odds 3 to 6, or 1:2 (magenta line). This leaves the remaining US units (US 3 AD and US 4 AD) to attack DE 343 ST at odds 10 to 2, or 5:1 (blue line). The likely result is that DE 343 ST is eliminated, and US 101 ABID is either eliminated or must retreat. In the following German turn, this will likely force the German faction to withdraw or counter attack at unfavourable odds (6 to 13, or 1:3).

### §10.3 Automatic defeat

At the start of the factions combat phase, if a unit is forced into a 1:7, or worse, combat it is *immediately* eliminated before any other combat resolutions. See also Figure 11.

An automatic defeat does *not* count as an attack, and if the defending units are still in the attackers ZOC, then those defending units *must* be attacked.

This rule essentially says that if an attacking unit is in enemy ZOC but *cannot* perform a legal attack, then it is eliminated. Legal attacks are attacks at odds 1:6 or better.

### §10.4 Combat resolution

Every combat *must* be fully resolved, including *advances* (§10.4.3) and *retreats* (§10.4.2), before moving on to the next combat. The active faction decides which combats to do, within the limitations and requirements, and in which order. The procedure for resolving combats is detailed below.

Once the combat odds (§10.2) of a battle has been determined, the attacking faction rolls a single six-sided dice and cross-indexes the combat odds with the result of the die roll in the *combat resolution table* (CRT Table 8). Note that at odds 7:1 to only possible outcome is DE, and no die roll is necessary.

Ⓐ If the Allied faction has allocated a bomber unit to provide CB support (§10.1.2), then the Allied faction may roll the dice *twice* and select whatever outcome from the two rolls.

The results are

**AE Attacker Eliminated:** All attacking combat units

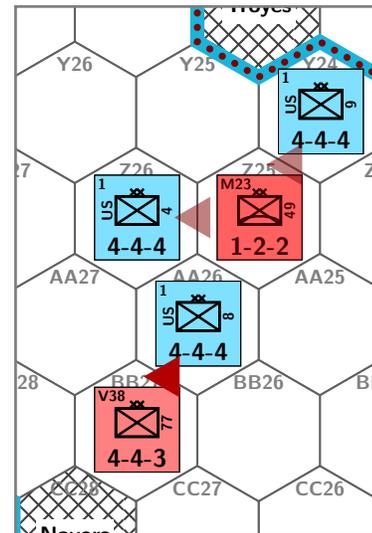


Figure 11: Automatic defeat. Off-hand, it seems that US 8 ID/ has been isolated in the Axis movement phase. However, DE 46 ST *must* attack both US 4 ID and US 9 AD at odds 1:8, which results in an *automatic defeat* and is eliminated. This leaves the DE 77 ID to attack US 8 ID only.

are eliminated.

**AR Attacker Retreat:** All attacking combat units *must* retreat two hexes. The defending faction *may* perform the retreat (§10.4.2).

**EX Exchange:** The faction with the lowest total combat factors eliminates *all* its units. The opposing faction loses units of an equal or larger total of combat factors (§10.4.1).

**DR Defender Retreat:** All defending combat units *must* retreat two hexes. The attacking faction *may* perform the retreat (§10.4.2).

**DE Defender Eliminated:** All defending combat units are eliminated.

If the hexes occupied by the defending units are vacated by *all* defending combat units; from EX, DR, or DE results; then the *attacking* combat units *may* be able to *advance* (§10.4.3).

ⒶⒶ Allied CAS (§10.1.1) fighter units or CB (§10.1.2) bomber units participating in the attack are removed from the hex *before* implementing retreats and advances. Allied air units are placed back *up-side down* on its slot in *Allied units available in Britain* box on the board, marking them as spent.

In the following, the terms *victor* and *loser* refers to the faction that benefited and lost, respectively, as a consequence of the battle. Thus, for AE and AR results, the victor is the *defending* faction. Similarly, for DE and DR results, the victor is the *attacking* faction. In EX results, the victor is the one with the highest total, possibly modified, combat factor.

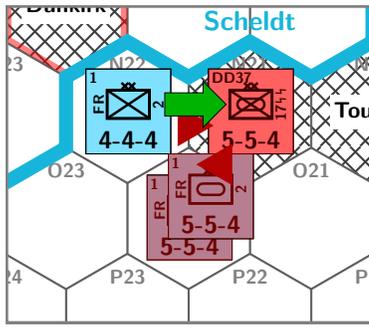


Figure 12: Exchange result. The Free French FR 2 ID, FR 2 AD, FR 5 AD attack DE 85 ID in Lille (N21) at  $4 + 5 + 5 = 14$  to  $2 \times 5 = 10$  or 1:1. The result is an exchange (EX). Since the German faction is the weaker of the two, all German units are eliminated. The Allied faction *must* match the 10DF (doubled in town) and eliminates the two armoured divisions. The Free French infantry division may advance into Lille since the defender was doubled on defence.

§10.4.1 Exchange results

When an exchange result is obtained, the first thing is to decide which side has the largest combat factor, either the total AF for attacker or total *modified* DF for the defender.

*Note, for the defender total DF all terrain bonuses are included.*

The side with the lowest combat factor (the loser) then loses *all* ground units. Then, the opposing side (the victor) loses units of *at least* the same total attack factors. If the loser was the defender, then the total, possibly terrain modified, DF must be matched by the attacking faction.

AA Allied CAS (§10.1.1) or CAD (§11.1) fighter units, or CB (§10.1.2) bomber units *cannot* be used to satisfy EX losses by the victor, nor do they count towards the losers DF. See also Figure 12 for illustrations of this rule.

§10.4.2 Retreats

Units that suffer an AR or DR result *must* retreat two hexes. The defending faction *may* retreat the units in case of an AR, while the attacking faction *may* perform the retreat in case of a DR.

*The victor faction has the prerogative to do the retreat, but may relinquish the privilege to the losing faction.*

When retreating units, the following rules *must* be observed

- Retreated units *must* be retreated two hexes, but can happen in *any* direction and through *any* passable terrain. This means that a retreated unit can retreat over *two* mountain hex-sides.
- Units can be retreated *through* friendly units violating stacking limitations (§3) *temporarily*, but cannot end up in a hex violating the stacking limitations. If

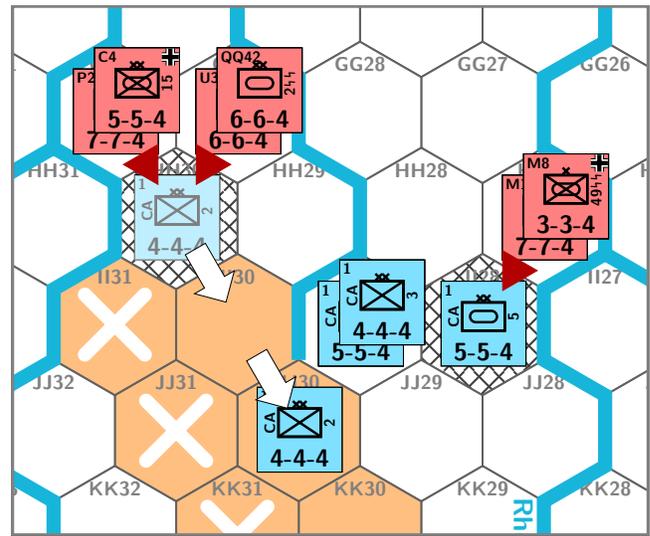


Figure 13: Retreat of units. DE 2 AD, DE 15 MD, 44 2 AD, and 44 12 AD attach CA 2 ID at Vichy (HH30) at odds 24 to 8, or 3:1. The result is DR. The Canadian 2<sup>nd</sup> infantry division cannot retreat through HH31 or HH29 since these are in German ZOC, nor through II31 since the mountains are impassable. It cannot retreat to II29 since that would violate stacking limitations (§3). Thus the Canadian division ends up at JJ30. The German faction has the option to advance three units into Vichy.

no other option is available, then the *excess retreating* units, chosen by the owning faction, are eliminated.

- Defending units may *not* be retreated into a hex being attacked in the current combat phase where the combat has not yet been resolved.
- Units *cannot* be retreated into or through enemy ZOC, over impassable mountains, neutral countries, out to sea, or off the board. If there are *no* alternative routes that would respect these limitations, then the retreating units are eliminated. The faction performing the retreat *cannot* force such elimination if alternate, viable, retreat routes exist.

*The above rules means that surrounded units cannot retreat, and are therefore eliminated instead. See for example Figure 7.*

☞ A unit *can* retreat across the dyke that connects D10 to E12, in *either* direction. However, it *cannot* end the retreat on the dyke (the dyke hex is essentially a special sea hex). If forced to do so, then the unit is eliminated.

AA German unit and river hex interdiction (§11.2 and §11.3) *does not* affect retreats. That is, if a German unit is interdicted by an Allied fighter unit and is forced to retreat, then it *must* still retreat two hexes. Likewise, if a river hex is interdicted by an Allied fighter unit, it *does not* prevent a German unit from retreating over a river hex side of that hex and continue retreating if

needed.

See also Figure 13 for an illustration of these rules.

### §10.4.3 Advances

If, after a combat,

- the attacked hex, or hexes, was cleared of *all* defending units, *and*
  - either,
    - the defending units were doubled or tripled due to terrain (mountain, town, fortification, fortress hex or river hex-side), or
    - the attack came from a sea hex into a coastal hex
- then

*any* or *all* attacking units may *advance* into the vacated hex, *even if* it is in enemy ZOC. *Stacking limitations* (§3) *must* be observed.

*Exception* In case of an attack from a sea hex into a coastal hex, then *only* the units attack from the sea hex may advance into the cleared coastal hex. Other units *on* the continent supporting the attack *may not* advance.

See also Figure 12 for an example of advance after combat.

*This is a rare case where a unit may move from one hex in enemy ZOC to another hex in the same enemy units ZOC.*

*Advance after combat can only be done in to terrain that would increase the defenders DF. An attacking unit cannot advance into clear hexes. Note that this means an advancing unit may traverse two mountain hexes in a single week.*

*Only the attacking faction may advance. The defending units may not advance after a AE, AR, or EX result which eliminates all attacking units.*

## 🛩️ §11 Allied tactical air support phase

The Allied faction has six fighter (🛩️) and four bomber (🛩️) aerial units at its disposal. All six fighter units are available to fly missions on every week, while the four bomber units can be used *once* each and only one mission per week. *Any* aerial unit may fly only *one* mission per week.

The bomber units are used for combat support for *carpet bombing* (CB) and the rules governing their use is detailed in §10.1.2.

The fighter units can fly four different kinds of mission. The first kind is *close air support* (CAS) and the rules for that are given in §10.1.1.

The remaining three types of tactical air support (TAS) missions that can be flown by the Allied fighter units are *close air defence* (CAS, §11.1), *German unit interdiction* (§11.2), and *river interdiction* (§11.3). These kind of missions are declared in the *Allied tactical air support*

phase.

The Allied faction may allocate as many *available* fighter units to these three kinds of mission in this phase. That is, the Allied faction start out with six fighter units on every turn (§6.2). During the combat phase the Allied faction can allocate fighter units to fly CAS missions (§10.1.1). Fighter units that flew CAS missions are *not* available to fly tactical air support missions in the same week.

*For example, if the Allied faction allocated two fighter units to fly two CAS mission during its combat phase, it has four fighter units to fly tactical air support missions in the Allied tactical air support phase.*

TAS missions may be declared in any order. By *available* below is meant how many face-up fighter units are in the *Allied units available in Britain* box at any given point before declaring a TAS mission.

*Note that there may be cases were it is not immediately obvious which kind of TAS mission was flown on a single hex. For example, a fighter unit placed on a hex with river sides but also containing a German unit may be taken to do either a unit or river interdiction mission. It is advisable to note down, or otherwise decide on a convention, to disambiguate these cases.*

### §11.1 Close air defence

The Allied faction may allocate any number of available fighter units to provide *close air defence* (CAD) to any hex currently occupied by one or more Allied units.

Place a fighter unit on the hex there CAD should be supplied. *At most* one fighter unit may provide CAD to a single hex.

A CAD fighter unit allocated to the defending Allied units in a hex (§11.1) provides a +1DF bonus to the Allied total defensive factor. The +1DF bonus applies to *all* attacks against the Allied ground units in that hex. The CAD bonus is *not* doubled or tripled due to terrain effects.

Once all German attacks against the hex that had CAD are resolved, return the fighter unit to the *Allied units available in Britain* box on the board. There is no need to invert the returned fighter unit.

### §11.2 Unit interdiction

The Allied faction may allocate as many available fighter units as it desires to fly a *unit interdiction* mission. The Allied faction chooses *any* German unit on the continent and places a fighter unit on it. That unit, and *only* that unit, may not perform *strategic movement* (§9.1.5) for *one* week.

*At most* one fighter unit may interdict a single German unit, but as many unit interdiction mission as there are available fighter units may be flown against *distinct* German units in a single week.



# Appendix

## §A Considerations

### §A.1 General overview

The Allied faction vastly outnumber the German faction, both in terms of combat factors, number of units, and mobility. However, the one thing that the Allied faction has against it is time.

If the Allied faction is not within reach of the Rhine-Issel river line by the 16<sup>th</sup> week, when the German faction starts to receive replacements, then the overall favour swings to the German side.

### §A.2 The terrain

The terrain toward an Allied victory is a funnel — wide to the south-west and narrow toward the north-east. This makes it hard for the Allied forces to push forward, especially because of the many north-south rivers and mountain ranges that provides defensible position for the German faction.

### §A.3 Allied strategy

The *Supreme Headquarters of the Allied Expeditionary Forces* (SHAEF) has two objectives

- Land the forces on the continent and stay there.
- Push towards the Rhine-Issel in force quickly.

Since the Allied faction cannot perform two invasions in one week, it is paramount that the Allied faction can establish beachheads in the first invasion week.

The German faction does not have enough forces to effectively fortify the whole western and southern seaboard of the continent, and only five of the seven coastal sectors can be fully protected. This provides a likely vulnerability for the Allied faction to exploit.

Likely hardened coastal sectors are the North sea, Pas de Calais, Le Havre, and to a lesser extend Normandy. These are exactly the sectors that would allow for short path to the Rhine. The remaining sectors, Brittany, Bay of Biscay, South France, and perhaps also Normandy are like to be easier to invade, but will require long supply lines.

On the second invasion, the earliest in the 9<sup>th</sup> week, can possibly provide an opening in one of the more hardened sectors, if the Allied faction manages to draw the German forces away from these.

### §A.4 German strategy

The overall objectives of the *Oberbefehlshaber West* (OB West) are

- Break the invasion as quickly as possible,
- or if that fails, perform a fighting withdrawal setting

up defensive position in the terrain.

Clearly, the coastal sectors of the North sea, Pas de Calais, Le Havre, and probably also Normandy needs to be defended vigorously. Should the Allied faction nevertheless decide to invade in one of these sectors, then the German faction can push hard against the invasion and possible deny the Allied any beachhead.

Though the German faction has many troops, few of them are mobile or with any significant offensive capability. This means that the German faction must be careful when counterattacking the invasion forces — it does not have enough force to cover its flanks, and is vulnerably to Allied breakthroughs.

To keep the interior lines strong, the German faction may be tempted to fall back to more defensible position at Meuse, Mass, or similar. However, it is in the coastal areas that the German faction has the best possibility to cause Allied casualties and at the same time deny the Allied faction the possibility to gather enough mass for the push on the Rhine.

If the Allied faction decides to invade further to the south, in Brittany, Bay of Biscay, or South France, then the German faction can form a mobile defensive line in mid-France while keeping a strong force in the north to counter the second invasion.

### §A.5 The real campaign

OB West considered Pas de Calais and Le Havre the most likely invasion sites due to the proximity to Britain and its V1 and V2 facilities. SHEAF managed to keep the plans for Operation Neptune (the Allied invasion in Normandy) secret up to very last point, not least due to deception, and when the German faction learned of the impending invasion they believed it to be a ploy.

In the mean time, at the insistence of Supreme Allied Commander Eisenhower and Field Marshal Montgomery, the Allied had accrued mass in Normandy — 7 infantry and 3 airborne infantry divisions, some 150 000 men. By the time the German OB West realised what was going on, it was too late. The Allied had formed beachheads and a breakthrough which shattered the defence. The German faction was in no position to counter the second invasion in South France. Soon enough the Allied faction crossed the Rhine and moved into Germany it self.

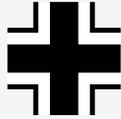
§B Examples of combat odds

Attacked hex	DF	Examples Odds and situation		
Clear from any hex	×1 8:2			
River side* from opposing bank	×1 4:8			
River side from same & opposing bank	×1 4:4			
Town from any hex	×2 8:8			
Mountain or fortified† from any hex	×2 6:6			
Fortress from any hex	×3 8:6			

\*Cross-river attacks does not modify DF when in town, fortress, fortification, or mountains.

†Fortification modifier only applies to German units.

Turn sequence	
♠ Allied turn	
Supply	
Invasion	
Airborne	
Movement	
Combat	
Tactical air	
Attrition	
♣ German turn	
Isolation	
Movement	
Combat	
Attrition	



Map features					
Hex	Move	Combat	ZOC	Other	
	Clear	1	—	—	German replacement
	River	**	2× DF*	None across	French border French reinforcements
	Mountains	Stop	2× DF	—	Invasion & supply Invasion area Supply point capacity
	Impassable		None		Supply Supply point capacity
	Fortification	1	2× DF	—	Port Reinforcement & supply point
	Town	1	2× DF	—	V1 launcher 1 Allied RP
	Fortress	1	3× DF	None	V2 launcher 1 Allied RP
	Dyke	1†	None	Into	U-boot base 1 Allied RP

\*if all attackers across    \*\*German movement may be interdicted    †must pass

Ground units	
Size	
xxxx	T Theatre
xxxx	AG Army group
xxx	A Army
xx	D Division
x	BD Brigade
...	REGT Regiment
Type	
	I Infantry
	ST Static
	ABI Airborne infantry
	M Armoured infantry
	A Armoured
	HQ Headquarters

Nationalities	
♠ German	♣ Allied

Replacement points		
Faction	From week	Per week
♠ Allied	9	1 RP/(, , )*
♣ German	16	5 RP

1 RP per installation captured, 3 max.

♠ Allied supply range	
Supply point	Range
	3×HQs 24
	2×HQs 16
	1×HQ 8
	Invasion 8
	Other* 0

\*Even if in enemy ZOC

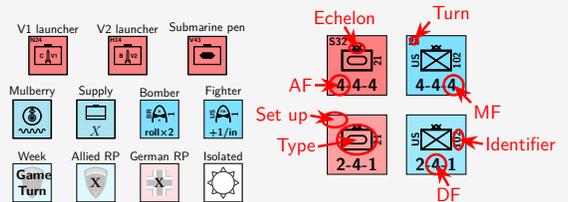
Combat results	
AE	Attacker eliminated
AR	Attacker retreat
EX	Exchange
DR	Defender retreat
DE	Defender eliminated

♠ Allied reinforcements			
Max/week*	12	3	

\*Limited by supply and sectors

Combat Resolution Table													
Die roll	Odds												
	1:7	1:6	1:5	1:4	1:3	1:2	1:1	2:1	3:1	4:1	5:1	6:1	7:1
1	AE	AE	AE	AE	AE	AE	AE	AE	EX	EX	DR	DR	DE
2	AE	AE	AE	AE	AE	AE	AE	AR	EX	DR	DR	DE	DE
3	AE	AE	AE	AE	AR	AR	AR	EX	DR	DR	DE	DE	DE
4	AE	AE	AE	AR	AR	AR	EX	EX	DR	DE	DE	DE	DE
5	AE	AE	AR	AR	AR	EX	DR	DR	DE	DE	DE	DE	DE
6	AE	AR	AR	AR	AR	DR	DE						

♠ Allied invasions							
Coastal sector	1st week			2nd week		3rd+ weeks	
	Only for supply						
	—	6	3	2	4	1	9
	2	7	3	4	5	—	12
	—	6	3	2	5	—	10
	—	6	3	2	4	—	9
	—	4	2	2	2	1	6
	—	3	1	1	2	1	4
	1	6	1	2	5	2	8



# D-DAY