# WORLD AT WAR 85 CORE RULES





	GUILLEILES	
Counter R	eference	6
	ion	
1	ity, Support & Resources	
How to u	se this manual	12
<b>○1.0</b> G	eneral Concepts	15
	Scale	
1.2 Time	e Scale	15
1.3 Map	Scale	15
1.4 Scen	arios	15
1.5 Gam	e Play	15
1.6 Com	ponents	15
1.6.1	Dice	15
1.6.2	Game Board(s)	15
1.6.3	Player Aids & Tracks	15
1.6.4	Units	16
1.6.5	Color bands and Attachments	16
1.6.6	Unit types	18
1.7 Mar	kers	18
1.7.1 (	Unit and Map Markers	18
1.7.2 (	Game Turn & Weather Track Marke	ers: 20
1.7.3	Artillery Strike/Strength	21
1.8 Card	ls	21
1.9 UNIT	r and CARD VALUES	23
1.9.1	AP Firepower (AP FP dice)	23
1.9.2	HE Firepower (HE FP dice)	24
1.9.3	To-Hit number (To-Hit)	24
1.9.4	Range Value	24
	Armor Value and Save Value for Armor	25
	Armor Value and Save Value for Lig	1
1.9.7	Soft Targets – Vehicles and Troops	25
1.9.8	Movement Points (MP)	26
	Assault Firepower	(
	lt FP dice)	
	Assault To-Hit Value:	
1.9.11	Headquarters (aka HQs)	27

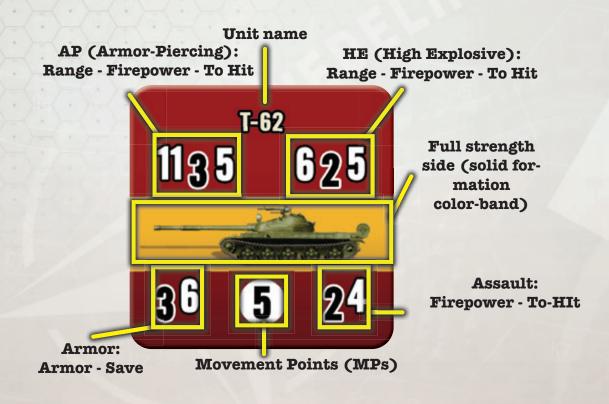
	1.9.12	Special Ability Triangles	.28
	1.9.13	Leaders	.29
_			
		equence of Play	
		ative Phase (Turn 1 only)	
		eations Phase	
		Formation Card	.30
		Designated Formation or Scratch Card	.30
	2.2.3	End Operations Card	.30
	2.2.4	Close Air Support Card	.30
	2.2.5	Electronic Warfare Card	.31
	2.2.6	Battlefield Event/Friction Card	.31
	2.3 Mar	ker Removal Phase	.31
		Ops Complete & Out of Command	.31
		Smoke Markers	
		EW Markers	
		Fire Markers	
		4.1 Fire Burn Out	
		4.2 Bridge Collapse	
	2.3.		
		4.4 Spreading Fire	
		Unsuppress HQs	
		INF Support Weapon Transfer	
		Rebuild the Formation Deck	
		Squall marker	
		Chemical Strike Markers	
		ory Determination Phase	
_	3.0 E	nd Operations card	.33
_	_		
		lose Air Support card	
		orise and Interception	
		-Aircraft Fire	
		e Air Support Attack	
	4.4 Ordr	nance Expenditure	.35
_	\ F.O. 5		
		lectronic Warfare card	
		Markers	
		Effects	
	5.3 Rem	oving EW Effects	.35

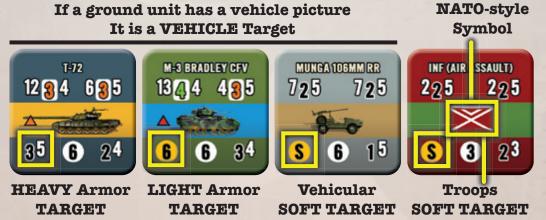
○ 6.0 Battlefield Event/Friction card36	9.8.3 Unloading into an Assault50
6.1 Battlefield Event or Battlefield	9.8.4 Loading, Unloading and Opportunity
Friction?36	Fire51
6.2 Applying Events or Friction36	9.8.5 Helicopter Transport units
	9.9 Combat Lift-Off52
○ 7.0 Formation Card37	
7.1 Refresh Step	10.0 Direct Fire Action53
7.2 COMMAND STEP38	10.1 AP and HE Firepower - Which to use?53
7.2.1 Transferring Leaders38	10.2 Line of Sight (LOS)54
7.2.2 Deploying Headquarters to the	10.2.1 Terrain Height54
Map	10.2.2 Blocking and Obscuring Terrain55
7.2.3 Check if Units are Out of Command 39	10.2.3 Blocking Terrain obstacle Height &
7.2.4 Command Range and Determining Command status40	Blind Spots
7.2.5 Units Always in Command41	10.3 Range
7.3 MISSILE RELOAD STEP42	10.3.1 Point Blank Range
7.4 DISRUPTION REMOVAL STEP42	10.3.2 Effective Range
7.5 OFF-BOARD ARTILLERY STEP42	10.3.3 Long Range
7.6 Action STEP	10.3.4 Maximum Range
1.0 10000115121	10.3.5 Minimum Range Requirement58
○ 8.0 Actions	10.4 Combat
8.1 Movement Action & Movement43	10.5 Support Weapons, Modifiers & Restrictions59
8.2 Direct Fire Action43	10.6 Direct Fire Restrictions and Modifiers .60
8.3 Move & Direct Fire Action43	10.6.1 Anti-Aircraft Fire60
8.4 Assault Action43	10.6.2 HQ or Leader Command Bonus61
8.5 Indirect Fire Action43	10.6.3 ATGM Minimum Range61
	10.6.4 Point Blank Range Fire
9.0 Movement Action & Movement 44	10.6.5 Long Range Fire
9.1 Terrain44	10.6.6 Firing into an adjacent
9.2 Stacking45	Smoke hex61
9.3 Unit Categories and Movement45	10.6.7 Firing out of a Smoke filled hex into
9.4 Road or Trail Movement45	an adjacent hex61
9.5 Ground & Amphibious Movement46	10.6.8 Terrain61
9.6 Towed Units46	10.6.9 Composite/Reactive Armor61
9.7 Helicopter Movement & Modes46	10.6.10 Volley Fire61
9.7.1 Flying	10.6.11 Target is a Landed Helicopter62
9.7.2 Nap-of-Earth	10.6.12 ATGM Direct Fire at a Target in
9.7.3 Hovering48	Blocking Terrain62
9.7.4 Landed	10.6.13 Concealment62
9.8 Transport units and Passengers49	10.6.14 Maximum Defensive Bonus62
9.8.1 Loading50	10.6.15 Maximum To-Hit penalty62
9.8.2 Unloading50	10.6.16 Minimum FP dice penalty62

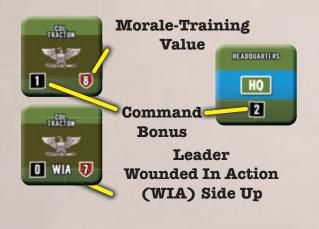
10.6.17 All-water Hex restriction62	14.7.1 Off-Board versus On-Board FP dice76
10.7 Combat Results62	14.7.2 Strike Procedure
10.7.1 Results versus Ground units and Helicopters	14.8 SMOKE
10.7.2 Results versus HQs and Leaders63	14.9 MLRS (Multi-Launch
10.7.3 Results versus Transport units and	Rocket Systems)78
Passengers64	14.9.1 MLRS Strike Reduction Check78
10.7.4 Results versus Close Air Support64	14.10 ADM (Artillery Delivered Mines)78
10.8 Wrecks and Disruption65	14.11 DPICM (Dual-Purpose Improved
10.8.1 Wrecks65	Conventional Munitions)
10.8.2 Disruption Effects65	14.11.1 DPICM Strike Reduction Check 79
10.9 Rubble, Clearing Rubble & Fires65	14.12 CHEMICAL
10.9.1 Clearing Rubble Hexes66	A 450 B : . 15 .: 1 00
10.10 Missile Ammo Check66	● 15.0 Designated Formation card 80
10.11 Opportunity Fire66	■ 16.0 Other Series Rules
	16.1 Improved Positions80
	16.2 Minefields80
10.0 On Board Indiana, Fire Assistance CO	16.2.1 Hidden Minefields81
◆ 12.0 On-Board Indirect Fire Action69	16.2.2 Minefield Depletion81
<b>■</b> 13.0 Assault Action70	16.3 Engineering81
13.1 Assault Modifiers71	16.3.1 Breaching Minefields81
13.1.1 HQ Bonus71	16.3.2 Clearing Rubble Hexes82
13.1.2 Infantry Assault Bonuses versus	16.3.3 Bridge-laying Units82
Vehicles71	16.4 Bridge and Ford markers83
13.1.3 Cross-Bridge or Cross-River	16.5 Weather83
Assault	16.5.1 Weather Changes83
13.1.4 Night Assault	16.5.2 Squalls84
13.1.5 Vehicle Assault bonus	16.5.3 Mud84
13.2 Resolving an Assault	16.6 Night Rules84
13.2.1 Applying Hits in an Assault72	16.6.1 Night Targeting Checks and LOS at
13.2.2 Retreating from an Assault72	Night84
13.2.3 Ending the Assault72	16.6.2 Assaults at Night85
14.0 Indirect Circ 77	16.6.3 Weather Effects and Night85
14.0 Indirect Fire73  14.1 On-Board Artillery Fire73	16.7 Parachute Drops85
14.2 Off-Board Artillery Fire	16.7.1 Designate Drop Zones and Landing Hexes85
14.3 Spotters	16.7.2 Check for Drift
14.4 Indirect Fire Range	16.7.3 Anti-Aircraft Fire from
14.5 FFE marker & Scatter Check	Ground Units86
14.6 Strike Types	16.7.4 Landing: Check for Disruption87
14.7 HE (High Explosive)	
11.1 11E (111811 Expressive)	

● 17.0 Battle Generator	88
17.1 Choose a scenario size	88
17.2 Choose the specific map or maps	
17.3 Create Objectives	89
17.4 Choose your Victory Conditions	89
17.4.1 Objectives minus Casualties	89
17.4.2 Objectives only	90
17.4.3 Turn Length and Objectives	90
17.4.3.1 Objectives	90
17.4.3.2 Game Length	91
17.4.3.3 Defender Bonus	91
17.4.3.4 Entering Defender Bonus units	91
17.4.4 Casualties only	
17.5 OPTIONAL: EW advantage	
17.6 Purchase your units	
17.7 Setup the scenario	
17.8 Game Record Log Sheet	
■ 18.0 Series Resources	96
18.1 Video Bootcamp	
Video Tutorial Playlist	
18.2 Audio Book Edition	
18.3 Battle Gear	
19.0 Glossary	98
20.0 Acknowledgments	100
21.0 Design & Development Notes	100
22.0 Index	104
Starter kit	120
Julius Kil	120
Credits	138

## **Counter Reference**











## **Counter Reference**



Hit



## **Counter Reference**

**FORMATION CARD** 2.8, 6.2 & 7.0



Reduced Strength HQ **Command Range** 







## **Counter Reference**

Out of Command 7.2.3



Electronic Warfare 5.0



Ops Complete 7.6



Electronic Warfare Reducing 5.0



Wrecks 10.8.1



Smoke Screen 14.8



Fire for Effect 14.5



Smoke Screen-Thinning 14.8



Disrupted 10.8.2



LOW Missile Ammo 7.3 and 10.10



Objective A (through E) 17.4 and Module rules



NO Missile Ammo 7.3 and 10.10



## **Counter Reference**

RELOADING
Missiles
7.3 and 10.10



Ford 10.9 and 16.4



Helicopter Nap-of-Earth Flying mode 9.7.1



Improved Positions 16.1



Helicopter LANDED Mode 9.7.4



Random Minefield 14.10 and 16.2



Bridge Destroyed 10.9 and 16.4



Placed Minefield 16.2



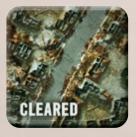
**Bridge 10.9** and **16.4** 



Scenario North
18.1



**Cleared** 10.9.1 and 16.3.2



Squall 2.3.8 and 16.5.2



## **Counter Reference**

Mud 16.5.3



Fire 2.3.4 and 10.9



Weather Level 16.5



Rubble 2.3.4.1 and 10.9



Number of Arty Strikes 14.7.1



In Tunnel (See Module Rules if present)



Arty Strike FP Dice Strength 14.7.1



In Tunnel (See Module Rules if present)



Burnt Out 2.3.4.1 and 10.9



## Introduction

The World At War 85 series of games (WaW85) are fast-paced, platoon-level simulations of combat during the Third World War. The series' Action begins in 1985, and brings to life the troops, tanks, artillery and aircraft of that time period, as conflict erupts around the globe.

These Core Rules are designed to be used with every game in the series, and so, once learned, you will be able to play any game in the series. Individual game Volumes (also called Modules, but each is in fact a complete standalone game) may add rules for use in that module, and individual scenarios may introduce rules that apply only to that scenario. But the Core Rules remain the same.

When in doubt, Module Rules override the Core Series Rules and Scenario Rules (SRs) override both the Core Series and Module rules.

## **Community, Support & Resources**

If you have any game questions, or if you are just looking for other gamers to chat with, you can find quick replies on our forums at http://forums.lnlpublishing.com.

If any parts of this game are damaged, or if you have any other support needs, please open a support ticket on our Support Desk at http://support.lnlpublishing.com.

You can also find additional game resources such as scenarios, counters, special rules and other community-design materials in our Resource section at:

http://forums.lnlpublishing.com/resources.

## How to use this manual

These styles of text are used to indicate useful information throughout these Core Rules:

Game concepts that are completely new and smaller sub-sections or concepts which are new or which have been significantly rewritten will be in BLUE.

IMPORTANT NOTES, exceptions, clarifications, etc., will always have this yellow-orange background, and, most importantly, will have the full force of the rules.

EXAMPLES of play will be in a gray box with white text.

Design Notes will be italicized and in a light-gray box. Design Notes are NOT rules of the game, but are inserted to enhance your understanding of why things are the way they are in the game.

The first 30 pages or so of the rules are simply for familiarizing yourself with the playing pieces, game markers, and game cards: nothing that needs to be memorized.

That information is also repeated in a more compact format on the Player Aid Card PACO2 Unit and Card Values, Marker Reference, some of which refer back to specific rules which govern their use.

For those familiar with the system, jump right in at **Section 2**, **Sequence of Play**.

Your Player Aid Card PACO2 Sequence of Play can come in handy while familiarizing your self with these rules. It has rules references that take you directly to the section needed for each card, phase, step and/or Action in the turn, if you need.

A great way to learn the game (if you do not have the luxury of being taught by a fellow gamer) is simply to set up a small scenario and follow the Player Aid Card PACO2 Sequence of Play, referring to the rules as you need them.

As just a few turns go by we hope you will find a minimum of referencing is necessary.

Your playing pieces represent groups of tanks, troops, and guns, and are interchangeably called units, counters or unit counters hereafter in these rules.

Yet the heart of the System - i.e. what drives each game Turn of a game In the **WaW85 Series** - is the drawing of cards from a custom deck of cards, called the **Formation Deck.** Each card represents either a group of units - yours, or your opponent's, in either case referred to as a **Formation card** - and so makes that Formation "active" to move or fight; or triggers various **Game Functions or Events**.

The seven types of cards are detailed in section 1.8.

Taking a look at the Table of Contents of this manual, you will see the major rules sections 3.0 through 15.0 are organized mainly on the lines of what each card does when it is drawn. Rules for the Game Function or Event cards tend to be short, a page or less, and with explanatory graphics. Some of these cards represent unforeseeable battlefield events or the availability of comparatively unpredictable or scarce assets (such as Close Air Support and electronic counter-measures).

But the major section of rules comes into play when you draw a Formation Card. When this occurs, a group of units with the same nationality and color-band as indicated on the card drawn becomes "active" - again, either yours or your opponent's - and executes a Formation Impulse. Within that Impulse, along with maintenance and artillery functions for the Formation, Active units may execute discrete **Actions** relating to movement, combat, or a combination thereof, until all Active units complete Actions or the player wishes to finish the Formation Impulse before that happens.

The detailed rules for the five Actions that units can perform in a Formation Impulse complete the major rules sections.

The rules for the Movement Action contain topics such as Movement Points printed on your units, Terrain, Roads and Trails, Helicopter Modes and movement, Amphibious Movement, Transport units and Passengers.

The Direct Fire Action section introduces combat concepts needed to fire at enemy units to disrupt or eliminate them. These include the firepower, range, to-hit and save values printed on your units, as well as Range, Line of Sight, Direct Fire restrictions and modifiers, and combat results against the different target types in the game. Opportunity Fire and Anti-Aircraft Fire are both forms of Direct Fire, and so are also included here.

The Move & Direct Fire Action combines limited movement with possibly modified Direct Fire rules. The differences - and there are not many - between this combined Move & Direct Fire Action and regular Movement Action and Direct Fire Actions are noted.

On-Board Indirect Fire Action shares procedures with Off-Board Indirect Fire, including Spotting units, Strike Scatter Checks, and executing one of the six types of Indirect Fire Strikes available in the **WaW85 Series**.

The On- and Off-Board procedures occur at different times in the Formation Impulse (one is a step and one is an Action), but both will refer to a common section on Indirect Fire, again with the differences noted.

And finally the **Assault Action** details elements of this combined Movement with Assault combat when entering an enemy unit's hex. Rules are introduced for resolving the assaults, what happens to unsupported Armor in such situations, Bridge Assaults, etc.

Again: If an Action requires a rule that is subsequently required by another Action - as an example, Line of Sight, used for both Direct and Indirect Fire purposes - one, the other, or both will refer to the detail section. You do not have to read it twice. Slight differences (such as between On-Board and Off-Board Indirect Fire) will be shown in the detail itself so you do not have to look elsewhere for it.

Next there are a number of short sections that detail some flavor rules that can be found throughout the **WaW85 Series**, things like Night Combat and parachute Drops. Finally, an extensive - but totally optional! - Battle Generator section is available for those who wish to design their own scenarios.

**Design Note:** Be undaunted by the number of pages you may see in these rules. This is a moderate complexity game, no more, with simple concepts that have been streamlined for playability. But first and foremost it can take more to explain a rule on paper than in person. The best way to learn any game is to have it taught to vou. But the rules stand as a reference, and we have tried to make them as easy to digest as possible. Should you not have the option of being taught, we have chosen to make the physical fonts and graphics found in this book as large as we could, as well as adding many explanatory graphics and text examples to key rules sections. These choices of course added pages to the book, but they are not text-dense pages, they are graphic heavy with larger fonts, so we hope you find, as we do, that they read very quickly. The Player Aid Cards that accompany the game are similarly designed, to have large, easy to read graphics, with simple tables to clearly present game-relevant information, all presented with specific rules references in case you need to quickly locate details to refresh your memory of a specific rule.

## 1.0 General Concepts

#### 1.1 Unit Scale

Counters represent infantry platoons (40-60 men), armored fighting vehicle (AFV) platoons (3-5 tanks), artillery batteries (3-4 gun tubes or launchers), Helicopter sections (1 to 2 Helicopters), Close Air Support flights (1 to 2 aircraft), and other roughly platoon-sized military units. Smaller units may be sections (1-3 vehicles or gun tubes). You will be commanding multiple platoons and/or sections organized into larger groups called Formations.

## 1.2 Time Scale

Each turn represents five to fifteen minutes.

## 1.3 Map Scale

Each hex is approximately 150 meters wide. A Hill level can vary between 10 and 25 meters in height.

## 1.4 Scenarios

Each Volume comes with a set of starting game situations called scenarios. You can play the scenarios within World At War 85 products in whatever order you desire.

## 1.5 Game Play

Players have a deck of Formation cards, representing a group of counters on the map. Players will draw the top Formation card from the deck, and activate that Formation's counters, to move and initiate combat.

The deck also contains special cards, such as electronic warfare, Close Air

Support, and battlefield events. When drawn, these cards are resolved by their own rules.

End Operation cards may end the Operations Phase when drawn. If operations do end, and after cleaning up logistical markers, all cards are then gathered and shuffled, and the next turn begins.

**IMPORTANT!** And one thing above all others in all games in the series: if the rules do not state that your units CAN do something, they may NOT do it.

## 1.6 Components

#### 1.6.1 Dice

The game includes eight (8) six-sided dice (d6). If you see xd6 in the rules, it means roll x number of six-sided dice.

#### 1.6.2 Game Board(s)

The game contains a number of geomorphic map boards that can be put together according to the scenario you are playing, or arranged to create your own game map.

Because the maps are geomorphic and especially when creating your own map configurations, as long as you match one short edge to another short edge, or one long edge to another long edge, the roads and rivers will line up and join properly.

## 1.6.3 Player Aids & Tracks

Various Player Aids and Game Tracks are included to make things easier to reference and track during play. More than one informational reference or table may be on one card, and some contain tracks for use during play. You may find the Player Aids more convenient than consulting the rules, yet they are configured to allow for easy reference to the rules if you need.

#### These include:

- PACO1 Unit and Card Values, Marker Reference
- PACO2 Sequence of Play
- PACO3 Terrain Effects Chart (TEC)
- PACO4 Battlefield Event & Battlefield Friction Tables
- PACO5 Miscellaneous Tables, including
  - » Weather Change Table
  - » Missile Ammo Usage Summary
  - » Special Ability Triangle Chart
  - » Move & Fire Summary
  - » Indirect Fire Abbreviations
  - » Indirect Fire Summary
- PACO6-1 Game Marker Tracks 1, including:
  - » Turn Record Track
  - » Weather Track
  - » Squall Box
  - » Mud Box
  - » Off-Board Artillery Tracks NATO/NATO-allied
- PACO6-2 Game Marker Tracks 2, including:
  - » Formation Deck and discard boxes

- » Off-Board Artillery Tracks Warsaw PACT/PACT-allied
- PACO7 Holding Boxes
- PACO8 A Line of Sight reference with examples
- PACO9 A reference that includes Every Die Roll in the Series
- PAC10 Direct Fire Modifiers
- PAC11 A master list of the cards in your Game set (Volume specific)
- PAC12 Battle Generator Tables, including
  - » Turn Length, Objectives and Point values per side
  - » Degree of Victory
- NAT-(nation name) National Unit Tables, one for each nationality in your game (Volume specific)

#### 1.6.4 Units

Your playing pieces, known as units, counters or unit counters, are <sup>3</sup>/<sub>4</sub>" cardboard rounded-corner squares, representing headquarters (HQs), vehicles (depicted on the counter), and other types of units (depicted by their NATO symbol).

#### 1.6.5 Color bands and Attachments

The face of each counter has a solid horizontal band whose color matches the color on its Headquarters, every other unit in its Formation, and also the color on its corresponding Formation card:



Unit counter



Headquarters (HQ)



Formation card

The face of a ground unit or Headquarters (HQ) represents it at full-strength:



Attached units, representing military assets supporting a Formation, are distinguished by a gray band. Each scenario will indicate to which Formation an attached unit is attached, and any units so attached should be treated as if they have the color-band of the Formation to which they are attached for the duration of any scenario:



The face of a Leader counter represents the individual in good health:









The reverse of a Leader counter represents the individual in a wounded state (Wounded In Action, or WIA):









Support Weapons, are indicated by the red diamond on the bottom center of the counter, and add capabilities to infantry, armor and some towed units:



**Note:** Support Weapons have the SAME image on the front and back of the counter for ease of locating them.

Close Air Support Counters attack units on the map when their corresponding Formation card is drawn (see the next section):



**Note:** Close Air Support Counters have the SAME image on the front and back of the counter for ease of locating them.

Units possess one or two steps. The reverse of a ground unit or HQ has an additional white band and reduced values, indicating the unit has suffered a reduction in combat strength or leadership potential:



A one step unit has a reminder of that on the back; it is eliminated if flipped:



However, the face of a Helicopter unit represents its Flying mode, marked with and "F". The reverse of a Helicopter unit represents it in its Hovering mode, marked with an "H:" and is **NOT a second step:** 



Unless otherwise indicated in a scenario's Order of Battle section, all units begin the game front side up.

**Note:** If you are unsure at any time if a unit has one or two steps, look on the **National Unit Table for the nationality of the unit in question,** and check the "Steps" column for that specific unit, or check the back of the unit for the "1-step unit" indicator as above.

## 1.6.6 Unit types

Consult the **National Unit Tables** for each nationality included as Player Aid Cards in the Volume of the game you are using for the specific unit types in your Volume.

**Note:** Not all unit types are present in all games in the World At War 85 Series.

#### 1.7 Markers

Markers are <sup>5</sup>/<sub>4</sub>" pieces that are placed on or beside units to denote their status; or on tracks to designate weather, artillery supply and effects, and/or the current game turn; or placed in a hex to modify its terrain.

Design Note: Except for EW, Smoke and Bridge markers, game markers have the SAME image on the front and back of the counter for ease of locating them if they are mixed together. You will not have to flip counters to find the one you need.

#### 1.7.1 Unit and Map Markers



#### **Ops Complete**

Placed on a unit when it has completed an Action.



#### **Out of Command**

Placed on a unit when it fails a Command Check.



#### Disrupted

The first combat effect against ground units, removed by a successful Removal Check.



Reloading Missiles

Indicates a unit may not use its ATGM or SAM system until it passes a Reload Check.



Low Missile Ammo

Indicates a unit only has one more ATGM or SAM attack.



No Missile Ammo

Indicates a unit may not use its ATGM or SAM system until its munitions are replenished by a battlefield event.



Helicopter Landed

A Helicopter unit on the ground.



**Helicopter NoE** 

A Helicopter unit flying nap-of-earth.



#### EW & EW Reducing

Double-sided counter placed EW side up initially on an affected HQ unit to represent the jamming effects of electronic

warfare being aimed against it. The counter must be flipped - reflecting a reduction in the effect - before it is removed.



Minefield - Random

Represents scattered mines (e.g. Artillery Delivered Mines), affecting both friendly and enemy units who enter the hex.



Minefield - Placed

Represents deliberately placed mines with corridors allowing friendly units to traverse the hex. Enemy units are attacked if they enter the hex.



**Improved Positions** 

Represents reinforced fighting positions, like foxholes, pillboxes, hedgehogs, or other strengthened buildings.



Smoke Screen & Smoke Thinning

**Double-sided counter** representing a smokescreen placed by artillery or mortars on one side, and the thinning status of that smoke on the other.



#### Bridge & Bridge Destroyed

Double-sided counter indicating a Bridge on a River hex side on one side, or a Bridge that has been destroyed on the other. The red arrow points at the affected hex side.



Indicates a Ford on a River hex side. The red arrow points at the affected hex side.



Rubble

Placed on a hex representing terrain with a Defensive Bonus. It also indicates that the roads through the hex are obstructed and unusable as a consequence of combat.



Cleared

Indicates rubble removed by engineers or engineering vehicles, making the roads in a Rubble hex usable again.



Indicates an intensive fire ignites in a City, Town, Woods or Jungle hex; or any Module or Scenario-permitted terrain type that has caught fire as a consequence of combat.



**Burnt Out** 

Placed when a Fire marker is removed.



North

Helps to orientate the map for deployment and reinforcement for a specific scenario.





**Objectives** 

Placed to indicate scenario Objectives, or entry/exit points.



Fire for Effect (FFE)

Indicates the intended target hex for an artillery Strike.



Wrecks

Replaces a vehicle unit that has taken enough hits to be eliminated and so removed from play.

#### 1.7.2 Game Turn & Weather Track Markers:

These markers are placed on the tracks to be found on Player Aid Card PACO? Tracks, including the Game Turn / Weather / Artillery Tracks, as needed in a scenario.



#### Game Turn

Placed on the Game Turn Track to indicate the current turn.



Weather Level

Placed on the Weather Level Track to indicate the current weather conditions.



**Squall** 

Placed in its box to indicate a squall is occurring for the remainder of the current turn.



Mud

Placed in its box to indicate muddy conditions until the end of the scenario.

#### 1.7.3 Artillery Strike/Strength

Placed on the Artillery Track to indicate the number of Strikes available (the black marker), and their strength (the orange marker). Not all Strikes need a strength marker as they are always the same as indicated on the track (MLRS), or not used directly for attacking enemy units.







HE: High Explosive Strike



MLRS: Multiple Launcher Rocket System Strike



ADM: Artillery Delivered Mines Strike

#### (Strength)





DPICM: Dual-Purpose Improved Conventional Munitions Strike



CHEMICAL Strike



SMOKE Strike

## 1.8 Cards

Cards are chosen to make up the Formation Deck for each scenario. Unless otherwise indicated in a Module or Scenario, this Formation Deck will have 2 End Operations cards, and a minimum of one Formation card per Formation in play. A single Battlefield Event/Friction card is always optional upon agreement of both players before the scenario is begun.

Scenarios will typically call for a second Formation card for many Formations - generally NATO, NATO-allied, Airborne/Airmobile/Parachute and Helicopter - instead of one.

Formation Cards make up the majority of the deck. They include helpful information such as the nationality, color-band, Morale-Training value, and both full- and reduced- strength HQ Command ranges.





Optional cards can include a Battlefield Event/Friction (as stated above), additional End Operations, Designated Formation, Scratch Force, Close Air Support, and Electronic Warfare. Here is a quick look at the possible additional cards.



# Designated Formation Card is

treated as a
Formation
card above,
but instead of
specifying a
Formation to

activate, the specific Formation is indicated by Module or Scenario rules.



# Scratch Force Formation Cards

are also treated as Formation cards above. They represent ad hoc Forma-

tions not composed of a single color band (plus the usual attach-

ments). They even may contain multiple nationalities.



#### **End Operations**

Cards are used to determine when the Operations Phase of a game turn ends:



# The Battlefield Event/Friction Card

tion Card
allows for
certain events
to transpire
out of the
players' con-

trol as commander of the battlefield.



## The Electronic Warfare Card

allows a player to attempt to impede an enemy Formation's effectiveness when

it activates, representing electronic jamming of communications in the battlefield area.

 Close Air Support Cards activate a corresponding unit counter that can be used to attack enemy units on the map.





#### 1.9 UNIT and CARD VALUES

These are the values used to characterize the combat units and cards in WaW85. Units will have at least one of these values, but most will have all of them. The rules will specifically define units and markers that do not have all of these values.

Note: If you need to locate any of these values they are summarized on PACO2 - Unit and Card Values Player Aid Card,

## 1.9.1 AP Firepower (AP FP dice)

AP FP Dice number is shown below in the yellow circle:



This number indicates the number of d6 your unit may choose to roll when attacking any vehicle, ship or aircraft, but NOT non-vehicular Soft Targets.

Non-vehicular Soft Targets have a NATO symbol, not a Vehicle symbol. See your National Unit Table Player Aid Cards.

If the color of this number is:

- **Black:** The unit may fire normally against non-Aircraft targets, but against Aircraft targets, this value is reduced (see Anti-Aircraft Fire, 10.6.1).
- Green: The unit's AP Firepower may only be used against vehicles (yes, including vehicular Soft Targets), or landed Helicopters. It may not be used against non-vehicular Soft Targets, flying or nap-of-earth Helicopters, or Close Air Support Counters. This weapon uses missiles and so is subject to Missile Ammunition Depletion Checks (aka Missile Ammo Checks). See Missile Ammunition Depletion 10.10.

**Exception:** NOE Helicopters are usually treated as a ground vehicle, but not for this purpose.

- Orange: If executing a Move & Fire Action, this unit suffers less or no penalty to its Direct Fire Attack, depending on how far it moves. (See Move & Fire Action, 11.0).
- Blue and its Range IS ALSO
  Blue (See 1.9.4 for Range): The
  unit may not fire its AP Firepower
  against non-Aircraft targets. The
  units' AP Firepower can be used at
  full-strength and range versus Helicopters and Close Air Support.

**Note:** If the **Range** value of a unit with a blue AP Firepower is also **blue**, the unit's AP Firepower weapon uses missiles and so is subject to checking for Missile Ammunition Depletion Checks (aka Missile Ammo Checks). See Missile Ammunition Depletion 10.10.

Blue - and its Range is NOT Blue (See 1.9.4 for Range): The unit MAY fire its AP Firepower at full-strength and range versus non-Aircraft targets, as well as Helicopters and Close Air Support.

#### 1.9.2 HE Firepower (HE FP dice)

**HE FP** Dice number is shown below in the yellow circle:



This number indicates the number of d6 the unit may choose to roll when attacking Light Armor vehicles, Aircraft or Soft Targets. If the color of this number is:

- **Black**: The unit may fire normally against non-Aircraft targets, but against Aircraft targets, this value is reduced (See Anti-Aircraft Fire, 10.6.1).
- Orange: If executing a Move & Fire Action, this unit suffers less or no penalty to its Direct Fire Attack, depending on how far it moves. (See Move & Fire Action, 11.0).
- Blue and its Range IS ALSO
  Blue (See 1.9.4 for Range): The
  unit MAY fire its HE Firepower
  at full-strength and range versus
  non-Aircraft, non-Heavy Armor

targets, as well as Helicopters and Close Air Support units. It may also fire at Heavy Armor targets but only if specified by Module or Scenario rules.

**Note:** If the **Range** value of a unit with a blue HE Firepower is also **blue**, the unit's HE Firepower weapon uses missiles and so is subject to checking for Missile Ammunition Depletion Checks (aka Missile Ammo Checks). See Missile Ammunition Depletion 10.10.

#### 1.9.3 To-Hit number (To-Hit)

The AP To-Hit number is in the left-hand yellow circle below and the HE To-Hit number is in the right-hand yellow circle:



When a unit attacks and rolls the number of dice indicated by one of the Firepower types above (AP or HE), then for each die roll result that is equal to or greater than this number, a hit is scored on the defender/target.

#### 1.9.4 Range Value

The AP FP Range is in the left-hand yellow circle below and the HE FP Range is in the right-hand yellow circle:



The effective range of that Firepower for the unit, in hexes. If the color of this number is:

- WHITE: The unit receives a bonus to its To-Hit number for either AP or HE FP dice using the rules for Point Blank Fire if they are at half effective range or less from the target unit (See Point Blank Range Fire, 10.6.4). The unit can fire up to twice its' effective range using the rules for Long Range Fire, but at a cost penalty to its To-Hit number (See Long Range Fire, 10.6.5).
- Blue: The unit is a missile-armed Anti-Aircraft unit and is subject to Missile Ammunition Depletion Checks (aka Missile Ammo Checks). See Missile Ammunition Depletion 10.10.

#### 1.9.5 Armor Value and Save Value for Heavy Armor

Each Heavy Armor target type has an Armor value. The Armor value is in the yellow circle below:



Each Heavy Armor target type has an Save value. The Save value is in the yellow circle below:



For a Heavy Armor target, the Armor value is the number of d6 rolled when determining how many of the attacker's hits can be ignored.

For each Armor value die result greater than or equal to the Save value, the unit may ignore one hit by its attacker.

#### 1.9.6 Armor Value and Save Value for Light Armor

Each Light Armor target type has a 5 or 6 on a gold circle, the gold circle indicating it always has an Armor value of 1. But the 5 or 6 is its Save value. This value is in the yellow circle below:



The gold background circle with a number in it (typically 5 or 6) indicates that Light Armor targets always roll only one d6 when determining how many of the attacker's hits can be ignored. Its Save value is the number in the circle.

If its Armor value die result is greater than or equal to the Save value, the unit may ignore one hit by its attacker.

## 1.9.7 Soft Targets — Vehicles and Troops

Soft Targets are indicated by an S in a gold circle (see below inside the yellow circle) and are further designated as Troops or Vehicles.

Soft Target - Troops have a NATO-style symbol on them; see the yellow rectangle:



Soft Target - Vehicles have a vehicle picture on them; see the yellow rectangle:



The gold background circle with an 'S' indicates that the unit is a Soft Target, whether a vehicle or other unit. Vehicular Soft Target units have a vehicle image on the counter. Non-vehicular Soft Targets have a NATO symbol and are also called Troops.

Soft Targets do not have an Armor die value but use the **Defensive Bonus** dice as determined by the terrain they occupy (check the TEC for the number of dice).

**Note:** The Save value for Soft Targets is always 5.

For each Defensive Bonus die result greater than or equal to the Save value, the unit may ignore one hit by its attacker.

There are various modifiers that can affect a unit's Armor dice, Defensive Bonus dice, or Save value. These will be detailed later in these rules (See Direct Fire Restrictions and Modifiers, 10.6).

#### 1.9.8 Movement Points (MP)

A unit's Movement Points are indicated as shown in the yellow circle below:



This number represents the maximum number of Movement Points (MPs) the unit may spend to enter new hexes on the map during a Movement Action. Movement can be further restricted by water obstacles unless a unit is designated as amphibious. Also a unit may be a Transport unit. These added movement capabilities are indicated by the background color of a unit's Movement Points.

A blue or half-blue/half-green circle behind the MP value indicates an amphibious unit that can move into all water and non-water hexes; and cross Rivers without using a Bridge or Ford hex side, though at a penalty in MPs. See below in the yellow circles:





A green circle behind the MP value indicates a non-amphibious unit that can only move into non-water hexes, and may only cross a River using a Bridge or Ford hex side, unless otherwise dictated in Module or Scenario rules:



A green or half-blue/half-green circle behind the MP value indicates that the unit is a Transport unit, and can load and Transport unit one Infantry unit and its Support Weapon and HQ, or tow one Towed unit ("T" Movement Points, see below) and its Support Weapon and its HQ:





A "T" as the MP value indicates a unit that must be towed by any Transport unit to move to another hex. It may not otherwise move:



An "F" as the MP value indicates a Flying Helicopter. See 9.7 Helicopter Movement & Modes:



An "H" as the MP value indicates a Hovering Helicopter. See 9.7 Helicopter Movement & Modes:



A "B" as the MP value indicates a Bridge-laying unit which has deployed a Bridge marker. See 16.3.3, Bridge-laying Units:



#### 1.9.9 Assault Firepower (Assault FP dice)

Assault FP Dice number is shown below in the yellow circle:



This value is the number of d6 the unit may choose to roll when Assaulting an enemy-occupied hex.

#### 1.9.10 Assault To-Hit Value:

Assault To-Hit value is shown below in the yellow circle:



When a unit Assaults it rolls the number of dice indicated by its Assault Firepower, and for each die roll result that is equal to or greater than this To-Hit number, a hit is scored on the target.

#### 1.9.11 Headquarters (aka HQs)

An HQs Command Bonus is indicated in the yellow circle:



**Command Bonus** 

Design Note: A Headquarters, or HQs. represents not just the command vehicles and troops, but also resources available on the company and/or battalion level that may not be represented by unit counters. These resources are incorporated into the HQ rules. HQs can be deployed to (stacked with) a unit of their Formation and redeployed as needed; this makes HQs somewhat of a hybrid unit/marker.

An HQ possesses a Command Bonus on its counter. The HQ may use that Command Bonus to add additional dice for Direct, Opportunity, or Anti-Aircraft Fire to the unit to which they are deployed; but not for Indirect Fire.

Note: See 10.6 Direct Fire Modifiers and Restrictions for details.

The Command Bonus also modifies Morale/Training Checks of any kind and attempted by the unit to which they are deployed by subtracting the HQs Command Bonus from the 2d6 Morale/Training Check dice roll.

#### 1.9.12 Special Ability Triangles

Note: The Special Abilities Triangle Chart on the page below is replicated on the Player Aid Card PACO5 Miscellaneous.

A unit may have a Special Ability triangle next to its NATO Unit Symbol or Vehicle Picture. The 5 types of Special Ability triangles are listed in the table below. This table is also on the Player Aid Cards. Details of the abilities are provided in these rules. For orange and yellow Special Ability triangles, more details might be present in the Volume/Module rules.

# **Special Ability Triangle Chart**



UNIT is a RECON TINIT

- · Always in Command
- May act as Spotters for Friendly Indirect
- · Enemy units within 5 hexes of a Recon Unit are not Concealed, except they may still be Auto-Concealed when fired at by Green AP FP dice (ATGMs, see 10.6.2), or by weather (PA05-1)



#### GRAY

UNIT may use INDIRECT FIRE using its HE FP VAL-UE



#### ORANGE

UNIT has COMPOSITE OF REACTIVE ARMOR



#### BLACK

UNIT'S GREEN AP FP (MISSILES) have a MINIMUM RANGE of 3 HEXES



#### YELLOW ELITE UNIT

Parachute capable

Also act as Recon (see Red triangle on this table)



WGER Commando



any ATGM DIRECT FIRE ATTACK (Green AP FP), these units may

## COMPOSITE ARMOR:





US M-1 Abrams

#### REACTIVE ARMOR:





For either type: when defending against decrease their Armor save value by 1.

#### 1.9.13 Leaders

A Leader's Command Bonus is indicated in the left-hand yellow circle below; its Morale/Training value is in the right-hand yellow circle below:



**Design Note:** Leaders offer similar bonuses as HQs but represent far fewer soldiers, just an officer with his staff. They must stick with a combat unit for protection and so are assigned to a specific unit.

Leaders, similar to HQs, also possess a Command Bonus, and can offer bonus dice for Direct, Opportunity, or Anti-Aircraft Fire as HQs do, to the unit to which they are assigned; but not for Indirect Fire.

**Note:** See 10.6 Direct Fire Modifiers and Restrictions for details.

Unlike HQs, Leaders modify Morale/ Training Checks of any kind attempted by the unit to which they are deployed by substituting their Morale/Training value for the units' normal Morale/Training value.

## 2.0 Sequence of Play

To execute a game turn in a game of the World At War 85 series. Follow these steps in order:

- Initiative Phase (Turn 1 only)
- Operations Phase
- Marker Removal Phase
- Victory Determination Phase

Details of each phase are provided below.

## 2.1 Initiative Phase (Turn 1 only)

In some scenarios, a Formation may activate before the Operations Phase of Turn 1 begins.

In some scenarios, the Scenario Rules may specify one or more Formations as holding the initiative. These Formations get to activate (See 2.2.1) BEFORE the first turn begins.

If a Formation makes an initiative activation, its Formation card remains in the deck. Initiative is a free activation, so no card needs to be drawn.

If more than one Formation is eligible, they may be activated in any order the player desires.

## 2.2 Operations Phase

The Operations Phase then begins by drawing the top card from the Formation Deck, which will have been placed in the Formation Card Box on Player Aid Card PACO7 Game Marker Track 2 upon setting up the game. Resolve each Formation activation or other Action before drawing the next card.

Each time an activation or event is fully resolved, a new card is drawn until the second End Operations cards in the deck is drawn (even if three End Operations cards are present in the deck). This card signals the end of the Operations Phase.

A deck will always include the Formation cards for the Formations in a scenario. and at least two End Operations cards. The deck may also include the following cards, as specified in the scenario Order of Battle or Scenario Rules:

- Designated Formation
- Scratch Force
- Close Air Support (CAS)
- Electronic Warfare
- Battlefield Event/Friction

The Battlefield Event/Friction card, may be left out of the deck for either learning scenarios (designated in the Scenario Rules), or, if players agree before the game.

The rules for what happens when each type of card is drawn are as follows.

#### 2.2.1 Formation Card

Go to section 7.0.

## 2.2.2 Designated Formation or Scratch Force Card

Go to section 15.0, then 7.0.

#### 2.2.3 End Operations Card

Go to section 3.0.

## 2.2.4 Close Air Support Card

Go to section 4.0.

#### 2.2.5 Electronic Warfare Card

Go to section 5.0.

#### 2.2.6 Battlefield Event/Friction Card

Go to section 6.0.

## 2.3 Marker Removal Phase

Markers are removed, flipped or otherwise rearranged. Perform these steps in order:

#### 2.3.1 Ops Complete & Out of Command Markers





Remove all Ops Complete and Out of Command markers from the map.

#### 2.3.2 Smoke Markers



>>> REMOVE





First, remove any Smoke Thinning markers from the map, THEN flip any Smoke markers to their Smoke Thinning side.

#### 2.3.3 EW Markers



>>> REMOVE





First, remove all EW REDUCING markers. No die roll is required.

Then roll 2d6 for each EW marker on one of your HQs. If the roll is less than or equal to your HQ's Formation's Morale/ Training value, the EW marker is flipped it to its EW REDUCING side.

#### 2.3.4 Fire Markers

Perform these steps in order:

#### 2.3.4.1 Fire Burn Out

Check if Fire hexes burn out. Roll 1d6 for each Fire hex. If you roll a 5 or 6, the Fire marker is removed.

If the hex is a City or Town hex, replace it with a Rubble marker, otherwise replace it with a Burnt Out marker.

#### 2.3.4.2 Bridge Collapse

Check each Bridge hex side that is part of a Fire hex for collapse. Roll 1d6 for each. If the result is 1 - 5 there is no effect; on a 6, the Bridge across the hex side collapses and is marked by a Bridge Destroyed marker, with its arrow pointing toward the collapsed Bridge's hex side. A collapsed bridge is no longer treated as a crossing.

#### 2.3.4.3 Minefield Depletion from Fire

Check each Minefield marker present in a Fire hex for Depletion: roll 1d6 for each. If the result is a 6, the Minefield marker is removed. Otherwise, it remains.

#### 2.3.4.4 Spreading Fire

Check for spreading Fire. Roll 1d6 for each City, Town, Woods, Light Woods, Light Jungle, Jungle hex - or any terrain indicated by a Module or Scenario rule adjacent to a Fire marker.

If the result is 1 - 5, there is no effect; on a 6, place a new Fire marker in the affected hex, and immediately attempt to retreat any ground units in the hex. See 10.9 Rubble, Clearing Rubble & Fires, paragraph 4 (i.e. paragraph beginning "If the result is 6") for the retreat procedure and restrictions for both ground units and Helicopters, including that any unit retreating from a Fire is NOT marked Ops Complete. Any unit which can not retreat out of any new Fire hex is eliminated.

Note: Helicopters may immediately change mode to attempt to retreat one hex out of a new Fire hex but are NOT subject to Opportunity Fire in this case.

#### 2.3.5 Unsuppress HQs

Move all Suppressed HQs to their respective HQ/SW Holding Boxes. They are now available for deployment in the next turn.

#### **2.3.6 INF Support Weapon Transfer**

Transfer INF Support Weapons to another eligible unit in its' hex by re-stacking the Support Weapon on top of the other unit in the hex. Only INF Support Weapons may be transferred. ARM Support Weapons may not be transferred from the unit to which they are initially deployed during a scenario.

#### 2.3.7 Rebuild the Formation Deck

Shuffle all discarded cards not removed from the game back into the deck.

If a formation did not activate this turn, return one End Ops card to the deck, and hold the other. Place ALL HQ counters of ALL skipped formations (either side) on top of the card.

If the scenario uses three End Op cards, hold two and stack them together.

**NOTE:** Use an Ops Complete marker for each helicopter formation on the card.

Next turn, deploy each HQ from the card, rather than the holding box, as its Formation Card is drawn.

When the card is empty, shuffle it and any other End Ops card it is stacked with back into the deck. The Operations Phase now proceeds as usual.

Designer Note: This ensures no formation goes two turns without activating. Sometimes, a scenario calls for three End Ops cards, rather than the usual two.

#### 2.3.8 Squall marker

Remove the Squall marker from the Squall Box if it is present.

#### 2.3.9 Chemical Strike Markers



>>> REMOVE

Remove all Chemical Strike markers from the map.

## 2.4 Victory Determination Phase

Victory Conditions are defined by the scenario, and are typically evaluated during this phase of the last turn of the scenario. Games may also end in a draw, as specified by scenario. If victory is not attained at the end of a turn, and there are still turns to be played, advance the Turn marker and begin the next turn.

Important: For some scenarios, a side gains points for eliminating enemy units. The points earned for eliminating a particular enemy unit are found on that unit's row of Player Aid Card National Unit Table for the unit's nationality, under the Cost column.

If a scenario allows you to score points for reducing enemy units, you receive half (round up) of the cost of eliminating the unit.

## 3.0 End Operations card



There are usually two End Operations cards in the deck, though some scenarios will call for three.

When the SECOND End Operations card is drawn, the Operations Phase ends, and play enters the Marker Removal Phase.

**To clarify:** If there are three End Operations cards in the Formation Deck, the SECOND End Operations card signifies that the Ops Phase is over.

## 4.0 Close Air Support card



Design Note: Depending on the scenario, players can call in aircraft to assist their forces and attack enemy positions. The sequencing of when this happens is not up to the player as ground commander, so a card is placed in the Formation Deck that, when drawn, involuntarily triggers a Close Air Support attack on the enemy. Because the Close Air Support attack takes place on the map, and there may be Anti-Aircraft units available to defend against its attack, a Close Air Support unit counter is also provided that corresponds to the card. The unit counter is used on the map to designate the target hex and to allow for the calculation of range for any defending Anti-Aircraft attacks.

When the CAS card is drawn from the Formation Deck, execute the following steps in order to resolve the card.



Close Air Support card & counter

## 4.1 Surprise and Interception

Roll 1d6. If the result is a 1, the Close Air Support has achieved Surprise (see 4.2 Anti-Aircraft Fire, below, for the effect of Surprise). If the result is a 6, your CAS has been intercepted on the way to the battlefield. Remove the card and counter from the game for the remainder of the scenario.

If not intercepted, move the corresponding CAS counter from your Holding Box to your chosen target hex.

The CAS counter is considered to be at a target height as if it were a Helicopter in Flying mode (See 9.7.1).

## 4.2 Anti-Aircraft Fire

The enemy may now execute one Anti-Aircraft attack on the CAS counter with any unit, not Ops Complete or Disrupted, whose range and firepower type permit (see 10.6.1 Anti-Aircraft Fire). and which also have a LOS to the CAS counter. This is a form of Opportunity Fire.

If the Close Air Support has Surprise (see 4.1 Interception above), resolve the Anti-Aircraft attack now.

If and only if the Close AIr Support does NOT have Surprise (see 4.1 Interception above), and before resolving the attack, up to two additional enemy units, also not Ops Complete or Disrupted, and whose range and firepower type permit (see 10.6.1 Anti-Aircraft Fire), and which also have a LOS to the CAS counter may add one FP per unit to the Firepower of the unit executing the anti-aircraft attack to a maximum a +2 FP, if possible. Important: the To Hit value of any modifying unit is ignored in this case; always use the To Hit value of the unit executing

the Anti-Aircraft attack to resolve the attack. Then, along with the latter, resolve the Anti-Aircraft attack using the modified FP.

The resolution in either case above is executed as in a Direct Fire Action (see 10.0 and note 10.6.1).

## 4.3 Close Air Support Attack

If the CAS counter remains in play, it can attack each unit in the target hex. Use the Direct Fire procedures in (See 10.0) to resolve the attack.

Note: CAS attacks do not use the Point Blank or Long Range modifiers, see Modifiers and Restrictions, 10.6

The CAS may use either type of FP dice (AP or HE) against an individual target unit, and it may switch if needed to be eligible to affect its next target unit in the hex (See 10.1).

**Example:** If CAS attacks a hex with a Heavy Armor and a Soft Target, it may use its AP FP dice to attack the Armor, and switch to its HE FP dice to attack the Soft Target.

Exception: MLRS CAS units - with 'MLRS' on their counter, or as indicated on their national Unit Table, or in module or scenario rules - place a Fire For Effect marker on the target hex at the beginning of its attack, and follow the rules for MLRS strikes (14.9).

**Designer Note:** This actually represents cluster bomb and equivalent area-effect munitions, so it is more of an Indirect Fire-equivalent weapon system, and so is subject to Indirect Fire rules instead of Direct Fire rules, including scattering!

## 4.4 Ordnance Expenditure

Once the CAS attack is resolved, roll 2d6 to check for ordnance expenditure:

If the result is <= 7, the CAS has ordnance remaining. Return the CAS counter to the Holding Box, and the card may be shuffled back into the deck during the next Marker Removal Phase.

If the result is > 7, the CAS has expended its ordnance. Remove the CAS counter and its card from the game. It is not considered destroyed for Victory purposes.

## 5.0 Electronic Warfare card



If electronic warfare features in the scenario, one side or the other MAY be indicated in the Scenario or Module rules as holding the EW Advantage. The advantage modifies the roll to determine who may use the

EW card when drawn

## **5.1 EW Markers**

When the card is drawn, roll 1d6.

If the result is 1 - 3, NATO/NATO-allied player may play the card.

If the result is 4 - 6, WARSAW Pact/PACT-allied player may play the card.

This roll is modified by -1 if the NATO/NATO-allied player holds the EW Advantage as may be indicated in some Scenario Rules; +1 if it is the WARSAW Pact/PACT-allied player.

**Note:** These numbers may be altered by Module or Scenario rules!

The player who wins the card may place an Electronic Warfare marker on an enemy HQ unit on the map or in the enemy HQ/SW Holding Box. Shuffle the card back into the deck during the next Marker Removal Phase, unless otherwise specified by Module or Scenario rules.





EW, and EW Reducing markers

**IMPORTANT NOTE:** Only one Electronic Warfare marker may be placed on an HQ at any time.

## **5.2 EW Effects**

The effects on a Formation when its HQ has an EW or EW Reducing marker stacked on it are:

 When activated, all hexes of the HQ's Formation must roll to remain In Command no matter if they are in Command Range of the HQ or not.

**EXCEPTION:** Units that are always in command (See 7.2.5) are unaffected.

- Disrupted units suffer a +1 penalty when rallying.
- No unit from that Formation may participate in On-Board or Off-Board Indirect Fire.

## **5.3 Removing EW Effects**

During the Marker Removal Phase, if the HQ has an EW Reducing marker on it, that marker is automatically removed.

If it has an EW marker on it the HQ makes a Morale/Training Check. If it passes the check, the marker is flipped to its EW Reducing side.

**Design Note:** EW reduced is an indicator the EW is being burned through and will only last the remainder of the turn.

## 60 **Battlefield Event/Friction card**



**Design Note:** Since the players really represent the overall commander in a scenario, the events on the Battlefield Event Table are outside of an overall commanders' control, those unexpected and chaotic things that happen on the battlefield, both good and bad. A Battlefield Event may require a roll on a second, grittier, Battlefield Friction Table, generally defining more chaotic things that happen to specific units.

On the other hand, if you want a less chaotic and stricter game of military chess, you are not required to use the Battlefield Event card. If all players agree, you may remove it from the deck for any game you play. However, if you choose to use it, the Battlefield Events and Friction that arise are NOT optional. The choice is yours.

Personally, I highly recommend using the cards, as things like bonus impulses and strength steps restored - and weather! - can be exciting, and not outside of the realm of battlefield experience, I think. We always looked forward to the Battlefield Event/Friction card when testing, feeling that it enriched the experience.

## **6.1 Battlefield Event or Battlefield Friction?**

When this card is drawn, roll 2d6 on the Battlefield Event Table.

- If the result is a 2 6 or 8 12, something has happened. Consult the table and resolve the event.
- If the result is a 7, roll another 2d6 to find the result on the Battlefield Friction Table instead.

## **6.2 Applying Events or Friction**

On these two tables, in the Side Affected column, some Events/Friction are listed as Global. They affect both sides. Weather Change is a good example.

Some events apply to only one side. In such a case, Roll 1d6.

- If the result is 1 3, the NATO/ NATO-allied player executes the event.
- If the result is 4 6, the WARSAW Pact/PACT-allied player executes the event.

Events are not optional (they are not under player control). However, if the event contains 'if possible' in the EFFECT column, and the conditions which make the event possible are not met, the event has no effect on play, but is treated as if it had been executed.

**Note:** Weather is a very important - even game-changing event, and is covered under its own section, 16.5.

### 7.0 Formation Card

**Design Note:** The Formation cards form the heart of the WaW85 game turn. Activating your Formations allows your counters on the map to maneuver and attack enemy units. The majority of game rules are, therefore, found in this section.

When a Formation's card is drawn, the player may activate the Formation for movement and/or combat. The steps that form the sequence of that activation are called a Formation Impulse.

When a Formation is activated, all units sharing the Formation's color-band may be activated, along with any attached units. Attached units are designated by Scenario Orders of Battle (see your scenario book with this Volume) and are considered to be the same color-band as the Formation to which they are attached for the duration of the scenario being played. All these units are termed 'Active' or 'Activated.'

**Note:** Keep the Formation card drawn at hand. It shows the Formation's Command Range and Morale/Training values, which you will need for play.

Note on Scratch Force Formation cards: Normally, Formations may only contain units of one nation with the same color-bands, and/or attachments of that nation with white color bands. However, units represented by Scratch Force Formation cards may contain a MIX of colors and/or attachments, even multiple nationalities.

Design Note: Scratch Force Formation Cards are typically used for Formations you may wish to use when designing your own scenarios with the WaW85 Battle Generator described later in these rules. However, there are one or two occasions when you will find them in published scenarios.

Resolve the activated Formation's impulse in this order:

- · Refresh Step
- Command & Leader Status Step
- Missile Reload Step
- Disruption Removal Step
- Off-Board Artillery Strikes
- · Actions by Active Units or Stacks

When each active unit completes its Actions, mark it with an Ops Complete marker.



#### **Ops Complete marker**

When all the units in a Formation are marked as being Ops Complete, or the player does not want to perform Actions with some units (say, so they will not be marked Ops Complete and be available for Opportunity Fire later in the Operations Phase), the Formation Impulse ends.

The Formation card is then added to the discard pile, and a new card is drawn. You may need to consult the Formation card later in the turn if the Morale/Training value is needed for something else; it can be pulled out of the discard pile and then placed back after use once you have the information you need.

Note: Even if no unit of the Active Formation executes an Action in this step, the Formation card is considered resolved and is placed in the discard pile for the Formation Deck, unless otherwise indicated in Module and/or Scenario rules.

The steps of a Formation Impulse are detailed below.

#### 7.1 Refresh Step

Remove any Ops Complete and Out of Command markers from the activated Formation.

Design Note: Depending on the scenario, some Formations may have more than one Formation card in the Formation Deck and may already have executed a Formation Impulse. So, they may already have had Ops Complete markers placed on them this turn. Also, friendly units may have executed Opportunity Fire (see 10.11) on moving enemy units earlier in the turn, and so already have an Ops Complete marker. To reiterate: these are all removed.

#### 7.2 COMMAND STEP

The Command Step covers several logistical functions:

- Leaders may transfer between units of the same nationality in the same hex.
- · The Active HQ may be deployed.
- All hexes with Active units are checked to see if the hex is In or Out of Command.

#### 7.2.1 Transferring Leaders

First, Leaders may be transferred between units of the same nationality in a stack. Simply stack the Leader counter on the other unit in the stack. It is now assigned to that new unit. This does not count as an Action for the units involved in the transfer, or the Leader, so do NOT place an Ops Complete marker on these units at the time of the transfer.

The Leader may now use its Command Bonus in the current Formation Impulse to the benefit of the new unit to which it is assigned.

#### 7.2.2 Deploying Headquarters to the Map

Once all Leaders have been transferred, the activated HQ now may deploy to the map.

**Design Note:** HQ deployment represents the fluid, moment-to-moment concentration of various command assets, not necessarily the physical location of the HQ vehicles and/or troops themselves. During one Formation Impulse it might represent communications or logistics lines running through the HQ counter's hex at that moment, allowing for a Command Bonus; in another it may represent the adjutant or executive officer commanding a section of the line due to the absence of, or at the direction of, the Commanding Officer; in yet another it could be the Forward Observers attached to the HQ, with or without a Fire Control vehicle, or even platoon leaders themselves coordinating artillery fire. As such, HQ counters may not be targets of Direct or Indirect Fire, yet there can be a loss of assets if they are in a hex where friendly units sustain losses or are eliminated.

They therefore can be "reduced", thus giving a lower Command Bonus, if other units in the hex are reduced or eliminated. HQs are Suppressed if all other friendly units in the hex are eliminated, or if already reduced when reduced. Suppression represents a temporary discomfiting of command, where the still-reduced HQ is moved off-map to the Suppression Holding Box for the remainder of the Operations Phase, until the subsequent Marker Removal Phase. Then it is moved to the HQ/SW Holding Box for redeployment in the next turn. Suppression represents the HQ taking serious casualties of some sort, and the time that the HQ is prevented from redeploying to the map represents the time it takes for the next officer In Command to gather the threads of the previous commanding officers' control.

HQs must always be either:

- On the map, stacked with a friendly unit; or
- Off-map in the friendly HQ/SW Holding Box; or
- Off-map in the friendly Suppression Holding Box; or
- Off-map on top of a retained End Operations card.

HQs in the friendly Suppression Holding Box may not be deployed during this step. They are moved to the HQ/SW Holding Box only during the subsequent Marker Removal Phase of the current turn.

If the HQ is already on the map at the beginning of this step, it has the choice to either remain in its current hex, or it may be deployed to any other hex containing a unit of the Formation. **Remember:** Attachments are always considered part of the Formation to which they are attached.

To deploy the HQ to another hex, an eligible path must be traced between the HQs current hex location and its intended deployment hex.

The path may not contain any hex occupied by an enemy unit with any type of AP FP or HE FP or Assault FP, or any hex Prohibited for movement by any Ground (not Air) unit type. If an eligible path does not exist between the HQ's current hex and its intended deployment hex, it may not deploy to that hex, but it may immediately attempt to deploy to another hex. If no other eligible path exists to a hex containing another unit of the Formation, the HQ may not deploy and must remain in its original hex.

If the HQ is not on the map at the beginning of this step, but is in the friendly HQ/SW Holding Box, the HQ may be deployed to the map into any hex containing a unit of the activated Formation. In this case, it is unnecessary to trace an eligible path to the deployment hex.

Once deployed, HQs may also move with the unit with which they are stacked. (See Movement, 8.0).

#### 7.2.3 Check if Units are Out of Command

Once the HQ is deployed, each hex occupied by units of the Active Formation are checked to see if they are In Command or Out of Command.

In Command means units in that hex may perform Actions in the upcoming Action Step of this Formation Impulse as normal.

Out of Command units, marked with an Out of Command marker, may not execute any Action during the upcoming Action Step of this Formation Impulse. They may however execute Opportunity Fire in an enemy Formation Impulse. If an Out of Command hex is brought back In Command in a subsequent Formation Impulse of this Formation, the Out of Command marker is removed.

See 7.2.4 and 7.2.5 to determine whether a hex is In Command or Out of Command.

## 7.2.4 Command Range and Determining Command status

Any hex occupied by units of the Active Formation, which are also within the Command Range of their Formation's HQ counter, are considered In Command for this Formation Impulse.

On the Formation Card below, inside the yellow circle, Command Range = 5 hexes; while reduced-strength Command Range = 4 hexes



The Command Range is found on the Formation card drawn. There are two ranges listed. Use the left-hand Command Range (the 5 in the example card) if the Formation's HQ is on its full-strength side. Use the right-hand Reduced Command Range (the 4 on the example card) if the HQ is on its reduced-strength side.

To determine the distance in hexes between the HQ and a hex containing an Active unit: starting from the HQ counter's hex, count the contiguous hexes in the shortest path between the HQ and the hex. Do NOT count the HQ's hex; DO count the hex for which Command is being determined. If the distance is equal to or less than the Command Range, all units in the Active hex are considered to be In Command.

For any hex of an activated Formation that is not within the Command Range of the activated Formation's HQ - or all hexes of an activated Formation whose HQ is currently Suppressed (i.e. in the friendly Suppression Holding Box) the owning player must instead make a Morale/Training Check to determine if that hex can be placed In Command for the duration of the Formation Impulse.

On the Formation Card below, inside the yellow oval, Morale/Training Value = 7



To make the Morale/Training Check, roll 2d6. If the result is equal to or less than the Formation Morale/Training value then the unit(s) in the hex are In Command, and so are unaffected by any Out of Command penalties. The Morale/Training value can be located on the activated Formation's Formation card (the big 7 on the example card) or, alternatively in the scenario description for that Formation.

If the die roll result is greater than the Formation Morale/Training value, the unit(s) in the hex are Out of Command: place an Out of Command marker on top of the unit(s) in the hex.

**Example:** Two T-62 Tanks are part of a Formation with a Formation Morale/Training value of 6, and are stacked together in the same hex. The player rolls a 7 on 2d6, and so fails the Morale/Training Check; an Out of Command marker is placed on the hex.

#### 7.2.5 Units Always in Command

Command is checked by hexes, with the exception that certain hexes AND certain units are always In Command, no matter their distance from any HQ, and never need roll for Command status. These include the following.

 Units with a RECON Special Ability (red Special Ability triangle on their unit counter).



**Exception:** Any unit stacked with a Recon unit that is not also a Recon unit or otherwise listed as always being In Command must still roll to be In Command, and, if not, only that unit is marked with an Out of Command marker, not the hex!

• All Helicopters which are NOT attachments (i.e. which do not have a gray Formation color band).



• All units in a hex with a Leader counter (not just the unit to which the Leader is assigned).



**Note:** The Leader counter will be stacked immediately above that unit to which it is assigned but it affects the entire hex for this purpose.

- All units in a hex with their Formation HQ (not just the unit to which the HQ is deployed).
- All units of a Formation entering from off-map during their first activation in a scenario.

**Note:** Units listed above which are always In Command are unaffected by a hex's Command status. An Out of Command marker has no effect on them, and they may move out of any such hex normally.

**Example:** A West German Luchs Recon unit is stacked with a West German Infantry unit. The Formation they are a part of activates, and their Formation card indicates they have a Morale/Training value of 7, and that their HQ has a non-Reduced Command Range of 5 hexes. Even if the stack is 7 hexes from their HQ, the Luchs Recon unit is automatically In Command.

Yet, the West German player must still roll for the hex, but only the Infantry unit is affected by the Command die roll. If the West German player checks Command and rolls an 8 on 2d6 for the hex, which is greater than the Formation's Morale/Training value of 7, the Infantry unit has an Out of Command marker placed upon it, while the Luchs does not.

#### 7.3 MISSILE RELOAD STEP

Each Undisrupted Active unit with a Reloading Missiles marker on top of it may make a Missile Reload Check to attempt to remove the marker from the unit. Roll 2d6 versus the unit's Formation Morale/Training value found on the Formation card: if the roll is <= Morale/Training value, the attempt succeeds, and the Reloading marker is removed.



If the result is > the

Morale/Training value, the Reloading attempt fails: consult Missile Ammo Usage Chart on the Player Aid Card PACO5 Miscellaneous, and either leave the Missile Ammo RELOADING marker as is; or replace the marker with a Missile Ammo LOW marker or a No Missile Ammo marker, as indicated on the chart.

Units which retain their Missile Reloading marker may not use their green or blue AP or HE value for any type of attack until the marker is removed. Units with a No Missile Ammo marker also may not use their green or blue AP or HE value. Unless replenished by a Module or Scenario rule, or by a Battlefield Event, they may not do so for the rest of the game. If replenished, the No Missile Ammo marker would be removed.

#### 7.4 DISRUPTION REMOVAL STEP

Active Helicopters are automatically Undisrupted: remove their Disrupted marker.

For any other Active units, the player may make a Morale/Training Check to attempt to remove Disrupted markers. Roll 2d6, adding 1 to the die roll if the Disrupted unit is under an Out of Command marker.

If the result is <= to the Formation Morale/Training value located on the unit's Formation card, remove the Disrupted marker from that unit. Otherwise, the marker remains with the unit until the Formation's next Disruption Removal Step, which occurs the next time the Formation is activated. Disruption affects individual units, rather than stacks of units. For the effects of Disruption, see units (See 10.8.2).

#### 7.5 OFF-BOARD ARTILLERY STEP

A Formation may now attempt to use a maximum of two Off-Board Artillery Strikes. One Strike at a time is completely resolved – to a maximum of two from all Active Spotters - before another is resolved (See 14.2 Off-Board Artillery Fire).

#### 7.6 Action STEP

During the Action Step, Active units may each select one of the following five Actions to perform:

- Movement
- · Direct Fire
- Movement & Direct Fire
- Assault
- On-Board Indirect Fire

Additionally, there are two special kinds of Direct Fire Actions that may be performed by inactive enemy units during the Action Step:

 Opportunity Fire by inactive enemy units, which is triggered by movement. Opportunity Fire is always Direct Fire. It is never Indirect Fire.

The units comprising a Formation, singularly or as stacks, are activated one by one during the Action Step, and each performs only one action. Unless otherwise noted, the unit or stack becomes Ops Complete when it completes its action.

**IMPORTANT:** Ops Complete units may not perform Actions, or any other function, (such as Spotting) until the marker is removed. Ops Complete units defend normally.

On-Board Indirect Fire is only possible for units with the gray Special Ability Triangle.

The units of a Formation, or a stack, are activated one at a time, and may only be activated once per turn.

Up to two units may stack together in a hex (see Stacking, 9.2). Stacks, may move together, and Assault together, but perform any Direct Fire or the fire portion of Move & Direct Fire separately.

**Again:** When a unit or stack completes its Action, place an Ops Complete marker on top of or beside it.



Ops Complete Marker

The Ops Complete marker is removed during the Marker Removal Phase, or when the unit is next Activated.

The Action Step is finished when all units in the Formation possess Ops Complete markers, or sooner if the player wishes.

### 8.0 Actions

#### **8.1 Movement Action & Movement**

See 9.0

#### **8.2 Direct Fire Action**

See 10.0

#### **8.3 Move & Direct Fire Action**

See 9.0, 10.0 and 11.0

#### 8.4 Assault Action

See 13.0

#### **8.5 Indirect Fire Action**

See 14.0

# 9.0 Movement Action & Movement

To execute a Movement Action, the Active unit moves from hex to contiguous hex on the map, paying a cost in Movement Points (MPs) to enter the terrain and/or cross hex sides into each new hex. Terrain and hex side costs are found on Player Aid Card PAO3 Terrain Effects Chart. It will be helpful to have this Player Aid Card handy when reading this section.

Movement Points are found on each unit, located in the yellow circle below:



A unit must stop moving when it expends all its MPs. A unit may not enter a hex if it would expend more than its printed MPs.

Once a unit has spent its MPs, place an Ops Complete marker on it, and its Movement Action is ended.

The Terrain Effects Chart (TEC) shows how much it costs in MPs to enter a hex, and/or to cross certain types of hex sides. Some hex sides can add to the cost of entering a hex, such as crossing a Hill contour in the Up Hill direction. See Terrain, 9.1 for the definition of Up Hill in relation to the map symbols, and its opposite, Down Hill. In some cases, movement is prohibited for some, or all, units. In that case the unit is not allowed to cross that type of terrain or enter that type of hex, no matter how many Movement Points it has.

#### 9.1 Terrain

**Design Note:** Not all types of terrain are available in all World At War 85 modules.

**Note:** It is recommended to consult Player Aid Card PAO3 Terrain Effects Chart when reading this section.

There are two types of terrain:

- Full hex
- Hex side

Additionally, game markers such as Wrecks, Improved Positions, Fire, Rubble, Burnt Out and Cleared markers can add to or replace existing terrain in a hex. Specifically:

- Wrecks and Improved Positions ADD their effects from the TEC to the TEC effect of the terrain already in the hex.
- Fire, Rubble, Burnt Out, and Cleared markers REPLACE the TEC effect of the terrain in the hex with their own effects from the TEC (also see 10.9, including 10.9.1, for additional effects, and/or uses, and/or restrictions of Fire, Rubble, and Burnt Out markers).

As a general rule, the terrain represented at the center of a hex is its terrain type.

An exception is Hill hexes. Hills are formed by contour lines representing elevation. All hexes contained within the boundaries of a contour line are considered Hill hexes. Hill hexes may have other terrain symbols in them, such as City or Woods:



There are 3 Hill hexes enclosed in the contour-line above.

A unit crossing from a hex outside the contour-line enclosed area into a hex with a contour line is considered moving Up Hill. This will add to the cost to move into the Hill hex: see the TEC. If moving from a hex which already contains a contour line to another hex without a contour line which is not part of the same Hill, the unit is considered to be moving Down Hill.

#### 9.2 Stacking

Two friendly units may stack in the same hex. Game markers do not count for stacking.

Support Weapons also do not count against the stacking limit of two friendly units, but are stacked immediately on top of the owning unit if deployed.

Passengers and Towed units do not count for stacking until they are unloaded from their Transport uniting units.

HQs and Leaders do not count for stacking, but are stacked immediately on top of the unit to which they are deployed (HQs) or assigned (Leaders).

Helicopters only count for stacking if they are Landed or Nap of Earth. **Note:** Stacking restrictions apply at all times including during movement. If moving through a friendly hex would result in there being more than two units present at the same time, the move must be made around the hex rather than through it. If an overstacked hex is discovered during play, the owning player must immediately remove a unit or units to reduce the stack to the limit of two units.

#### 9.3 Unit Categories and Movement

For movement, units fall into four categories. Cross-reference a unit's type with the terrain row on the TEC to find the cost in MPs to enter a terrain hex or cross a hex side for that Unit:

- Troops (all units which are Soft Targets, have MPs, and do not have a Vehicle Picture).
- Vehicles (units with a Vehicle Picture).
- Nap-of-Earth Helicopters
- Flying Helicopters

Design Note: Towed units - see 9.6 - must be loaded into a Transport unit to move and so do not have a category on the TEC - but their Transport unit is a Vehicle and so will use the Vehicle column. Also, Close Air Support units are placed on any hex on the map, rather than moved across the hex grid, so also have no movement category on the TEC.

#### 9.4 Road or Trail Movement

A unit following a Road or Trail ignores the other terrain type(s) in the hex, and instead pays the cost of the Road or Trail in MPs.

Note: A Rubble marker eliminates all Roads and Trails in its hex until the marker is removed and replaced with a Cleared marker. A Cleared marker reinstates all Roads and Trails through the

#### 9.5 Ground & Amphibious Movement

Units with Movement Points printed in a white or green circle are ground units that may only cross Rivers at a Bridge or Ford, unless otherwise indicated in the Module or Scenario rules.

Units with Movement Points in a blue or blue/green circle are amphibious units that may enter all Water hexes, and also cross Rivers at any point, provided they can enter the terrain on the other side. They can cross by Bridge or Ford like any ground unit, but can only cross an un-Bridged and un-Forded river hex side by beginning their Movement Action adjacent to the River, and spending all of its Movement Points to cross into the adjacent hex. This must be a Movement Action, or Assault, not a Movement & Direct Fire Action. The unit is then marked Ops Complete.

An amphibious unit crossing Water is still subject to Opportunity Fire in its destination hex, if not Assaulting.

#### 9.6 Towed Units

A unit with a 'T' for its Movement value has to be Towed (loaded) by an appropriate Transport unit in order to move to another hex. It cannot move when not loaded in, or on, a Transport unit.

This usually applies to Artillery, Anti-Aircraft Guns, and some Mortars.

See Transport units and Passengers, 9.8 below.

#### 9.7 Helicopter Movement & Modes

Helicopters move much faster than the ground units in the game and so have their own movement rules.

Helicopters also have different capabilities when they are flying at different altitudes. Both their speed and altitude are reflected by what is called their Mode of movement.

Helicopters have four Modes of movement, represented by the counter (Hovering & Flying) and a marker (Nap-of-Earth & Landed). Note that although there is information printed on both sides of a Helicopter counter, it is counted as a one-step unit.



When a Helicopter unit is activated, the player immediately chooses its mode for that activation. It can be changed to any of the four modes. It can only again be changed at the beginning of its next activation (Exception: See 9.9, Combat Lift-Off), unless a Module or Scenario rule specifies. This means, for example, that a Helicopter cannot fly, hover and then

land in the same turn. Helicopters are not affected by hex side terrain. They are only affected by minefields if they land in them, and may not take advantage of Improved Positions. (See the Terrain Effects Chart for the Movement for Helicopter and Unit Height for Helicopter columns; and the footnotes for Hex Side terrain and Fortifications.)

A Helicopter that changes mode is subject to Opportunity Fire. A Helicopter which changes mode, but which does not otherwise move and which does not execute Direct Fire after changing mode is marked Ops Complete.

Helicopters are prohibited from entering or remaining in hexes containing Fire markers.

If such a marker is placed in their hex, they must immediately attempt to retreat from the hex. See 10.9 Rubble, Clearing Rubble & Fires, paragraph 4 (i.e. paragraph beginning "If the result is 6") for the retreat procedure and restrictions for both ground units and Helicopters, including that any unit retreating from a Fire is NOT marked Ops Complete. Any Helicopter unit unable to retreat out of a Fire hex is eliminated.

**Note:** Helicopters may occupy hexes simultaneously with enemy units in certain situations where they are at Nap-of-Earth, Hovering, or Flying.

**Important:** Helicopters may not control Objective hexes.

#### **9.7.1** Flying

A Helicopter unit in Flying mode has an unlimited number of Movement Points, and so may enter any hex on the map. However, if Helicopter unit executes Direct Fire, it must stop moving immediately after resolving the fire.

For the purposes of Opportunity Fire, the player traces the unit's path across the map.

It is considered to be flying 2 levels above any Terrain obstacle height in each hex it enters, so enemy ground units may move into its hex but may not Assault a flying Helicopter.

Normally, enemy and friendly units may not occupy the same hex UNLESS one side is Assaulting the other. But this is an exception: enemy ground units and friendly flying Helicopters may occupy the same hex at the same time and Assault is not permitted.

Each side has a stacking limit of 2 in this case. Any Anti-Aircraft Fire from such ground units directed at a flying Helicopter in the same hex is considered to be at a range of one hex, as is any fire from the Helicopter to the ground units in its hex.

**Note:** A flying Helicopter may not fire any of its weapons if it expends more than 12 MPs during its current Activation. It may use Opportunity Fire like any other unit, if not Disrupted or Ops Complete.

#### 9.7.2 Nap-of-Earth

A Helicopter unit in Nap-of-Earth mode (NOE) has 12 Movement Points, but only pays 1 movement point per hex regardless of the terrain in each hex entered. They pay no hex side cost of any kind. However, they may not enter any terrain type prohibited to them by the Terrain Effects Chart (notably: Fire). For the purposes of Opportunity Fire, the unit moves like a ground unit, from hex to adjacent hex.

It is considered to be flying O levels above any Terrain obstacle height in each hex it enters, so enemy ground units may move into its hex only if the obstacle height of the terrain in the hex is higher than the unit height of the hex.

**Example:** On the Terrain Effects Chart, a Clear hex has a unit height of O and a terrain height of O, both the same. A NOE Helicopter is at level O. But if that NOE Helicopter were in a City hex, where the terrain height is O but the obstacle height is 1, the NOE Helicopter has to stay above the obstacle, and so it is at level 1, not O.

If a NOE Helicopter is in a hex where the unit and obstacle heights are equal. It is treated as a ground unit. Enemy ground units may not enter its hex unless they Assault the NOE Helicopter.

Example: A Helicopter at NOE is in a Clear hex. The obstacle height and the unit height of a Clear hex are the same, O, so enemy ground units must Assault the Helicopter (and any other friendly ground units in the hex) in order to attempt to enter it.

However, if a NOE Helicopter is in a hex where the obstacle height is higher than the unit height (say, a City hex) enemy ground units may move into the Helicopters hex and may not Assault the NOE Helicopter (it is flying above them). In this case, enemy ground units and NOE flying Helicopters may occupy the same hex at the same time. Any Anti-Aircraft Fire from such ground units directed at a NOE Helicopter in the same hex is considered to be at a range of one hex.

**Example:** A NOE Helicopter is in a City hex, where the terrain's unit height is 0 and the obstacle height is 1. The NOE Helicopter is considered to be at level 1.

Enemy ground units may enter its hex (they are at unit height 0), but may not Assault it.

**Note:** A NOE Helicopter may not fire any of its weapons unless indicated in Module or Scenario rules.

#### 9.7.3 Hovering

If a Helicopter changes to Hover mode at the start of its activation, it remains stationary in its hex for the remainder of the activation. It may fire its weapons according to the Firepower value on the Hovering side if its counter. For the purposes of LOS, a hovering unit is considered one level Higher than the terrain of its hex. Terrain obstacle heights are noted on the Terrain Effects Chart, and the Helicopter-NOE column already includes the one level higher.

Enemy ground units may move into its hex but may not Assault a hovering Helicopter.

Normally, enemy and friendly units may not occupy the same hex UNLESS one side is Assaulting the other. But this is an exception: enemy ground units and friendly hovering Helicopters may occupy the same hex at the same time and Assault is not permitted. Each side has a stacking limit of 2 in this case. Any Anti-Aircraft Fire from such ground units directed at a flying Helicopter in the same hex is considered to be at a range of one hex, as is any fire from the Helicopter to the ground units in its hex.

#### 9.7.4 Landed

A Helicopter in Landed mode is stationary in its hex. If it is a Transport unit, Passengers can load or unload, then it may attempt a Combat Lift-Off (See 9.9, Combat Lift-Off).

For the purposes of LOS and Assault, a Landed Helicopter unit is treated as a ground unit. Enemy units may not enter its hex unless they Assault the Landed Helicopter unit.

**Note:** A Landed Helicopter may not Fire any of its weapons which have a green AP value (ATGM).

Design Note: Why fly? Fly at Nap-of-Earth? Hover? Land? Flying is the most efficient yet most vulnerable mode of Helicopter movement. A flying Helicopter is visible at altitude so most terrain types do not block LOS of any enemy Anti-Aircraft fire. Flying at Nap-of-Earth effectively limits a Helicopter's movement to twelve or fewer hexes, but allows it to take advantage of terrain as if it were a very fast ground unit.

This can be helpful when approaching the battlefield to set up a shot. Hovering is required for many Helicopter-based weapons, notably anti-tank guided missiles. And landing is required to embark and/or debark Air Assault and other Air-mobile troops. Helicopters by themselves may not control hexes for purposes of victory determination, since enemy ground units may enter their hex if the Helicopters are at any altitude, and Helicopters may not land in most Objective hexes anyway (city, woods, jungle, etc.).

Also, why no Pop-up attacks? During development a suggestion to add Pop-up attacks was entertained. But in a 5 to 15 minute time-span of a turn, Pop-up attacks are simply the way Helicopters attack. Hovering mode reflects the sum total of the time of vulnerability as the Helicopter performs one or more Pop-ups to attack. So I felt no special rule was necessary.

#### 9.8 Transport units and Passengers

Design Note: During a Movement Action, you are permitted to use your Transport units to load other units, called Passengers, so as to assist them to move faster across the map, and/or across water obstacles they may not normally enter on their own. When they reach their destination, those units may be unloaded. Passengers may be forced to be unloaded if their Transport unit is eliminated in transit. Non-Towed Passengers may unload directly into an Assault.

If a unit has a green or blue/green circle behind its Movement value, it is a **Transport unit**:



A Transport unit can be loaded with a unit, together with a Support Weapon and an HQ counter.

Passengers must be unloaded to move or conduct fire on their own. They may be unloaded involuntarily as a result of combat.

Passengers do not count for stacking until they are unloaded. They cannot fire until they are unloaded, unless otherwise indicated by a Module or Scenario rule.

Disrupted units may not load, but loaded units can be Disrupted by a combat result, and are still able to unload as usual.

Passengers or a Transport unit may load or unload during an activation, but not both.

**Note:** In any case, if the Passenger expended no MPs before being loaded; or whenever unloaded; and whether or not its Transport unit moved, the act of loading or unloading triggers Opportunity Fire (see 10.11).

#### 9.8.1 Loading

There are two ways to load a unit.

If the Transport unit and Passengers begin the activation in the same hex, the Passenger may load and then the loaded Transport unit may move up to half the Transport unit's MPs (rounded down).

The Passenger unit counter is stacked immediately beneath the Transport unit to indicate it is being transported by that Transport unit. This is the only way that Towed units may be loaded into Transport units. After the transport unit completes its move, if any, it is marked Ops Complete.

If the Transport unit and Passenger begin the activation in different hexes, the Transport unit can move up to half its MPs (rounded down), and the Passenger can use up to 1 MP, as long as both units end in the same hex. The Passengers then load into the Transport unit. In this case, since the Transport unit has already moved, once the Passenger loads into the Transport unit, the Transport unit is marked Ops Complete.

**Again:** Towed units may not use this second method to Load.

#### 9.8.2 Unloading

There are two ways to unload a unit.

The Transport unit may remain in its hex, or it can move up to half its Movement Points, and then the Passenger may unload into the Transport unit's hex; or directly into a hex adjacent to the Transport unit, which may or may not be occupied by enemy units. If the Passenger unit unloads into the Transport unit's hex, or an adjacent hex not occupied by enemy units, it is now marked Ops Complete.

If a Transport unit did not move before its Passengers were unloaded, the Transport unit may then still move up to half its Movement Points; if it did move before unloading, it may not move further after its Passengers are unloaded. Once the Transport unit has moved or has elected to remain stationary after unloading, it, too, is marked Ops Complete. Unloaded Passengers are stacked on top of their Transport unit when unloaded into the Transport unit's hex.

#### 9.8.3 Unloading into an Assault

Passengers not transported by Helicopter Transports may unload into an enemy occupied hex adjacent to their Transport unit. This is only permitted during the movement portion of an Assault Action.

The Passenger's act of unloading into an adjacent hex will trigger Opportunity Fire; it should be placed there now. However, in this specific case, it is considered to be in its Transport unit's hex for purposes of resolving that Opportunity Fire. If the unit is not Disrupted or eliminated by any Opportunity Fire, it immediately executes its Assault attack.

Similarly, if two Transport units with Passengers attempt to unload directly into an Assault as a stack, the Passengers may form a stack for the Assault.

However, in this case of Assault, if an unloaded Passenger is Disrupted by Opportunity Fire, it remains in a Transport

unit's hex, subject to stacking limits. If the limits have been violated because the unit remained in the hex with the Transport units from which it unloaded, eliminate Passengers first to bring the stack under the limit.

Design Note: The assumption is that if unloading into an adjacent hex, the Transport units are proceeding to the very edge of the hex, and then unload their Passengers. But troops exiting Transport units are at their most compact and therefore most vulnerable and things can go awry pretty quickly if the enemy is able to respond. A dangerous situation arises when your assault troops are Disrupted, never make it to the Assault hex, and then are piled up onto your Transport units in the adjacent hex. The stacking limit may be quickly violated, thus eliminating assault troops, Transport units or both.

#### 9.8.4 Loading, Unloading and Opportunity Fire

Normally, there is a limit of one Opportunity Fire attempt per unit per hex moved (See 10.11, Opportunity Fire). If Passengers do not move but attempt to load into a Transport unit in its hex; or a Transport unit is unloading Passengers in its hex or into an adjacent hex; then the act of loading or unloading triggers Opportunity Fire on the Passengers.

**Example:** A Soviet Infantry platoon (MP of 3) and a Soviet BMP-2 platoon (MP of 6) start a Formation Impulse in different hexes. The Infantry platoon moves toward the BMP-2 using 1 MP, subject to Opportunity Fire. An enemy unit fires Opportunity Fire at the infantry unit but neither disrupts or eliminates it. The BMP-2 then spends 3 MPs (half of its Movement value of 6), also subject to Opportunity Fire, to reach the same hex. Upon both units reaching the same hex and remain-

ing Undisrupted and un-eliminated, the Infantry Platoon declares loading. It is NOT now subject to Opportunity Fire as it has already been attacked by Opportunity Fire in this hex. It may complete the act of loading and is placed under the BMP-2 counter to indicate this. The loaded BMP-2 is marked Ops Complete.

If the Infantry platoon and the BMP-2 had started in the same hex, and the Infantry unit declared its intent to load it would then have been subject to Opportunity Fire for the act of loading, as it had not yet been attacked by Opportunity Fire in that hex. If it remained Undisrupted and un-eliminated after that, it would have then loaded, and the loaded BMP-2 could have spent up to 3 MPs (half of the BMP-2's 6 Movement value), itself now subject to Opportunity Fire.

#### 9.8.5 Helicopter Transport units

The green "H" indicated in the yellow circle below designates a Helicopter Transport unit. This one is Landed as indicated by the marker:



Only Helicopter Transport units which are in Landed mode or switch to this mode for this activation, may load or unload Passengers. The Helicopter in Landed mode and any Passengers it will be loading must start the activation in the same hex.

When Passengers are unloaded from a Landed Helicopter unit, they may unload into the Helicopter unit's hex or an adjacent hex, but only after the Helicopter unit has been subjected to Opportunity Fire, if any, if it changed to Landed mode at the start of its activation.

Passengers that are being loaded trigger Opportunity Fire immediately after announcing they are attempting to load, but before actually loading into the Helicopter Transport; unloading Passengers trigger Opportunity Fire in the hex into which they are unloaded.

Important: Passengers may not unload from Helicopter Transport units into an enemy-occupied hex, whether it is the same hex as the Landed Helicopter Transport unit is in or an adjacent hex.

Design Note: Extraction by Helicopter under fire is obviously dangerous. It is possible that a Helicopter Transport unit could switch modes to Landed (subject to Opportunity Fire for changing mode), pick up or unload Passengers (them being subject to Opportunity Fire immediately prior it being loaded), execute a successful Combat Lift-Off and change to Flying mode (again subject to Opportunity Fire for changing mode) and move away from the hex in which it began its activation.

#### 9.9 Combat Lift-Off

A Landed Helicopter unit may attempt to change its mode during the same activation in which it loads or unloads.

Roll 2d6 immediately after the Helicopter Transport unit loads or unloads, and after any Passengers or unloaded Passengers have had Opportunity Fire resolved against them. If the result is <= the Helicopter Transport unit's Morale/ Training value, the unit may change its mode to Hovering, Nap-of Earth, or Flying. If successful in switching to one of the latter two modes, the Helicopter unit may then move.

If the result is >= the Helicopter Transport unit's Morale/Training value, it is a fail: the unit remains Landed until the beginning of its next activation, when it can select its mode as usual.

### 10.0 Direct Fire Action

Direct Fire is when your unit uses one of its two ranged Firepower dice values – AP or HE – to attack an enemy unit within Range and Line of Sight of your unit's Firepower.

Units that are Disrupted, or are marked as Ops Complete, cannot employ Direct Fire.

- Your attacking unit must have an appropriate type of Firepower, AP or HE, that can damage the target (See 10.1).
- Your attacking unit must be able to see the target unit, i.e. have an unblocked Line of Sight (LOS). (See 10.2, LOS)
- The target unit must be in Range of your selected Firepower (See 10.3, Determining Range).

**Important:** If any or all of these prerequisites are not fulfilled, your unit may not attack that target unit using Direct Fire.

## 10.1 AP and HE Firepower — Which to use?

The type of target unit you wish to attack determines what Firepower value printed on your unit counter you may use to attack it. Here is a quick summary of the types of targets in the World At War 85 series against which you use your units' AP or HE Firepower to attack

Important: Vehicles have vehicle art on them whether they are Heavy Armor, Light Armor or Vehicular Soft Targets; everything else has a NATO symbol, and is always a Troops (non-vehicular) Soft Target.

- AP, or Armor-Piercing Firepower, may be used to attack any type of vehicle or aircraft, but not anything else.
- HE, or High Explosive Firepower, may be used specifically against Light Armor vehicles, any Soft Target, or aircraft. It may only be used against Heavy Armor vehicles if permitted by Module or Scenario rules.

High Rate of Fire HE: If Module or Scenario rules DO permit, then specific units will be designated that possess HE Firepower that is powerful enough to attack Heavy Armor Targets at shorter ranges. These units may use their HE FP to attack Heavy Armor targets at printed Range or less (Long Range Fire is not permitted in this case).

**Design Note:** Here is what you are shooting at:

Heavy Armor vehicles - battle tanks, and other heavily armored fighting vehicles

Light Armor vehicles - self-propelled weapons and infantry fighting vehicles

Vehicular Soft Targets - unarmored vehicles and trucks

Troops (non-vehicular) Soft Targets units with a NATO symbol, typically infantry and towed weapons

Aircraft – flying or hovering Helicopters; or Close Air Support units once placed on the map

When you choose to execute a Direct Fire Action with one of your units, your unit must choose the FP dice value that can affect its intended target unit. If your unit does not have the appropriate Firepower available, it may not use Direct Fire against that enemy unit.

If both AP or HE Firepower may affect the target, you get to choose which to use. However, you may not use both in the same Direct Fire Action.

#### 10.2 Line of Sight (LOS)

Design Note: In the non-cardboard-tankunit real world you would be unable to shoot at a target unit if you could not see it. That is true in this game as well. Your units must be able to "see" their targets to shoot at them from a distance. This is referred to as having a "direct line of sight" between your unit and its target. It is the "direct" part of Direct Fire. For Indirect Fire (covered in 11.0 and 14.0) although the firing unit does not have a LOS to its target hex, it indirectly gets information about where to fire (that's the "indirect" part of Indirect Fire ) from another unit - a Spotter - which itself must have a direct LOS to the target hex.

So Line of Sight is always a prerequisite for both Direct and Indirect Fire in some way. Incidentally, Line of Sight is reciprocal, naturally, so if you can see your target, it can see you...

Important: LOS is a prerequisite of Direct Fire. It is also a prerequisite during Indirect Fire for a Spotter to have a LOS to the intended target hex (Spotters will be defined later under Indirect Fire, 14.3). All rules for LOS indicating a firing unit also apply to Spotters for Indirect Fire.

LOS is a straight line drawn from the center of the attacking unit's hex to the center of the target hex. Use a thread or a straightedge to measure it.

See LOS Figure 01.

LOS FIGURE 01 - An example of a Line of Sight between two units.



If the unit's LOS is blocked by terrain in a hex it passes through, or by a hex side it runs directly along, the attack may not take place.

LOS may also be obscured, for example by terrain of low height, like Rough or Cultivated. This means the terrain is less effective at blocking LOS.

**Important:** Units and markers themselves do not block LOS.

See Player Aid Card PACO3 Terrain Effects Chart (TEC) for whether the terrain in a hex is Blocking or Obscuring or has no effect on LOS.

**Important:** The LOS is never blocked between adjacent hexes.

#### 10.2.1 Terrain Height

Each terrain type on the Terrain Effects Chart has an Obstacle Height and a Unit Height.

The unit height is the height level in the hex at which a unit is located for purposes of Line of Sight determinations.

The obstacle height is the overall height of the actual terrain in that same hex, used to determine if that hex's terrain blocks or obscures LOS when it intervenes in a LOS.

Unit heights are classified by unit type on the Terrain Effects Chart (TEC):

- Ground units, which includes Landed and Nap-of-Earth (NOE) Helicopter units.
- · Hovering Helicopter units.
- Flying Helicopter and Close Air Support units.

#### 10.2.2 Blocking and Obscuring Terrain

When a unit and its target are each in terrain with an identical unit height, the following cases apply.

If the LOS runs through one hex containing obscuring terrain, the LOS is **NOT** blocked:

LOS FIGURE 02 - Same Unit Height: ONE OBSCURING HEX? LOS NOT BLOCKED

If the LOS runs through TWO or MORE hexes containing Obscuring Terrain, the LOS is blocked:

LOS FIGURE 03 - Same Unit Height: TWO or MORE OBSCURING HEXES? LOS BLOCKED

Blocked

Obscuring hex sides NEVER block LOS:

LOS FIGURE 04 - Same Unit Height: OB-SCURING HEXSIDES? LOS NOT BLOCKED

Never block If a LOS runs through a hex containing Blocking terrain, the LOS is blocked:

LOS FIGURE 05 - Same Unit Height: ONE
BLOCKING HEX? LOS BLOCKED

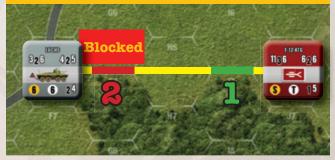
Blocked

Blocked

1106 626

If a LOS runs along the edge of TWO or MORE hex sides containing Blocking terrain, the LOS is blocked:

LOS FIGURE 06 - Same Unit Height: TWO BLOCKING HEXSIDES? LOS BLOCKED



If a LOS runs along the hexside between two blocking hexes, the LOS is blocked.

If a LOS runs along the hexside between two obscuring hexes, count that hexside as an obscuring HEX - instead of HEX-SIDE - for LOS purposes. So, a second such hexside, or a regular Obscuring hex, would then block LOS.

If a LOS runs along the hexside between an Obscuring hex and a Blocking hex, count that hexside as a Blocking hexside for LOS purposes.

#### 10.2.3 Blocking Terrain obstacle Height & Blind Spots

As an Exception to all other cases in 10.2.2 and 10.2.3:

If the LOS is directly down a hex spine, and there are two blocking hexsides along the LOS, BUT the higher unit is at a same obstacle height as one or both of the blocking terrain hexsides, then the LOS is treated as if the higher unit is at the same level as the lower unit in this specific case, and so therefore covered by LOS FIGURE 06 above.

**Note:** This exception is ONLY for purposes of LOS determination. For all other game purposes, the unit's heights are as indicated on the map. So either it has a LOS or it does not when the LOS is down a hex spine, that is all this is meant to cov-

When a unit and its target are each in terrain where they have different unit heights, the following cases apply.

NOTE: Enlarged versions of the graphics in this section are found on Player Aid Card PACO8 A Line of Sight reference with examples.

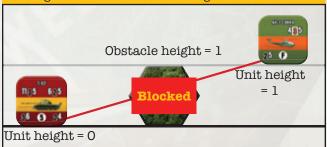
If the LOS crosses a blocking hex whose obstacle height is higher than the unit height of either the attacker or target, the LOS is blocked:

LOS FIGURE 07 - Intervening hex obstacle higher than either unit height? LOS BLOCKED



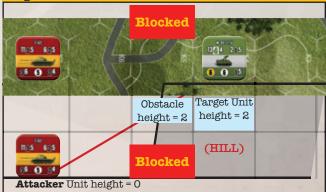
If the LOS crosses a blocking hex whose obstacle height is the same as the unit height of one unit, but higher than the other, the LOS is blocked:

LOS FIGURE 08A - Unit Height 1 - Obstacle Height 1: Intervening hex obstacle height equal to one unit height but higher than the other unit height? LOS BLOCKED



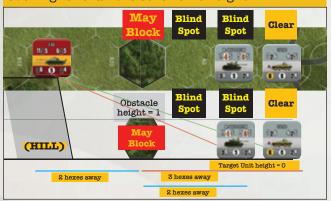
**Important:** this means the LOS of a unit on a Hill or Hill-City or Hill-Woods hex is blocked to a lower unit if they are not on the edge of the hill, see LOS Figure O8B.

LOS FIGURE 08B - Unit Height 2 = Obstacle Height 2: Intervening hex obstacle height equal to one unit height? LOS BLOCKED



If either of the units is in a hex with a unit height that is one level higher than a blocking hex's obstacle height, the blocking hex creates a Blind Spot along the LOS, starting immediately behind the blocking hex, and stretching from there for the same number of hexes as the distance between the HIGHER unit and the blocking hex.

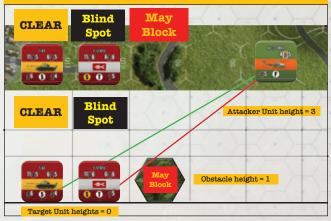
LOS FIGURE 09 - Intervening hex obstacle height ONE level lower than the one unit height and ONE level higher than the other unit height



**Important:** The LOS to a unit in a **Blind Spot** is blocked!

Example in LOS FIGURE 09: The unit height of the Soviet platoon on the left is two; the obstacle height of the blocking hex in K9 is one. The Soviet unit may not fire at any enemy unit either one or two hexes along the LOS from the blocking hex, as it is two hexes from the blocking hex. It may fire at an enemy unit at target height zero which is three hexes or more beyond the blocking hex.

If either of the units' heights is two or more levels higher than the blocking hex's obstacle height, the **Blind Spot** behind the intervening terrain is **only one hex:**  **LOS FIGURE 10** - Intervening hex obstacle height TWO or MORE levels lower than the one unit height



**AGAIN:** The LOS to a unit in a **Blind Spot** is blocked!

#### 10.3 Range

Range is measured in map hexes. In order to use Direct Fire, you must first determine if your unit's intended target unit is in range of the Firepower type your unit has chosen to use for the attack. For example, if a target unit is five hexes away from your firing unit, the range is five hexes:

**RANGE FIGURE 01** - An example of the range between two units.



Each FP dice on your ground unit's counter – whether AP or HE - has an associated Range value printed as a superscript to the upper left of it on the counter.

AP FP Range is in the left-hand yellow circle, while HE FP range is in the right-hand yellow circle.



To determine the Range between your unit and its intended target unit, count the smallest number of contiguous hexes between your unit's hex and the target unit's hex. Measure distances not including the firing unit's hex but including the target hex. The resulting number is the Range between your unit and its target unit.

If the counted Range is less than or equal to your unit's FP Range value, the target is in range.

The following sections define types of ranges.

#### 10.3.1 Point Blank Range

Point Blank Range is all ranges up to  $\frac{1}{2}$  of the printed Range value (rounded down) for that Firepower.

#### 10.3.2 Effective Range

Effective Range is all ranges greater than ½ of the printed Range value (rounded down) and up to the printed Range value

for that Firepower.

#### 10.3.3 Long Range

Long Range is all ranges greater than the printed Range value and up to double the printed Range value for that Firepower.

#### 10.3.4 Maximum Range

Maximum Range is exactly twice the printed Range value on the counter.

**Note:** RANGE FIGURE 02 below shows the different ranges and how they relate to each other for a unit with an effective HE FP Range of 4 hexes.

#### 10.3.5 Minimum Range Requirement



If the unit counter has a black Special Ability triangle, and elects to use its green AP value, it has a minimum range of 3 hexes, and so cannot fire if the range is 1 or 2 hexes. Note however that Point Blank Fire may still be possible at 3 or more hexes.

#### 10.4 Combat

Once the 3 prerequisites for combat have been met - an appropriate weapon FP,

RANGE FIGURE 02 - An example of Point Blank, Fifective and Long ranges for the Luchs' HE FP



with the target in LOS and Range - your unit may attack its target.

Then check 10.6, Direct Fire Restrictions and Modifiers, to see if any FP, To-Hit, Save or Defensive Bonus values are increased, decreased or otherwise modified by the particular terrain or position or other factors involved in the specific combat.

To execute the attack after all modifiers have been taken into account: for each d6 you roll which is equal to or greater than your modified To-Hit number, you score a hit.

For each attack, the target rolls a number of defensive dice equal to it's armor value (if it is a Heavy or Light armored target) plus Defensive Bonus dice according to the terrain it occupies. Armored targets are further subject to a Maximum Defensive Bonus, see 10.6.14. Concealment and weather conditions can provide Defensive Bonuses, each such bonus adding one additional save die in either case. Note that in some cases a unit may have no dice at all to roll (notably troops in Clear terrain; See 10.6 Direct Fire Restrictions and Modifiers).

For target units with an Armor value, each d6 the target unit rolls which is equal to or greater than its modified **Armor save value**, saves – and therefore can ignore - one hit you just scored.

For target units without an Armor value but using a Defensive Bonus based on the terrain they occupy, each d6 the target unit rolls which is equal to a 5 or 6 saves – and therefore the target unit can ignore - one hit you just scored.

Each unsaved hit causes a Disruption, reduction or elimination of the target unit. Apply the combat hit effects immediately

(See 10.7 Combat results).

When the attack has been resolved, the attacker is marked Ops Complete, and the Direct Fire Action is over.

## 10.5 Support Weapons, Modifiers & Restrictions

Support Weapons are additional Direct Fire weapons. They may begin the game in your Holding Box or on the map at your choice, but if in the Holding Box, they may be deployed. They may only be deployed and used by the specific unit type indicated on the counter, either Infantry units, or Heavy Armor units and some Towed guns.

An Infantry Support Weapon is indicated on the counter by the INF symbol in the yellow circle:



Infantry Support Weapons may be deployed to any Infantry-type Troop units. These may not be deployed to any Towed units or any Mortar units.

Infantry type units will have "Infantry" in the description under the Unit Type column on the unit's row in its National Unit Table.

An Alternative Armament Support Weapon is indicated on the counter by the ARM symbol in the yellow circle:



Alternate Armament Support Weapons are assigned by Module and Scenario rules which will indicate specific Heavy Armor vehicles and some Towed Artillery and Anti-Tank Gun units to which these may be deployed.

All Support Weapons may begin the game in your HQ/SW Holding Box. During any Action, you may deploy a SW from the Holding Box to an eligible unit for its type (INF or ARM). This decision can be made immediately before the Support Weapon is used for Direct Fire. There is no restriction on when to deploy during an Action other than the Support Weapon being deployed to the proper unit type.

Any number of SW's may be deployed to a single unit of the appropriate type (only restricted by which formation the SW is assigned to in the scenario being played, see the Order of Battle for the scenario you are playing) but all SW are eliminated if the unit to which they are deployed is eliminated.

Some Support Weapons – like Mine Plows – are not used for Direct Fire, but are used for other purposes. Mine Plows allow a Heavy Armor vehicle to attempt to safely breach Minefield hexes. (See 16.3.1, Breaching Minefields).



Once deployed, and if capable of Direct Fire, all a unit's Support Weapons may fire either immediately before or after the unit to which it is (or they are) deployed fires. The Support Weapons can engage either the same target, or different targets than each other, and/or the unit to which it is deployed.

Support Weapons capable of Direct Fire may be deployed when the Formation is inactive and then execute Opportunity Fire (See 10.11 Opportunity Fire).

**Note:** Once deployed from the holding box, Support Weapons - unlike HQs - do not ever return to the Holding Box during the game (See 2.3.6, INF Support Weapon Transfer).

## 10.6 Direct Fire Restrictions and Modifiers

This section details restrictions that may affect your unit's FP dice, To-Hit number and/or Range at which Direct Fire may be conducted against an enemy unit. There are also bonuses and penalties to your unit's fire that may be applicable to your Action. For Defensive Bonuses specifically, these are cumulative, but subject to the Maximum Defensive Bonus limit (See 10.6.14).

When performing a Direct Fire Action, check each of these cases to see if it applies to the combat before it is executed.

**Note:** The following Restrictions and Modifiers are summarized for quick use during play on Player Aid Card PAC10 Direct Fire Modifiers.

#### 10.6.1 Anti-Aircraft Fire

Design Note: Anti-Aircraft Fire is a specific form of Direct Fire used by units with a blue AP value. These are referred to as Anti-Aircraft units, and are ideally designed to bring down flying enemy Helicopters and CAS. Other units are less suited to that specialized task, but can still be effective in this role, and so are subject to Firepower and Range restrictions detailed here. Anti-Tank Guided Missiles are not suited to Anti-Aircraft Fire.

Anti-Aircraft units with blue FP can engage Flying/Hovering/NOE helicopters and CAS counters with Direct Fire as usual, modified as below.

However, a unit engaging with black or orange FP may only engage these targets at the Effective Range printed on their counter, or 10 hexes, whichever is less; Point Blank and Long Range modifiers do not apply. It suffers a -2 modifier to its FP dice, and its To Hit for AA fire is 6.

Units may not engage these targets with green AP FP (representing ATGMs); they may be used against landed helicopters, however.

NOE helicopters may not be engaged by units with blue FP and Range (representing missile AA).

#### 10.6.2 HQ or Leader Command Bonus

Add the Command Bonus of an HQ or Leader deployed or assigned to the firing unit's FP (AP or HE).

Important: A unit may only use one or the other of the HQ or Leader Command Bonus for one attack, not both. During one activation, the Command Bonus may only be added to either the firing unit's FP (AP or HE), or the FP (AP or HE) of a support weapon deployed to that unit: not both.

#### 10.6.3 ATGM Minimum Range

Units with a black Special Ability triangle firing a green AP value (ATGMs) may not fire if their intended target is at less than 3 hexes range.

#### 10.6.4 Point Blank Range Fire

-1 to To-Hit for Direct Fire only (NOT On-Board Indirect Fire, or CAS attacks)

#### 10.6.5 Long Range Fire

+1 to To-Hit (Including On-Board Indirect Fire, but NOT CAS attacks)

#### 10.6.6 Firing into an adjacent Smoke hex

+1 to To-Hit

## 10.6.7 Firing out of a Smoke filled hex into an adjacent hex

+1 to To-Hit

#### 10.6.8 Terrain

Defensive Bonus dice are added for the target unit per the Defensive Bonus columns on the TEC. Cross-indexing the terrain in the hex that the target unit occupies with the Defensive Bonus column for its type (Troops or Vehicles).

This determines if and how much of a Defensive Bonus the unit receives. This Defensive Bonus is cumulative with others in this section subject to the Maximum Defensive Bonus (See 10.6.14).

#### 10.6.9 Composite/Reactive Armor

Units with an orange Special Ability triangle have Composite/Reactive armor and receive a -1 to their Armor save value if fired upon by green AP dice (ATGM).

#### 10.6.10 Volley Fire

Soviet, Pact and PACT-allied Heavy Armor vehicle units ONLY receive a +1 to a Heavy Armor vehicle unit FP dice in a stack with another Heavy Armor vehicle of the same nation. Both units are marked Ops Complete after the Volley Fire is executed.

**IMPORTANT:** This does not apply to Opportunity Fire, or during the Fire segment of a Move & Fire Action. Also: This modifier bonus is optional, at the discretion of the Attacker.

The use of Volley Fire is restricted to Heavy Armor units only, using Black or Orange AP or HE FP. (Thus Volley Fire may not be used by ARM Support weapons deployed to either Heavy Armor unit in the stack.) When a unit uses Volley Fire and adds the modifier from the other unit in the stack, both units are marked Ops Complete after the attack is executed.

**Design Note:** Soviet tank units practiced this gunnery tactic.

#### **10.6.11** Target is a Landed Helicopter

+1 FP dice and -1 to To-Hit for the attacker.

## **10.6.12** ATGM Direct Fire at a Target in Blocking Terrain

+1d6 Defensive Bonus to targets in City, Town, Woods, Light Woods, Light Jungle or Jungle hexes which are fired upon by a Green AP FP.

#### 10.6.13 Concealment

+1 Defensive Bonus to the target if concealed.

**Important:** Concealment is defined as the target is:

- Not moving, and
- Not marked Ops Complete, and
- In a hex with a Defensive Bonus, and
- Not adjacent to an enemy unit, and

 Not within 5 hexes of an enemy Recon unit (Recon units have a red Recon Special Ability triangle)

#### 10.6.14 Maximum Defensive Bonus

An enemy Heavy or Light Armor vehicle unit may only add a maximum of two additional dice for terrain Defensive Bonus, concealment, and/or ATGM firing on a target in blocking terrain, after all modifiers are applied.

Soft Targets (vehicular or otherwise) have no maximum Defensive Bonuses limit.

#### 10.6.15 Maximum To-Hit penalty

The maximum To-Hit value after all modifiers are applied shall never be more than 6.

#### 10.6.16 Minimum FP dice penalty

The minimum FP dice after all modifiers are applied shall never be less than 1.

#### 10.6.17 All-water Hex restriction

Unless permitted by module or scenario rules, amphibious ground units in all-water hexes may not themselves execute any form of direct (or indirect) fire.

#### **10.7 Combat Results**

Once the attacker has determined any hits, and the target has determined hits saved, it is time to resolve any unsaved hits.

Unsaved hits disrupt, reduce, or eliminate the target unit, depending on the type of unit hit. For this purpose, units are classified as:

- · Ground Units
- HQs and Leaders

- Transport units and Passengers
- · Close Air Support

## 10.7.1 Results versus Ground units and Helicopters

- Undisrupted full-strength twostep units are Disrupted by the first unsaved hit, reduced by the second, and eliminated by the third.
- An already Disrupted fullstrength two-step unit is reduced by the first unsaved hit, and eliminated by the second.
- Undisrupted, reduced two-step units are Disrupted by the first unsaved hit, and eliminated by the second.
- Undisrupted one-step units are also Disrupted by the first hit, and eliminated by the second.
- An already Disrupted unit that is either already reduced, or is a one-step unit, is instead eliminated by the first unsaved hit.

**Note:** Helicopters are one-step units.

**IMPORTANT:** If any type of Transport unit (e.g. ground, helicopter, etc.) suffers a result, remember to also check 10.7.3 Results versus Transport units and Passengers, if it is carrying Passengers.

Hits are applied to the target unit that was specified by the attacker. Any hits in excess of the hits needed to eliminate the target unit are applied to the other unit in a stack, but only if the latter can be affected by the FP dice used in the attack.

**Example:** Excess AP hits will not do anything to a non-vehicular Soft Target in the same hex as a Heavy Armor Target that was eliminated.

#### 10.7.2 Results versus HQs and Leaders

HQs and Leaders may not be directly targeted, but may be affected if any units with which they are stacked are reduced or eliminated.

**Note:** This applies to either unit in the hex not just the one with which they are deployed or assigned.

If any unit stacked with an HQ or Leader is reduced, roll 1d6 for each HQ and Leader in the hex. If one unit stacked with an HQ or Leader is eliminated instead, but another unit is still in the hex, roll and add 2 the die roll.

- On a result of 1 3, the HQ or Leader is not affected.
- On a result of 4 6, the HQ is reduced, or the Leader is wounded.
   An HQ that is already reduced remains reduced, and is moved to the Suppressed Holding Box. A Leader who is already wounded is eliminated.

**Remember:** An HQ moved to its Suppressed Holding Box remains reduced.

If all the units stacked with an HQ or Leader are eliminated, the HQ is automatically reduced if not already, then moved to the Suppressed Holding Box. Any Leader present in the hex is eliminated.

Suppressed HQs are moved to their HQ/SW Holding Box during the subsequent Marker Removal Phase.

If an HQ or Leader is with a unit in a stack, and only that unit is eliminated, it is stacked with the remaining unit, so long as the HQ was not suppressed, or the Leader survived its Reduction Check.

## 10.7.3 Results versus Transport units and Passengers

- If a Transport unit is Disrupted, its Passengers are Disrupted.
- If a Transport unit removes its Disruption marker, so do the Passengers.
- If a ground Transport unit is reduced, roll 1d6.
  - » On a result of 1 3, the Passengers are not affected.
  - » On a result of 4 6, the Passengers are reduced, rolling as usual for the reduction/wounding of attached HQs or Leaders.
- If a ground Transport unit is eliminated, roll 1d6.
  - » On a result of 1 3, the Passengers are reduced and disrupted; roll to see if attached HQs or Leaders are reduced or wounded.
  - » On a result of 4 6, the Passengers are eliminated; see 10.7.2 for HQs and Leaders.
- If a Flying or Hovering Helicopter Transport unit is eliminated, the Passengers and any HQ or Leader with them are eliminated.
- If a Landed or Nap-of-Earth Helicopter Transport unit is eliminated, roll 1d6 for each Passenger unit.
  - » On a result of 1 3, the Passengers are reduced and Disrupted, any HQs with them are reduced

- (or Suppressed if already reduced); any Leaders with them are WIA (or eliminated if already WIA).
- » On a result of 4 6, the Passengers and any HQ or Leader with them are eliminated.

#### 10.7.4 Results versus Close Air Support

Hits by your Anti-Aircraft Fire versus an enemy CAS unit counter are covered by this section.

- If you score two or more hits on an enemy CAS counter, the enemy is eliminated, and so the card and counter are immediately removed from the scenario.
- If a CAS unit takes one hit, roll 1d6.
  - » On a result of 1 3, the unit circles back. Discard its card, and keep its counter in the HQ/SW Ready to be Deployed Holding Box. The card is reshuffled into the Formation Deck for the next turn.
  - » On a result of 4 6, the unit calls off its run, and returns to base. Remove its card and counter from the scenario. It is not considered eliminated for Victory Point purposes, but its card and counter are still removed from the scenario

**To be clear:** If the CAS counter is eliminated, its card is also eliminated.

#### **10.8** Wrecks and Disruption

#### 10.8.1 Wrecks



If a vehicle unit is eliminated, place a Wrecks marker in the hex. Only one Wrecks marker is permitted in a hex: if another vehicle unit is eliminated

in the hex, no Wrecks marker is added to the hex. No Wrecks markers may be placed in all-Water hexes, unless permitted by Module or Scenario rules.

#### **10.8.2 Disruption Effects**



Disrupted units may not use Direct Fire or Spot for Indirect Fire. They may move, but may not move closer to an enemy unit in LOS. If not cur-

rently in an enemy unit's LOS, it must stop immediately upon entering a hex in LOS of an enemy unit. They may also not move into a hex adjacent to an enemy unit, and if already adjacent it must remain where it is. Of course this means they may not Assault, but they may counterattack in response to an enemy Assault, but with a To-Hit number of 6 (See 13.0, Assault Action).

**Important:** Once Disrupted, the Disrupted marker may only be removed during the Disruption Removal Step of a subsequent Formation Impulse for its Formation. If a Disrupted unit is Out of Command, it adds 1 to its Disruption removal 2d6 die roll.

**Important:** Note that units receiving a disruption or step-loss result from Opportunity Fire must stop moving. The affected unit is also immediately marked Ops Complete.

#### 10.9 Rubble, Clearing Rubble & Fires

If a net result of 3 or more hits is inflicted in one Direct or Indirect Fire attack on a unit or stack (after any Defensive Bonus saves and/or Armor saves) in any City, Town, Woods, Light Woods, Light Jungle or Jungle hex - or any terrain type designated in Module or Scenario rules - immediately roll 1d6 to determine if the hex becomes a Rubble hex and/or if a Fire is ignited in the hex.

If the result is 1-4, there is no effect.

If the result is 5 the hex is rubbled; place a Rubble marker in the hex. That hex now uses the Rubble line on the TEC for all purposes.

If the result is 6, and the hex does not already contain a Burnt Out marker, a major fire is ignited in the hex. Place a Fire marker in the hex. Any Wrecks, Improved Positions and / or Cleared markers in the hex are immediately removed from the map. Minefield markers of either type (Placed or Random) remain in the hex. Then attempt to retreat any units in the hex as if they had lost an Assault Action (See 13.2.2, Retreating from an Assault) EXCEPT the unit may move into ANY adjacent hex that satisfies the Retreat conditions of 13.2.2, as there no hexes opposite any Assaulting unit's entrance hex in this case (the units are running from a fire!). Helicopters in NOE or Flying mode may attempt to retreat one hex (only) to move out of a Fire hex.

Helicopters in Hover or Landed mode may immediately change mode to attempt to retreat one hex (only)out of the Fire hex. Helicopters are NOT subject to Opportunity Fire when they change mode - and no unit is subject to Opportunity fire in the hex retreated to - when retreating out of a Fire hex. Also, any unit (Ground or Helicopter) which cannot retreat out of a Fire hex is eliminated.

Unlike an Assault retreat, a unit retreating out of a Fire hex is **NOT** marked Ops Complete.

Cultivated hexes on summer maps may catch fire under the same circumstances. Roll 1d6: 1 to 5, no effect; 6, place a Fire marker, and immediately roll for effects as above, as if a 6 had been rolled.

#### 10.9.1 Clearing Rubble Hexes





**Important:** Rubble hexes may not be cleared until any Minefield marker in the Rubble hex is removed by being depleted (See 16.2.2) or by a successful Breaching attempt (See 16.3.1).

Rubble hexes may be cleared (removed) by an Engineer or CEV (Combat Engineering Vehicle platoon) unit which begins its Formation Impulse in the Rubble hex, declares a Movement Action, and then spends all of its MPs to make a Clearing Roll. Roll 2d6, with a penalty of +3 to the die roll.

If the results is less than or equal to the Clearing unit's Morale/Training value, the Clearing Roll is successful, and the hex is successfully Cleared: remove the Rubble marker and replace it with a Cleared marker.

That hex now uses the Cleared line on the TEC for all purposes. A failed Clearing Roll has no effect. Mark any such unit as Ops Complete after any Clearing attempt.

**Note:** Only one Clearing attempt may be made per activation per unit per hex. So if two Engineer units are in a Rubble hex, both may make one Clearing attempt in each activation.

#### 10.10 Missile Ammo Check





Important: If your unit must make an ammo check and already has a LOW MIS-SILE AMMO marker, do not roll. Instead, simply remove the LOW MISSILE AMMO marker and replace it with a NO MISSILE AMMO marker.

Immediately after a unit executes Direct Fire with its green AP value (AT-GM-armed units); or its blue AP value if it also has a blue Range value (SAM units), it rolls 2d6 for a Missile Ammo Check. If the result is > its Formations Morale/Training value, place a Missile Reloading marker on the unit. The unit may not Fire with its AP value until the marker is removed (See 7.3, Missile Ammo Reload Step).

#### **10.11 Opportunity Fire**

Opportunity Fire is a form of Direct Fire triggered by enemy movement, or enemy loading or unloading of Passengers in the LOS of an inactive unit, or a helicopter changing mode.

Units that are Out of Command may still use Opportunity Fire. Units that are marked as being Ops Complete or Disrupted may not use Opportunity Fire.

Opportunity Fire may be triggered during an enemy Movement, Move & Fire, or the movement portion of the Assault action (see the note below for Assault).

Note: during an Assault Action, Opportunity Fire IS NOT triggered by the assaulting unit entering the target hex: the act of entering the target hex is in fact the Assault portion of the Assault Action, not part of the Movement portion of Assault Action. This means that a unit starting its activation adjacent to an enemy unit may Assault the latter without triggering Opportunity Fire! Also see 9.8.3, Unloading into an Assault, for detail during that specific situation.

When an activated unit moves in the LOS of an eligible inactive unit, the Opportunity Fire is declared and movement stops until the attack is resolved. The moving unit may be able to continue its move afterwards.

Alternatively, if a Passenger expended no MPs before being loaded; or whenever unloaded; and whether or not its Transport unit moved, the act of loading or unloading triggers Opportunity Fire. Again, the Opportunity Fire is declared and the loading or unloading stops before completion until the attack is resolved. The loading/unloading unit may be able to complete its process afterwards.

When an Opportunity Fire attempt is declared, a Support Weapon may immediately be deployed and used to execute Opportunity Fire.

Unlike regular Direct Fire, where both a Support Weapon and the unit to which it is deployed may both fire, during Opportunity Fire a Support Weapon deployed in this manner is used in place of any FP of the unit to which it is deployed (because the unit will be Ops Complete as soon as the Support Weapon fires).

**Important:** Only one Opportunity Fire attack is allowed per hex of movement, OR loading or unloading Action inside a hex.

**Important:** Units receiving a disruption or step-loss result from Opportunity Fire must stop moving. The affected unit is also immediately marked Ops Complete.

**Note:** The stack is still a stack. So, for Opportunity Fire, remember: it is Direct Fire, and the rules for Direct Fire against a stack apply (as in 10.7.1). And also: Opportunity Fire is always Direct Fire. It is never Indirect Fire.

Example: If there were 4 hits scored by AP FP on the top unit of a moving stack of two T-72 units by Direct Opportunity Fire, the first platoon would be eliminated and the second would be Disrupted and cease movement. However, if the second unit in the stack had instead been an Infantry unit, the Infantry unit would be unaffected and could continue moving.

If, after the Opportunity Fire attack is completed, the target of the Opportunity Fire is able, it may continue its move or complete loading/unloading. If only one unit in a stack is able to continue its move (the other being Disrupted, for example), the stack may split with one unit moving on while the other remains in the hex.

A unit that continues its movement may draw Opportunity Fire from another unit. The attacking unit, or an attacking unit which deployed a SW to attack, is marked Ops Complete after the attack.

### 11.0 Move & Fire Action

A unit making a Move & Fire Action must expend at least 1 Movement Point, and then it may (not must) execute Direct Fire at a target.

**Important:** A unit may not fire, then move.

The Move & Fire Summary Chart below summarizes the effects detailed below of selecting a Move & Fire Action. It is also found on Player Aid Card PACO5 Miscellaneous Tables.

A Move & Fire Action does not affect a ground unit's To-Hit numbers, but its FP dice may be reduced. A Move & Fire Action does not affect a Flying Helicopter's FP dice or To-Hit number, but it may not move more than 12 Movement Points and still fire, unless indicated by Module or Scenario rules.

Units with black AP/HE FP dice have their Movement Points halved (rounded down), and also reduce their FP dice by 2 for their subsequent Direct Fire attack. Note that the unit's FP dice may not be reduced below 1.

Ground units with TAP/HE values possess Enhanced Move & Fire capabilities:

- Soviet, Pact and PACT-allied units with an CAME FP dice value can move up to half their MPs (rounded down), and reduce their FP dice by 1. Or they may move between their half to their full MPs, and reduce their FP dice by 2.
- NATO and NATO-allied units with an orange FP dice value can attack without penalty if they move up to half their MPs (rounded down). Or they may move between more than half to their full MPs, and reduce their FP dice by 1.

Upon completion of this Action, mark the unit or stack Ops Complete.

Sample Unit (not all)	Nation, Unit & Firepower	Expend at least one MP, up to half MPS (round down)	Expend more than half MPs (round down), to full MPs
118 5 625	Any Ground unit with Black, Elmo or Green AP or HE	-2 FP dice (min 1)	Prohibited
12 14 6 0 5 05 0 24	Soviet/PACT/ PACT-Allied unit with <b>Oranga</b> AP or HE	-1 FP dice (min 1)	-2 FP dice (min 1)
11 05 5 5 5 45 <b>(3</b> 24	NATO/NATO-allied unit with <b>Orange</b> AP or HE	No effect	-1 FP dice (min 1)
Helicopters		Expend <= 12 MPs	Expend > 12 MPs
425	Flying Helicopter with any color AP or HE	No effect	Prohibited

# **12.0 On-Board Indirect Fire Action**

Of course Aircraft - including Helicopters - may not choose this Action.

A unit making an On-Board Indirect Fire (See 14.0) attack does not need a LOS to its target, but does need a Spotter on the map which has a clear LOS to the target hex.

On-Board Indirect Fire is executed as an Action by one of your units which has neither an Ops Complete or Disrupted marker, and with a **gray Special Ability triangle** on it (typically MRTR, SPMRTR, ARTY, or SPA units).

See Indirect Fire for the procedures (14.0).

### 13.0 Assault Action

**Design Note:** Assault is a particularly deadly form of attack, where units move to and enter an enemy-occupied hex, and engage at short - if not hand-to-hand - ranges, with the intent of clearing a hex of enemy units in order to control the hex.

Important: Aircraft may not choose this Action. Flying and Hovering Helicopters may not be the target of an Assault. NOE Helicopters may only be the target of an Assault if they are in a hex with an obstacle with terrain of obstacle height zero (0). (See the TEC.)

An Assault Action may be initiated by your units which have an Assault value and which have neither an Ops Complete marker nor a Disrupted marker. A unit selecting this Action may Move up to its full MP allowance to reach and enter its intended target hex. All Movement to the unit's intended target hex, including moving into a hex adjacent to the intended target unit is called the Movement portion of Assault Action, and is subject to Opportunity fire up to and including the hex adjacent to its intended target hex; but actually entering the target hex from an adjacent hex is called the Assault portion of the Assault Action, and is NOT subject to Opportunity Fire.

**Exception:** Any unit that is unloading from a Transport unit directly into an Assault may be subject to Opportunity Fire, see 9.8.3 and 9.8.4.

Upon successfully entering the target hex, the Assaulting unit then immediately executes the Assault as the Attacker. The target units are the Defenders in the Assault. **Note:** The assaulting unit must have enough Movement Points remaining to pay the full cost of entering the target hex, or the Assault does not take place, If that is not the case, the unit is marked Ops Complete in the last hex before it entered the target hex.

A unit with an Assault value may initiate combat upon entering an enemy-occupied hex. A unit without an Assault value may not enter an enemy-occupied hex, and may not counterattack if assaulted itself.

If a stack is moving to Assault, and includes a unit without an Assault value, the stack splits. The eligible unit will enter the enemy-occupied hex, while the ineligible unit halts in the adjacent hex.

Defending units that are marked Ops Complete may counterattack.

Disrupted units may counterattack as well, but with a To-Hit number of 6.

Again, the Assault is resolved as soon as the attacker enters the hex.

Note: Any unit which possesses an Assault FP but does not possess either an AP FP factor or is indicated in its Module Rules as a unit with High Rate of Fire HE (See 10.1, AP and HE Firepower - Which to use?) may not initiate an Assault against a Heavy Armor unit. Such units also may not counterattack an Assault by a Heavy Armor unit. See the National Unit Table for a specific unit to see if it has the High Rate of Fire HE capability.



**Example:** The United States M-113 unit above has an Assault value but does not have an AP FP. It may not initiate an Assault against the T-72 and it may not counterattack if assaulted by the T-72.

#### **13.1** Assault Modifiers

**Design Note:** Your infantry is at a huge advantage when assaulting enemy vehicles not escorted by their own infantry. However, when you assault across a bridge, you become involved in a complicated ballet of support and risk.

Ideally you will try to suppress the bridge's defenders before you charge the narrowing path of a bridge in your attempt to seize it. Assaulting across a river is particularly dangerous. And night-time assaults are especially deadly as the range can be closed quickly, the attackers mostly unseen. The Assault modifiers reflect these situations.

There are a few bonuses and penalties that are specific to an Assault. They are cumulative with each other unless indicated by Module or Scenario rules.

**Note:** The maximum To-Hit number of any unit after being affected by sections 13.1.2, 13.1.3 or 13.1.4 is 6.

#### **13.1.1 HQ Bonus**

Increase your unit's Assault FP dice by your HQ's Command Bonus.

**Note:** Your HQ does not otherwise directly participate in the Assault. It can be reduced or Suppressed as usual by friendly reductions or eliminations as a result of the Assault. HQs must retreat with any of your units which survive.

#### 13.1.2 Infantry Assault Bonuses versus Vehicles

Undisrupted Infantry units gain a -1 to their To-Hit number versus enemy vehicles either alone or in a stack with no Infantry of their side - Disrupted or not.

If the Assault happens in a City or Town hex, the infantry also gains +1 Assault FP dice.

#### 13.1.3 Cross-Bridge or Cross-River Assault

An Assault against an Undisrupted enemy unit across a Bridge or River hex side suffers a +1 to the attackers' To-Hit number and -1 Assault FP dice. The enemy unit also gains -1 To-Hit.

#### 13.1.4 Night Assault

Apply a -1 To-Hit to all Undisrupted units in a night-time Assault, as designated by Module or Scenario rules.

**Design Note:** Forcing bridges and night assaults are not for the faint-hearted...

#### 13.1.5 Vehicle Assault bonus

If your vehicle or stack of two vehicles wins an Assault and is not Disrupted, and after any enemy units are retreated, it may make a free move into an adjacent empty or friendly-occupied hex, subject to stacking limits as usual. This move is NOT subject to enemy Opportunity Fire.

#### 13.2 Resolving an Assault

**Note:** In an Assault, there are no saved hits, there are only hits. Hits are not reduced by armor values, terrain or concealment. The exception is Improved Positions, which negates the first hit against the defender in an assault.

Design Note: It's a knife fight...

Each of your attacking units rolls its individual modified number of Assault FP dice, and scores a hit for each die roll result >= its modified To-Hit number.

The defender - if eligible - then counterattacks in the same way.

Note: Landed Helicopters and NOE Helicopters may use their HE FP dice and To-Hit number to counterattack in an Assault if they have one. Helicopters without HE FP dice are considered like any other unit without Assault FP dice and may not counterattack an Assault, unless indicated by Module or Scenario rules. Again, Flying Helicopters may not attack or be attacked by an Assault.

#### 13.2.1 Applying Hits in an Assault

The hits are now applied by both sides, each unit in a stack receiving one hit before taking another. If there are an odd number of hits, roll 1d6: on a 1-3 the top unit receives the hit; on a 4-6 the bottom unit does. Use Section 10.7 Combat Results to determine the result of the hits to each unit receiving hits, but ignoring any references in 10.7 to unsaved hits (all hits are unsaved hits in Assault). Note that 10.7 applies regardless of whether or not a unit with one or more hits was able to counterattack in the Assault. If the defender is not eliminated, and the attacker did not inflict more hits than received, the attacker must immediately return to the adjacent hex from which it originally entered the defender's hex to execute the Assault portion of the Assault.

If the defender is not eliminated, and receives more hits than it inflicted, it retreats 1 hex, subject to 13.2.2, Retreating from an Assault, below. If the attacker has units remaining, the Attacker has won the Assault; immediately after that, any undisrupted assaulting vehi-

cles may take their Vehicle Assault bonus (see 13.1.5, Vehicle Assault Bonus). Note that possible HQ and Leader losses are resolved as usual for both sides in an Assault (See 10.7.2, Results versus HQs and Leaders).

#### 13.2.2 Retreating from an Assault

A defending unit that has lost the Assault and is retreating must attempt to move into one of the three hexes opposite from the hex side the attacker entered the defender's hex.

Important: Units retreating from a fire hex also use this Retreat procedure! However, such units may attempt to move into ANY hex adjacent to the fire hex from which they are retreating.

A retreating unit cannot enter:

- · An enemy-occupied hex.
- A hex adjacent to an undisrupted enemy unit with an AP or HE value.
- A hex that is already occupied to the stacking limit by a friendly stack.
- A hex it is Prohibited from entering by the TEC.

A unit unable to retreat is eliminated.

**Important:** Units retreating from an Assault do not trigger Opportunity Fire.

#### 13.2.3 Ending the Assault

Once the Assault is resolved, all units that participated – on both sides - are marked Ops Complete.

## 14.0 Indirect Fire

There are two types of Indirect Fire: Off-Board Artillery Strikes; and On-Board Artillery Strikes.

## 14.1 On-Board Artillery Fire

All units with a gray Special Ability triangle are On-Board Artillery units. Many times the type of unit is part of the printed name on the counter but sometimes not. The type is always listed on the National Unit Tables for each game if you are ever unsure.

On-Board Indirect Fire is executed during any On-Board Indirect Fire Action, by any of your active units which have a gray Special Ability triangle; are Undisrupted and not Ops Complete; and an eligible spotting unit (called a Spotter) for your firing unit has an unblocked LOS to the target instead.

To be clear: If a unit which is capable of Indirect Fire has a clear LOS to its target, it does not need a Spotter, and so uses Direct Fire to attack that target. In this case it uses its HE FP values and the Direct Fire Action rules. If it does not have a LOS but has an eligible Spotter which does, it uses the Indirect Fire Rules.

**Design Note:** Direct Fire does not scatter as Indirect Fire possibly may. The concept is that Indirect fire used on a target directly in LOS of the firing unit over the course of 5 to 15 minutes of a turn will land in the target hex, and not scatter.

The following abbreviations are used for the unit types which generally have gray Special Ability triangles. This table is also found on the Player Aid Card PACO5 Miscellaneous Tables:

# ON-BOARD INDIRECT FIRE ABBREVIATIONS



## 14.2 Off-Board Artillery Fire

Off-Board Artillery Strikes happen during the Off-Board Artillery Step, and represent assets outside the area of the map, but supporting your troops. The strength and number of Strikes are tracked on the Artillery Track on the Turn Record-Weather-Artillery Tracks Player Aid.

A track marker is provided for each type of Strike for which the number and/or strength of each Strike needs be tracked.

The black marker is the number of Strikes; the orange marker is the strength of the Strikes. All Strikes of a specific type during a scenario have the same strength marked on the track.

An Off-Board Artillery Strike can only be used once in a scenario.

**73** 

## 14.3 Spotters

A hex may be spotted for Indirect Fire by:

- · The activated Formation's HQ; or
- Any Active unit with a red Recon Special Ability triangle.
- (For On-Board Artillery Strikes only) any activated unit permitted on its National Unit Table, and passing a Spotter Check.

To conduct a Spotter Check for a unit, roll 2d6. Subtract the Command Bonus of any HQ deployed to the unit; or subtract the Command Bonus of any Leader assigned to the unit.

**Important:** Only the HQ's bonus or the Leader's bonus may be used - not both.

If the result is <= Morale/Training value of the unit, the unit may act as a Spotter for that specific On-Board Indirect Fire.

If the result is > Morale/Training value, the on-board asset is marked Ops Complete. No attack takes place

**Important:** Do **NOT** place an Ops Complete marker on a Spotting unit or HQ for either type of Indirect Fire! Only your units that execute the On-Board Artillery Strike itself will have Ops Complete markers placed on them after they Fire.

## 14.4 Indirect Fire Range

Off-Board Artillery Strikes can be directed onto any hex the Spotter can observe.

Targets of On-Board Artillery Strikes must be within the firing unit's HE Range.

Some restrictions on Range:

- For towed ARTY and SPA units, there is a 7-hex minimum range
- MRTR and SPM units indicated as 120MM or greater in their counter name have a minimum range of 2 hexes.
- All MRTR and SPM units of less than 120MM (typically 82MM or 81MM) have NO minimum range.

**Note:** Consult each unit's **National Unit Table** if you are unsure from the counter name of what the minimum range is.

## 14.5 FFE marker & Scatter Check

Off-Board Artillery Strikes take place during an active Formation's Off-Board Artillery Step in its Formation Impulse. On-Board Artillery uses the On-Board Artillery Action during the Action Step of one your Formation Impulses.

In either case your Strike or Action is resolved one at a time, so only one marker is needed to indicate the Active Strike at a time. This is called the Fire For Effect marker (aka, the FFE marker).



#### Fire For Effect (FFE) marker:

- If needed, make a Spotter Check.
- Place the FFE marker on any desired target hex within LOS of your Spotter; and range of your On-Board Indirect Fire unit (if that is what is firing).
- Check for Scatter. Roll 1d6.

If the result is 1 - 5, the Strike is on target. The FFE marker remains where placed.

If the result is 6, the Strike scatters to another hex. Roll 1d6 to determine direction consulting the North direction for the scenario.

		1o6 I	SOLL		
1	2	3	4	5	6
N	NE	SE	S	sw	NW

Move the marker one hex in the rolled direction. Then roll 1d6 again.

If this 2nd roll is 1-3 the FFE marker remains where it is and the Strike is resolved

If this 2nd roll is 4-5, the FFE marker scatters another hex. Again roll for direction, as above.

If this 2nd roll is 6 something has gone badly wrong, and the attack is canceled. The FFE marker is removed. The Strike total for that type of Off-Board Artillery Strike is reduced by one on the Artillery Track; and the On-Board Artillery unit that attempted to fire is marked Ops Complete.

If the FFE marker is still on the map after the Scatter Check, the resolution of the Strike proceeds against the units in its new location, and depending on the Strike's Type.

Design Note: There is a very small possibility that a battery will check its fire because of some problem arising on their end; or, more likely, a friendly "off-map" unit on another part of the battlefield has been given a higher priority and received the Artillery Strike support instead of you. Or the miss was so bad that it is not worth locating the final impact hex on the map. A small element of the Friction of War.

## 14.6 Strike Types

Sections 14.7 to 14.12 cover the different types of Artillery Strikes.

**Design Note:** Not all types of Artillery Strikes are available in all World At War 85 modules.

Consult the Indirect Fire Summary Chart on Player Aid Card PACO5 Miscellaneous Tables while looking at this section, to specify.

**Note:** A summary of which Strikes can be used by On-Board and which can be used by Off-Board Artillery is provided below, the **Indirect Fire Summary Chart**, which can also be found on Player Aid Card **PACO5 Miscellaneous Tables**.

Off-Board High Explosive, DPICM, and MLRS Strikes are specifically assigned a pair of numbers in the Order of Battle section of a scenario: the number of dice rolled, and the number needed to hit on each die rolled.

The paired-number combination, and the number of Strikes of each type are each marked on the Artillery Track at the start of the scenario or when otherwise indicated in the Order of Battle, or module or scenario rules.

In contrast: On-Board High Explosive, DPICM or MLRS Strikes are assigned the HE FP dice and To-Hit number of the unit firing.

Off-Board High Explosive, DPICM, and MLRS Strikes all use a similar resolution sequence, described in the next section, 14.7.2 Strike Procedure. When firing an MLRS or DPICM Strike, follow their procedures until it indicates you proceed to 14.7.2.

When following the procedure in 14.7.2 only, "High Explosive Strikes" also refers to DPICM or MLRS Strikes, as appropriate to the strike being resolved.

## 14.7 HE (High Explosive)

#### 14.7.1 Off-Board versus On-Board FP dice





Marker for # HE Strikes (Black) HE Strike Strength (Orange)

Off-Board High Explosive Strikes are assigned FP dice and a To-Hit numbers in the Order of Battle section of a scenario.

The FP dice and To-Hit combination, and the number of Strikes are each marked on the Artillery Track.

On-Board High Explosive Strikes are assigned the HE FP dice and To-Hit number of the unit firing.

#### 14.7.2 Strike Procedure

Units in a hex hit by a High Explosive Strike are attacked individually and all such units in a hex are attacked by the Strike.

Use the Direct Fire procedures in combat (10.0), Direct Fire Restrictions and Modifiers (10.6) and Combat Results (10.7) to resolve the HE Indirect Fire attack.

**Important:** Disregard section 10.1 for Indirect fire! On-Board Indirect Fire is subject to Long Range penalties. It is NOT subject to the Point Blank Range bonus. See Direct Fire Restrictions and Modifiers, 10.6.

However, how hit Saves are calculated is a little different from Direct Fire resolu-

INDIRECT FIRE SUMMARY CHART			
Strike Type	Available as an Off-Board Strike	Available as an On-Board Strike *	
High Explosive	Yes	ARTY, SPA, MRTR**, SPM**	
Smoke Screen	Yes, place 3x	ARTY, SPA Place 3x  MRTR, SPM: Place 1x	
Artillery Delivered	Yes, place 3x	SMOKE	
Mines  Dual-Purpose Improved Conventional Munitions	ONLY	NO	
Multi-Launch Rocket System	ONLY	NO	
CHEMICAL	ONLY	NO	
* Minimum Ra Range	nge Restriction	ons, see 14.4	

- \*\* Heavy Targets get full Armor and Save when targeted by mortars

- Infantry and unarmored targets gain Defensive Bonuses for terrain type (see 10.6.8) and concealment (see 10.6.13).
- Light Armor uses its usual 1d6
  Armor Value and its usual Save
  Value; Heavy Armor has its Armor Value reduced to 1 but uses
  its full Save Value. In addition to
  the Armor Value, both Light and
  Heavy Armor gain Defensive Bonuses for terrain type (see 10.6.8)
  and concealment (see 10.6.13).
  Their total Defensive Bonus dice
  are still subject to the Maximum
  Defensive Bonus restriction (see
  10.6.14).

**Exception:** When Heavy Armor is attacked by a MRTR or SPM Strike, then the unit's Armor/Save values are used instead. It is still subject to the Maximum Defensive Bonus (10.6.14)

• The usual rules apply when units are reduced or eliminated and HQs & Leaders (10.7.2), and/or Passengers (10.7.3) are present in a Strike hex.

Once the Strike has been resolved, the FFE marker is removed. For Off-Board assets, reduce the number of HE Strikes by one on the Artillery Track; while for On-Board Strikes, the firing unit is marked Ops Complete.

## 14.8 SMOKE



Smoke (front) -Smoke Thinning (back) Once the Strike has tested for Scatter, a Smoke marker is placed in the target hex. Two further Smoke markers may then be placed; the first in any hex adjacent to the target hex, the second adjacent to either. You do NOT have to place either or both of the additional Smoke markers, but are allowed to do so.



Important: Unless permitted by Module or Scenario rules, if a Smoke marker is placed on an All-Water hex as part of a Smoke layout, it is then removed from the map immediately after the Layout is completed by the player firing the Smoke Strike.

**Design Note:** Unless the smoke strike's rounds have an air-burst fuse, smoke rounds are not effective in water.

Smoke blocks LOS for units at any elevation, whether that be into or through the screen (see the TEC). Units adjacent to a Smoke filled hex, however, have LOS into it, but not through it, for the purposes of both Direct Fire and Spotting. Units in a Smoke filled hex only have LOS to adjacent non-Smoke filled hexes.

Units firing into an adjacent Smoke filled hex suffer a +1 to their To-Hit number.

Units firing out of a Smoke filled hex into an adjacent hex also suffer a +1 to their To-Hit number.

Smoke Thinning markers are removed, and then Smoke markers degrade to Smoke Thinning by being flipped during the Marker Removal Phase.

See 2.3.2 for Smoke marker adjustment.

# 14.9 MLRS (Multi-Launch Rocket Systems)



#### Marker for # MLRS Strikes

Like HE, MLRS Strikes are assigned their values in the Order of Battle section of the scenario, and are marked on the Artillery Track in the same way.

First, the FFE marker should be in place.

Roll for Scatter, and if the Strike remains and is not canceled, place the FFE marker in the target hex. The attack will also affect units in the 6 surrounding hexes.

Once the Strike has been resolved, the FFE marker is removed. Reduce the number of MLRS Strikes by one on the Artillery Track.

**Again:** An MLRS Strike affects all units in the hex it is in and the six adjacent hexes.

#### 14.9.1 MLRS Strike Reduction Check

Before resolving the Strike, make a **Strike Reduction Check.** Roll 2d6: if a 2 or 12 is rolled, reduce the Strike's FP dice by 1.

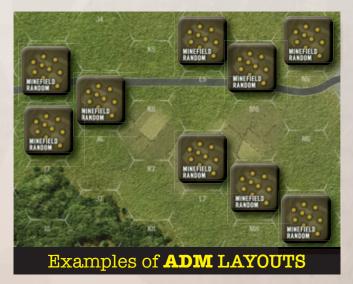
Resolution then proceeds as for HE (See 14.7.2, Strike Procedure).

## 14.10 ADM (Artillery Delivered Mines)



# Artillery Delivered Mine Strikes use the Minefield: Random marker

Roll for Scatter, and if the Strike remains and is not canceled, then replace the FFE marker with a Minefield-Random marker in the target hex. Two further Minefield-Random markers are then placed; the first in any hex adjacent to the target hex, the second adjacent to either. You do NOT have to place either or both of the additional Minefield-Random markers, but are allowed to do so



The markers in this case represent scattered mines.

Each unit in a hex that receives a Minefield-Random marker rolls 1d6.

- On a result of 1 3, there is no effect on the unit.
- On a result of 4 5, it takes 1 hit.
- On a result of 6, it takes 2 hits

There is no Save roll permitted for hits inflicted by mines.

Once the Strike has been resolved, the Minefield-Random markers remain in place for the rest of the game, unless Depleted or Breached, as usual (See 16.2.2, Minefield Depletion; and 16.3.1 Breaching Minefield).

Also, reduce the number of ADM Strikes by one on the Artillery Track.

# 14.11 DPICM (Dual-Purpose Improved Conventional Munitions)





# DPICM Strikes (Black)
DPICM Strike Strength (Orange)

**Design Note:** Dual-Purpose Improved Conventional Munitions contained many sub-munitions designed for both anti-armor and anti-personnel attack. However, the sub-munitions had a high failure rate.

Like HE, DPICM Strikes are assigned their values in the Order of Battle section of the scenario, and are marked on the Artillery Track.

Roll for Scatter, and if the Strike remains and is not canceled, place the FFE marker in the target hex.

#### 14.11.1 DPICM Strike Reduction Check

Before resolving the Strike, make a **Strike Reduction Test.** Roll 2d6.

If 2, 3, 11 or 12 is rolled, reduce the Strike's FP dice by 1.

Resolution then proceeds as for HE (See 14.7.2, Strike Procedure). Reduce the

number of DPICM Strikes by one on the Artillery Track.

## 14.12 CHEMICAL



Marker # Chemical Strikes, Also Strike location on the map

Roll for Scatter, and if the Strike remains and is not canceled, then replace the FFE marker with a Chemical marker in the target hex. The Strike also affects any unit in the 6 adjacent hexes.

**Again:** A Chemical Strike affects all units in the hex it is in and the six adjacent hexes.

Each unit in a Chemical Strike hex rolls 2d6.

On a result <= the unit's Morale/Training value, there is no effect on the unit.

On a result > the unit's Morale/Training value, Heavy or Light Armor take 1 hit. Anything else takes 2 hits

No defensive Save rolls are permitted against a Chemical Strike.

The usual rules apply when units are reduced or eliminated and HQs & Leaders (10.7.2), and/or Passengers (10.7.3) are present in the hexes affected by a Strike.

Chemical Strike markers remain on the map after the Strike is resolved. Units entering a hex adjacent to or containing a Chemical Strike marker during the current turn must pay an additional 2 Movement Points to enter the hex, but are not otherwise affected.

Once the Strike has been resolved, reduce the number of Chemical Strikes by one on the Artillery Track.

All Chemical Strike markers are removed during the next Marker Removal Phase.

**Design Note:** These artillery Strikes represent a barrage by non-persistent nerve gas.

# 15.0 Designated Formation eard



If you draw the Designated Formation card, you can activate any one of your Formations, as long as it is the same nationality as the card, unless modified by Module or Scenario rules.

**Note:** A Designated Formation card does not prevent the Formation chosen from activating again if its own Formation card is drawn from the Formation Deck later in the turn, or if activated by the Battlefield Event Table.

## 16.0 Other Series Rules

Sections 16.1 through 16.5 below are used in all **WaW85 Series** Volumes.

Sections 16.6 Night Rules and 16.7 parachute Drops below are only used in Volumes where they are indicated in Module Rules, but can both be used with the Battle Generator (See 17.0) when making your own scenarios.

## **16.1 Improved Positions**



#### Improved Positions marker

A unit in Improved Positions ignores the first hit it receives each time it is attacked. Helicopters in any mode may not benefit from Improved Positions.

Improved Positions typically are assigned in a scenario's Order of Battle and may be placed in any hex in the playable area, subject to restrictions as noted in the Order of Battle or Module or Scenario rules.

**Note:** Improved Positions and Assault - during an Assault, Improved Positions will negate the first hit against the defenders (one hit total).

## 16.2 Minefields





Minefield: Random and Placed

Minefields are typically assigned in a scenario's Order of Battle.

Placed and Random Minefields follow the same rules, except units entering a Minefield-Placed hex belonging to their own side are not attacked.

Units voluntarily exiting any Minefield hex (i.e. not retreating because of hits by that Minefield, see below) are not affected by the Minefield at that time, but it costs 2 extra Movement Points to do so.

However, both sides are attacked when they enter a hex containing a Minefield-Random marker.

Design Note: Friendly mines...aren't...

Each unit entering a Minefield hex rolls 1d6.

- On a result of 1 3, there is no effect on the unit.
- On a result of 4 5, it takes 1 hit.
- On a result of 6, it takes 2 hits

No defensive Save rolls are permitted against a Minefield hit.

The usual rules apply when units are reduced or eliminated and HQs & Leaders (10.7.2), and/or Passengers (10.7.3) are present in the Minefield hex.

A unit that takes a hit immediately retreats to the hex it entered the Minefield from, and is marked Ops Complete.

All Minefield markers remain on the map and in effect until Depleted (16.2.2) or Breached (16.3.1).

#### 16.2.1 Hidden Minefields

If you are assigned Minefield markers in your Order of Battle in a scenario, the position of each Minefield may be recorded before the game (Map-Hex notation is in the same format as in Scenarios, **Example:** Map 1-A5). The Minefield marker does not need to be placed on the map unless and until an enemy unit enters the Minefield's location.

At that point, place the Minefield marker in its recorded hex location and proceed as in 16.2. Once placed on the map, Minefields stay on the map unless Depleted or Breached.

Friendly units may start the game in hexes containing hidden Minefields, if

permitted to set up in that location by the Scenario Rules.

Hidden Minefields may not be located in a City, Town, or in a hex with an Improved Positions marker.

#### 16.2.2 Minefield Depletion

After a unit has been attacked by a Minefield marker of either type, roll 1d6.

If a 6 is rolled, the Minefield marker is removed. This does not apply to units Breaching a Minefield (See (see 16.3.1).

## 16.3 Engineering

**Design Note:** For completeness, we here repeat 10.9.1, Clearing Rubble hexes, in 16.3.2. This is to allow for one-stop shopping of the Core Rules engineering functions. Both 10.9.1 and 16.3.2 are identical. Additional Engineering functions may be introduced in specific Modules but these cover the essentials in WaW85 scenarios.

Though Mine Plows are readily available in all games, Engineers and CEV units will be designated in each WaW85 Volume which uses them, and not all Volumes may have Engineers and/or CEV units. Check the **National Unit Table** for the volume you are using.

## 16.3.1 Breaching Minefields



Engineers, CEVs, or Heavy Armor with a Mine Plow SW, or any other unit designated by Module or Scenario rules can breach (eliminate) a Minefield marker, either Random or Placed.

To breach a Minefield marker, the unit must start its activation adjacent to the Minefield marker, and spend all its Movement Points to enter the hex. Upon entering the hex the unit is subject to Opportunity Fire as usual. If it is not Disrupted or Eliminated, it then may immediately roll 2D6 for a Breaching attempt:

- On a result <= the unit's Morale/ Training value, remove the Minefield marker.
- On a result > the unit's Morale/ Training value, the Minefield marker remains in play, and the unit retreats to the hex it entered from, and is marked Ops Complete.

#### 16.3.2 Clearing Rubble Hexes





**IMPORTANT NOTE:** Rubble hexes may not be cleared until any Minefield marker in the Rubble hex is removed by being depleted (See 16.2.2) or by a successful Breaching attempt (See 16.3.1).

As in 10.9.2, rubble hexes may be cleared (removed) by an **Engineer or CEV (Combat Engineering Vehicle platoon)** unit which begins its Formation Impulse in the Rubble hex.

An **Engineer or CEV** declares a Movement Action, and then spends all of its MPs to make a Clearing Roll.

Roll 2d6, with a penalty of +3 to the die roll.

If the results is less than or equal to the Clearing unit's Morale/Training value, the Clearing Roll is successful, and the hex is successfully Cleared: remove the Rubble marker and replace it with a Cleared marker. That hex now uses the Cleared line on the TEC for all purposes. A failed Clearing Roll has no effect. Mark any such unit as Ops Complete after any Clearing attempt.

**Note:** Only one Clearing attempt may be made per activation per unit per hex. So if two Engineer units are in a Rubble hex, both may make one Clearing attempt in each activation.

Also: Engineers and CEV units will be designated in each WaW85 Volume which uses them, and not all Volumes may have Engineers and/or CEV units. Check the **National Unit Table** for the volume you are using.

### 16.3.3 Bridge-laying Units

The B on the reverse of a Bridge-laying unit indicates a Bridge marker is deployed to the map from this unit.



Units designated by Module rules as being bridge-laying units will also indicate this capability on their National Unit Table Player Aid Card. Such units can place a bridge marker across any river hexside in its hex.

To do so, the unit begins a Movement Action (not Move and Direct Fire, or Assault) adjacent to that river hexside and, as its Action, spends all its movement points to flip itself to reveal its bridge deployed symbol. At that time it may place a Bridge marker pointing toward any river hexside of the hex it occupies, unless

that hexside is prohibited to be bridged by Module or Scenario rules.

The Bridge-laying unit may retrieve the bridge by again executing a Movement Action and spending all its movement points to flip to its vehicle-symbol side, while also removing the Bridge hexside marker.

**Note:** A Bridge-laying unit may only deploy one Bridge marker at a time.

Unless the Bridge marker is removed, the Bridge-laying unit may not move at all. If the Bridge-laying unit is eliminated, the Bridge marker remains in play.

Important: Bridge-laying units are one step units, but have a "B" in a white circle as its Movement Value on the back of the counter, instead of the usual "One-Step Unit" indicator. The unit may be disrupted when either side is up, but it is treated as a One Step Unit for combat purposes (See 10.7.1, Results versus Ground Units).

## **16.4 Bridge and Ford markers**



#### Bridge / Bridge Destroyed markers

A Bridge marker is placed to represent a water crossing not already present on the map. Its reverse represents a destroyed bridge. The red arrow should point at the bridged hex side.



Ford marker

Fords cannot be destroyed, unless a Module or Scenario rule permits. It also represents a water crossing not already present on the map. The red arrow should point at the forded hex side.

### 16.5 Weather

Design Note: Weather Changes may arise as indicated on the Battlefield Events Table for your WaW85 Volume. When possible weather changes are indicated, you will consult the Weather Change Table. Since the setting of each WaW85 Volume has in its own climate, each Weather Change Table in each WaW85 game may be somewhat different. But in any climate, bad weather tends to adversely affect the fighting capability of units on the map.

**Important:** Unless otherwise designated in Scenario Rules, the Weather Level always begins the game at 0 (Clear Weather).

The Battlefield Event Table has two events that can influence the weather in any scenario being played: Weather Changes, and Squalls. Weather Changes may make the weather level higher (worse) or lower (or better). The Weather Change Table on the Player Aids shows what the effect is of each weather level.

### 16.5.1 Weather Changes



#### Weather Level marker

When the Weather Change Battlefield Event is rolled, follow the instructions in the Weather Change event to use the Weather Change Table.

The definitions of the different effects are at the bottom of the table. The weather level is tracked with three tracks or boxes on the Tracks Player Aid: Weather Track; The Squall Box; and the Mud Box. Mark the current weather level and any changes during the scenario on the Weather Track as needed during the scenario.

Weather affects are not cumulative: the effects at one level are completely replaced by another level, except for Aircraft removal; Mud, as indicated on the table; and Squalls. Squalls completely replace the weather level effects for the one turn they endure (See 16.5.2).

#### **16.5.2 Squalls**



Squall marker

If a Squall occurs, place the Squall marker in the Squall Box to indicate the Squall is in effect for the remainder of the turn. The effects of the Squall are indicated in the event. The Squall's effects override and replace any weather level effects for the current turn until the Squall marker is removed during the Marker Removal Phase.

**Design Note:** If the squall intensifies the weather, that makes sense. If the opposite, it represents a lull in the storm, intense though the squall may still be.

#### 16.5.3 Mud



Mud marker

If Mud is one of the effects of a weather change, place the Mud marker in the Mud Box; it stays and its effects remain for the duration of the scenario!

**Design Note:** Once soaked to mud, it would take longer than the duration of most scenarios for the ground to dry out.

## **16.6 Night Rules**

**Note:** Scenarios that take place at night will be specifically indicated in Scenario Rules or you may add these rules to any scenario you generate using the Battle Generator (See 17.0, WaW85 Battle Generator). The following apply when a scenario takes place at a night.

### 16.6.1 Night Targeting Checks and LOS at Night

The maximum LOS for Direct Fire and Indirect Fire Spotting becomes 7 hexes, or as restricted by the weather rules, whichever is less.

When firing or Spotting, and immediately after the LOS has been verified, an attacker or Spotter must then make a successful **Night Targeting Check (NTC)** versus the unit's Morale/Training value in order to fire.

If the target is not adjacent to the unit making the NTC, the Morale/Training value is halved (rounded up) before rolling, unless the unit has Advanced Night-Fighting capabilities.

**NOTE:** the units which have these capabilities are listed in Module or Scenario rules.

Boll 2d6 for the check.

- On a result <= the unit's Morale/ Training value: the attempt is successful.
- On a result > the unit's Morale/ Training value: the attempt fails.

If the NTC is failed, the attack or Spotting attempt is canceled, and the unit which attempted it is marked with an Ops Complete marker.

ATGM and SPATGM units do not need to make Ammo Reload Checks if they fail an NTC, but they are given an Ops Complete marker.

If the NTC is successful the target may be attacked subject to the Night bonus and penalty restrictions below:

- An Attacker only receives the Point Blank Range Bonus at night when the target is adjacent to the Attacker, and would be entitled to it if the Night rules were not in effect.
- Attackers firing at non-adjacent targets at night always receive the Long Range Fire penalty.

### 16.6.2 Assaults at Night

All non-Disrupted units participating in an Assault at night subtract one from their Assault To-Hit number (Attacker or target). Units without an Assault value still may not Assault or counterattack in an Assault.

# 16.6.3 Weather Effects and Night

Any weather or Squall effects are cumulative with Night effects.

## **16.7 Parachute Drops**



Units with a yellow Special Ability triangle, and elite units such as Airborne, parachute, Special Forces, Spetznaz, or Commando Infantry units may be designated by Module or Scenario rules as capable of entering the map via parachute Drop during their Formation Impulse. Parachute Drops are considered a Movement Action, but are executed as follows.

Note: Only use these rules for parachute Drops if called for in Module or Scenario rules, or in a scenario generated by the Battle Generator. Not all World At War 85 Volumes have elite, parachute Drop-capable units. See the National Unit Tables in your Volume for any units designated as elite units.

### 16.7.1 Designate Drop Zones and Landing Hexes

When designated to enter the map, either by Scenario Rules or by the parachuting Formation's Formation card being drawn from the Formation Deck, each individual parachuting Infantry unit or attachment will be placed on the map within a certain distance of one or more scenario-designated Drop Zone hexes.

Within that radius to the Drop Zone hex (es), each unit is placed in its intended hex of landing:

- A hex where the terrain is not blocking or Rough (other obscuring terrains such as Cultivated may be designated as landing hexes), and
- A hex which is not an all-Water hex, and
- A hex which does not contain another parachuting unit

**Also:** the Formation's HQ and all Support Weapons assigned to the Formation must be deployed to individual parachuting units at this time.

#### 16.7.2 Check for Drift

Each parachuting unit must then roll to see if it arrives over its intended Drop Zone hex. Roll 1d6 for each parachuting unit, individually.

- On a drift roll result of 1-3 the unit will land in its intended landing hex.
- On a drift roll result of 4 or 5, the unit drifts one or two hexes before landing. Roll 1d6 to determine direction consulting the North direction indicated on the map on which the unit that is attempting its landing.

		1o6 I	ROLL		
1	2	3	4	5	6
N	NE	SE	S	sw	ww

- » Move the unit one hex in the rolled direction. Then roll 1d6 again. On a new roll of 4-6 it drifts another hex. Determine direction as above.
- On a drift roll result of 6, the unit has drifted wildly. Roll the direction of drift as with a roll of 4 or 5 above. But to determine distance, instead of 1 or 2 hexes, make a single 1d6 roll and add 1 to determine the distance drifted.

A parachuting unit is eliminated if its final location after drifting is:

- · Off the playable area, or
- In a hex containing an enemy unit, or
- In a hex containing blocking or Rough terrain.

# EXCEPTION TO STACKING LIMITS BEING IN EFFECT AT ALL TIMES:

Stacking limits are applied to parachuting Units immediately AFTER all such units have completed any drifting movement. Over-stacked parachuting Units are then eliminated. The player whose units are affected may choose which is eliminated to bring the stack into line with the limits.

### 16.7.3 Anti-Aircraft Fire from Ground Units

Once final landing hexes are determined for all parachuting units, and stacking limits have been applied to all hexes containing landing parachuting Units, and subject to any Module or Scenario rule restrictions, the enemy may now make one Anti-Aircraft Fire attack on each landed parachute stack (this is a form of

Opportunity Fire). Any enemy unit, not Ops Complete or Disrupted, and whose HE FP Anti-Aircraft fire range permits (see 10.6.1 Anti-Aircraft Fire), and which also has a LOS to its target parachute stack is eligible to make the attack.

Up to two additional enemy units, also not Ops Complete or Disrupted, and whose HE FP Anti-Aircraft range permits (again, see 10.6.1 Anti-Aircraft Fire), and which respectively also have a LOS to the target parachute stack may add one FP per unit to the Firepower of the unit executing the anti-aircraft attack to a maximum a +2 FP, if possible. Important: the To Hit value of any modifying unit is ignored in this case; always use the To Hit value of the unit executing the Anti-Aircraft attack to resolve the attack. Then, along with the latter, resolve the Anti-Aircraft attack using the modified FP.

Important: The landing parachute units are considered to be Flying - like a Helicopter in Flying mode or a CAS counter - for purposes of their target height level in this case (See Flying, 9.7.1.).

Only HE Values may be used to fire at landing parachute units.

To clarify: Missile-armed Anti-Aircraft units may NOT be used versus dropping parachuting units.

Landing parachuting units receive one defensive die for this Anti-Aircraft Fire. It saves a hit if a 5 or 6 is rolled.

The resolution in either case above is executed as in a Direct Fire Action (see 10.0 and note 10.6.1).

Resolution of unsaved hits is covered in the Results versus Ground units (See 10.7.1).

### 16.7.4 Landing: Check for Disruption

Once all Anti-Aircraft Fire versus parachuting units is complete (and the Anti-Aircraft firing units are marked with Ops Complete markers), make a Morale Check for each landed parachuting unit. Each such unit that fails its Morale Check, if already Disrupted, is reduced. Otherwise it becomes Disrupted.

At the end of the parachute Drop procedure, all units that dropped receive an Ops Complete marker.

## 17.0 Battle Generator

Design Note: Each World At War 85 Volume provides a large selection of small, medium and large scenarios pre-made and ready to play. But as each counter set contains the full color-banded strength of all Formations - which may not always be used in the designed scenarios the game lends itself well to the addition of a Battle Generator. With Unit and Formation points systems, geomorphic maps, variable Objective Point value cards, multiple attachment possibilities, and Scratch Force Formation cards, you can create just about any battle situation you desire using the maps and units of any WaW85 game or combination there of. Check out the Battle Generator player aids color-coded with a red border, as you read these guidelines.

Here's our suggested guidelines for designing your own scenarios.

The process runs like this:

- Use the Battle Generator Table on the Battle Generator Player Aid to choose a scenario size, maps, turn length and points used to purchase forces for each side using the points values listed in each National Unit Table.
- Lay out the selected number of maps.
- Choose and, if necessary place Objective markers
- Choose your type of Victory Conditions
- Optionally: Bid points for the EW Advantage.

**Important:** Both players need to agree if they want to use EW in the game, and remember that means the Electronic Warfare Card is placed in the Formation Deck.

- · Purchase your units
- Setup your units and play!

### 17.1 Choose a scenario size

Use the Turn Length & Objectives Table on Player Aid Card PAC12 Battle Generator Tables.

Choose a scenario size from those listed in the left-hand column of the table. The table row for that size will show the corresponding recommended number of maps, recommended turn length, and recommended points per side. Feel free to vary these values as you prefer.

If you choose a Regimental sized game, the players should all agree on the number of maps before setting up.

Once the scenario size and number of maps are determined, Choose the type of scenario to be portrayed:

- Soviet/PACT Offensive
- NATO/Allied Counterattack
- Meeting Engagement.

Cross-index the Scenario Size row with the type of scenario to see the two columns that show the number of points available to build each side's forces.

**Example:** A Meeting Engagement for a Medium sized scenario uses 2 maps. Under the Meeting Engagement heading for that row are two columns: 1700 points for the Soviet/PACT side to spend to build their forces, and 1400 points for the NATO/NATO-allied forces to spend.

## 17.2 Choose the specific map or maps

If you are using one map, choose one to be the Playable Area for your scenario. If you choose a larger scenario, choose the number of maps indicated and lay them out adjacent to each other in any configuration desired: the geomorphic maps in each WaW85 Volume connect in any configuration as long as you match a short side to a short side, or a long side to a long side. We recommend a rectangular playing area, but it is not an absolute necessity.

Choose opposite sides of the map for each faction (NATO or Soviet/PACT, or the equivalent for your game) as their home map edge. Each side's forces will enter from their respective edges.

Note: There are a couple of maps planned which will have all-Water hexes running down a long and/or short edge. You should try and match such an edge to another map with the same kind of edge, if you choose to connect another map to it. The Road and River hex sides will match to any other edge as usual, short side to short side, or long side to long side.

**Design Note:** This allows for the depiction of a small bay and/or harbor.

## 17.3 Create Objectives

There are ten Objective markers in each Volume of WaW85, 5 each for each faction, labeled A, B, C, D, and E. On one set the identifying letter is circled in blue (the NATO/NATO-allied side) and on the other set, red (the Soviet/PACT side).

The defender places 3 Objective markers within 20 hexes of their home edge. An Objective will be a specific map feature – a bridge, hill, town, for example – and may encompass more than one hex.

The attacker then places 2 Objectives in the defender's half of the map.

**Note:** For a meeting engagement, for the purposes of placing Objectives, randomly decide which player is the attacker.

## 17.4 Choose your Victory Conditions

If you have no particular Victory Conditions in mind (like play until one side is completely eliminated) one of these four types of Victory Conditions may fit the bill. Players should agree on which to use at this time.

**Note:** You will not yet actually purchase your units until 18.4.6.).

Once the Victory Conditions for your scenario are chosen, follow the procedure to evaluate victory in your Battle Generator scenario. Here are the selections (17.4.1 through 17.4.4). You only need choose one.

## 17.4.1 Objectives minus Casualties

Using these Victory Conditions, the side with the higher points total wins the scenario.

Each side scores 200 points times the number of Objectives they control at the end of the game. Each side subtracts the full points cost of any of their units which have been eliminated from their total, and 1/2 the points cost of any two step units which are reduced but not yet eliminated.

As a formula:

(200 Victory Points x your Objectives held at end of game) – (points for your own units eliminated - 1/2 points for your units reduced) = Your Victory Point Total

To determine the degree of the winner's victory, divide the points total of the losing side by the points of the winning side, then multiply by 100, and round down (i.e. compute a percentage of the loser of the winner's points) to determine the degree of the victory on the Degree of Victory Chart on Player Aid Card PA12 Battle Generator tables.

Low score / high score) x 100 = Degree of Victory

## 17.4.2 Objectives only

**Design Note:** To enhance the playability of your scenarios, and introduce a small measure of fog of war, the same Objective will be worth different points to either side in the same scenario.

Using these Victory Conditions, each side scores points for controlling Objectives during the last turn's Victory Determination Phase. The side with the higher points total wins the scenario. Ties are a draw.

Each side gains Victory Points for each Objective it controls. But how many Victory Points for any one Objective varies by side.

Choose from 1 to 5 Objectives on the map and mark them with lettered Objective markers. Then place a corresponding Objective card off to the side of the map, one for each Objective for each side.

**Example:** So if you have 3 Objective markers placed on the map (A, B and C) you will have 3 NATO Objective cards (also A, B and C) and 3 PACT Objective cards (A, B and C)

There are also 10 Objective Points cards that can be used by either side, and vary in points they are worth from 1 to 4.

Collect all 10 Objective Points cards into a deck, shuffle them and distribute them face down, one each under each sides Objective card. The Objective is now worth that number of points to the side who owns the Objective card.

Each side may only look at the Objective Points card under their own Objective cards!

## 17.4.3 Turn Length and Objectives

These Victory Conditions allow the defender to choose a hidden, variable force size before the game, while the attacker gets to secretly vary the game length. The fewer turns chosen by the attacker, the fewer Objectives need be taken by the attacker to win. Meanwhile, the more forces the defender takes, again, the fewer Objectives the attacker need control to win.

**Note:** If this scenario is to be a Meeting Engagement, randomly decide which side is the attacker and which the defender for purposes of this Victory Condition.

#### 17.4.3.1 Objectives

Always create five Objectives when using these Victory Conditions.

#### 17.4.3.2 Game Length

The attacking side (as randomly determined if this is a Meeting Engagement) will choose the game length in turns, and, before the game, secretly writes it down on a piece of paper. The attacker may choose any turn length up to two turns before or two turns after the recommended turn length for the Scenario Size.

#### 17.4.3.3 Defender Bonus

The defending side secretly chooses a Defender Bonus of zero, +10% or 20%, and also secretly writes it down on a piece of paper before the game. The defender creates two additional reinforcing Formations (aka bonus Formations), each worth up to 10% of the original points value recommended for the defender for the chosen Scenario Size. The defender will bring on one of these Formations if the 10% bonus is chosen; or both if the 20% bonus is chosen (10%+10%). These forces should each have a Formation card, or, if no full national Formations are left to the defender, a Scratch Force Formation card may be used for any grouping of units of any mix of colors, friendly nationalities, and/or attachments. The defender should make these Formations up whether the defender intends to use them or not, to leave the attacker in the dark as to the defender's intentions.

#### 17.4.3.4 Entering Defender Bonus units

At the start of Turn 3, the defender rolls to bring on one of the bonus Formations.

- 1-3 Their preferred bonus Formation is shuffled into the deck, and enters via their home map edge when their card is drawn.
- 4-6 Roll again next turn.

At the start of Turn 7, the defender rolls as above for each of the bonus Formations that has not already deployed. If the defender chose a zero bonus, the rolls are made as above to bluff their opponent.

At the end of the game, the attacker reveals the number of turns they wrote down, and the defender reveals their bonus. Compare on the Turn Length and Objectives Table on the Player Aid Card PAC12 Battle Generator Tables to determine the number of Objectives the attacker needed to control to win, else the defender wins.

#### 17.4.4 Casualties only

Each side scores the point value of any enemy unit it eliminates and half the point value (rounded up) of any enemy unit it reduces (including HQs). Units in Formations with two Formation cards (including attachments) have their point values multiplied by 1.25 (round up) for this purpose.

**Important:** Designated Formations do not count as a second card for this purpose.

Also, each side scores the total of their Objective Points multiplied by two for each Objective controlled at the end of the game.

**Example:** A one point Objective would be worth 2 points; a four point Objective would be worth 8 points.

The side with the higher point total wins. Divide the points total scored by the losing side by the points total scored by the winning side, then multiply by 100, and round down to determine the degree of the victory on the Degree of Victory Table on the Player Aid to determine the winner.

## 17.5 OPTIONAL: EW advantage

**Important:** Use this guideline for your scenario only if all players agree.

Once you have chosen the Victory Conditions, but before you spend points to choose your forces, each side secretly writes down how much they bid, in points, for the Electronic Warfare advantage. Once both bids are written down, show them. The side with the higher points bid wins the Electronic Warfare advantage for the duration of the game. (See 5.0 If you draw the Electronic Warfare card.) The winning bid amount is subtracted from the winner's points total for purchasing units in the next step.

## 17.6 Purchase your units

**Note:** You are always limited in attachments by the counter mix of the specific Volume from which you are designing your scenario. If using more than one Volume, each limits the units from its own counter mix.

You may select units in Formations up to the points value of your side as shown in the Scenario Size Table (See PAC12 Battle Generator Tables).

Using National Unit Tables for the Volume from which you wish to select Formations and units, choose color-banded Formations using the Base Formations section for your desired nationality, found after the unit listings for that nationality.

To these color-banded units, add any attachments you wish to add from that nation's attachment listing, following the Base Formation listings on the same table.

Then add an HQ of a given Morale/Training value; check the unit listings above

the Base Formation listings to find your nationality's HQ listing and the Unit Points cost for the different Morale/Training values you may purchase.

I suggest you limit your Leaders to 1 Leader for every 3 HQs (rounded down) purchased for your side. So if you have less than 3 HQs purchased, I do not recommend a Leader be purchased.

Also choose a Formation card of the same Morale/Training value and color for each Formation you build (for free) to go in the Formation deck.

Note: Designated Formation cards must be purchased with points! Other than that, NATO/NATO-allied forces are assigned 2 Formation cards unless the Formation represented is to be depicted as fatigued, low on or out of ammunition or fuel, or otherwise less capable in their deployment, as you wish to simulate. Soviet/PACT/PACT-allied forces generally get 1 Formation card; exceptions are Air Assault, Special Forces, Paratroops, and Helicopters, which get 2 Formation cards unless, again, they are otherwise less capable in their deployment.

Design Note: I do recommend at least one anti-tank, one indirect fire (MRTR or SPM, not MLRS or SPA or ARTY, per the below Important Note!) and one Anti-Aircraft attachment and/or Support Weapon for each Formation. But the entire point is that you can experiment as you wish. Notice that sometimes complete companies or battalions can be formed from only attachments.

Leverage Scratch Force Formation cards for this purpose, or, like the US Armored Cavalry of the time, swap out platoons within companies to make Teams as you see fit for your Victory Conditions.

Also in many cases, alternate Transport units are made available in the counter set of your Volume (generally trucks and APCs), to supplement or swap in mechanized infantry Formations to support armored Formations. Finally, there are airmobile or air assault troops, many Volumes include enough Helicopter Transport units to airlift an entire parachute company or airborne battalion. And for those who are interested: I chose to designate the Helicopter Transport units as attachments rather than their own Formation to put them under the command of the HQs that have the troops they transport.

Important: I strongly recommend limiting On-Board MLRS, SPA, and ARTY units for each side, not by points, but selecting only 1 or 2 units attached per three companies or the equivalent for NATO/NATO-Allied; or 1 or 2 units attached per three battalions or equivalent for PACT/PACT-Allied. This is because in balancing scenarios, we found that On-Board artillery had a much higher effectiveness than its number indicate.

Design Note: Why? In balancing the published scenarios we found Onboard (and Off-board) artillery had much higher effectiveness than its numbers on the map would indicate. More simply: Onboard artillery in a fast-paced D6-based game cannot possibly have the obstacles and restrictions that real-world Onboard artillery would have in bringing a strike to bear. Too many units on the map can spot too many enemy units - that is the "gamey" portion of the game - and it is unavoidable unless our game is played in a manner where the fog of battle is primary, perhaps as a double-blind referred attempt at a simulation.

I suggest you limit the numbers of Onboard MLRS, SPA and ARTY units per side. We found success with that (as many have enjoyed our scenarios so far, if I may say so). MLRS, SPA and ARTY are intended to be feared, but not to be overwhelming.

It can be easy in the design your own scenario to manipulate the point system so that you have so much on board artillery that has so much more effective spotters, that they are ultimately maximally destructive, especially when married with their effectiveness bonus, more so against armor. Artillery's effectiveness against armor is a well-documented fact, known since Tanks were first invented in World War 1, but in order to balance a Scenario, we have to limit that. It's not as gamey as it sounds: it actually works really well.

Telescoping the size of the scenario can telescope the point value, but if you pour points into exclusively artillery formations, now you have so much firepower that it's simply not going to make a balanced scenario. So if you can limit your Onboard artillery, I think you'll find you'll have a satisfying DYO experience. Remember you can always touch base if you need suggestions on balancing your Orders of Battle!

If there is no Formation card provided in your Volume with the correct color-band/Morale/Training value combination, choose a card with the correct color band, but note the Formation on the Formations Morale/Training Log Sheet which is a separate sheet provided, and entitled "PLO2 DYO Formations HQ Morale/Training Log Sheet." Feel free to make copies of the sheet for your personal use.

Simply circle the Morale/Training value corresponding to the Morale/Training value of the HQ you purchased. You can even adjust the Morale/Training Value of a Scratch Force this way.

**Important:** On the log, the Morale/Training of 6 has two Command Ranges available. More inexperienced troops use this value. The Soviets themselves tend to use 6 (4/3), to better reflect their tendency toward operational doctrine; while their allies tend to use 6 (5/4) exhibiting more independence. The choice is yours, there is no point difference.

Finally, purchase Designated Formations, Off-Board Artillery Strikes, Electronic Warfare advantage, Improved Positions and Placed Minefields according to their points value on the following table. We recommend purchasing no more than one Designated Formation per side unless circumstances dictate and you have the additional cards from an expansion.

**Note:** Off-Board Artillery is expressed as a pair of numbers: the number of dice rolled, and the number needed to hit. See 14.0: Indirect Fire. .

**Example:** 3-4 means roll 3 dice for each target in the hex, and use a To Hit Value of 4 (4 or better to hit with each die).

These Values can be seen on the Artillery Track Player Aids.

World At War	: 85 non-unit ues	point val-
ARTY STRIKE: ADM	Artillery Delivered Mines	200
	Places Mine- field: Ran- dom mark- ers	
ARTY STRIKE: CHEMICAL		200
ARTY STRIKE: DPICM*	3-4 or 2-3	3-4 = 60 2-3 = 135
ARTY STRIKE: HE*	Med 3-4; Heavy 3-3	3-4 = 75 3-3 = 150
ARTY STRIKE: MLRS*	Multiple Rocket Launch Sys- tem 3-3	200
ARTY STRIKE: SMOKE SCREEN		30
DESIGNATED FORMATION		300
EW	ADVANTAGE of +1 (NATO) or -1 (PACT)	200
IMPROVED POSITIONS		100
MINEFIELD PLACED		100

To correctly add up your points for an individual Formation:

Add up your total points by Formation, subtracting points for any color-banded unit not taken, and adding points for any attachments and/or SWs added.

**Important:** If a Formation has two Formation cards, multiply the total points for that Formation by 1.25 to get the final points value for that Formation. Designated Formation cards do not count as a second card for this purpose.

- Then add the points for any Off-Board Artillery Strikes you select
- Then add the points for any Fortification markers you select for that Formation.
- Then add the points for any Designated Formation cards you select.
- Then add the points for any CAS you select.

## 17.7 Setup the scenario

Collect and shuffle all the Formation and CAS cards, including two End Operations cards, and any optional cards like the Battlefield Event/ Friction card, and/or the Electronic Warfare card. For Battle Generator purposes you may add a third End Operations card if all players agree; this choice will lead to fewer Formations activating in a turn.

Determine any Module Rules you wish to use in the scenario. All players must agree on the use of any Module Rules.

Before commencing play, the defender may set up on map first, using up to all but one defending Formations, each unit of any Formation within 3 hexes of any Objective and/or within 12 hexes of the defending side's home map edge. Any of the defender's Formations not beginning the game on the map may enter beginning on Turn 3 from their home map edge as Reinforcements.

**Note:** When using Turn Length and Objectives Victory Conditions (See 17.4.3) the Bonus Reinforcing Formations created do not count toward starting Formation setup, and may also enter as reinforcements per 17.4.3.4.

After the defender is set up, if the scenario has two or more maps, the attacker may set up Formations equal to the number of maps, each Formation within 6 hexes of the attacking side's home map edge. If the scenario has one map, the attacker may not start any units on map. Each attacking Formation which does not start the game on map may enter on Turn 1 or later at the attacker's discretion.

Begin play on Turn 1, and enjoy!

#### **Miscellaneous Important Notes:**

- An Objective or any hex is considered controlled by the last side to either occupy or have moved through the hex with a ground unit that has either an HE or AP Firepower.
- When using Turn Length and Objectives Victory Conditions (See 17.4.3) the Bonus Reinforcing Formations created do not count toward starting Formation setup, and may also enter as reinforcements per 17.4.3.4.
- Not all scenarios require Objectives as Victory Conditions
- Point cost for eliminating a unit is listed in the Cost column of that unit's row on your Player Aid Card National Unit Table for the unit's nationality.
- Helicopters, CAS counters, Trucks, and other unarmed Transport unit vehicles may not control hexes or Objectives for purposes of Victory Conditions.
- In any scenario, and when an HQ exits the map stacked with a friendly unit, that HQ is then immediately moved to the HQ/SW Deployment box for use in the next activation of its formation.
- Always Remember: The Core or Module rules can be overridden by a Scenario Rules

## 17.8 Game Record Log Sheet

We have also provided a World At War 85 Game Record Log Sheet which is a separate sheet, and entitled "PLO2 DYO Formations HQ Morale/Training Log Sheet." Feel free to make copies of the sheet for your personal use.

## 18.0 Series Resources

If you are interested in expanding your **WaW85** gaming experience these additional resources might to the trick. Many of our **WaW85** Resources can be found for purchase on our **WaW85** online store at http://www.lnlpublishing.com and are sold separately.

## 18.1 Video Bootcamp

We have created a series of videos designed to enhance the learning of the core concepts of **WaW85**. These are not substitute for reading this rule book, but should be considered a video player aid for the manual. You can view these videos at the links below.

### **Video Tutorial Playlist**

Short URL: https://goo.gl/a8q9zi

Long URL: https://www.youtube.com/playlist?list=PLUdPYZkObJF2rXi7sCb-ZgwNGpQEiQsnqR

## 18.2 Audio Book Edition

We have created an Audio Book Edition of our rulebook, available in our Resource section:

http://forums.lnlpublishing.com/resources.

WaW85 on Vassal



Another excellent **WaW85** community resource is Vassal, the free, opensource platform for playing online adaptations of board games.

Each **WaW85** module has its own accompanying Vassal module. Vassal modules can be found, for free download, through the Resources section on our Web site:

https://forums.lnlpublishing.com/resources/ **Or at** http://www.vassalengine.org/

Through Vassal, you can play both sides or you can network through our forums or other social-media outlets to find an opponent to play against. Set up any scenario from any **WaW85** complete game or expansion module, or use the Battle Generations. Vassal supplies the Maps and counters and even rolls the dice! Players still need to own the core rules, player-aid cards and the module and scenarios booklet.

## 18.3 Battle Gear

The **WaW85** Battle Gear are items to enhance players gaming experience. These additional items are not necessary to play **WaW85** but are available through our strategic partnership with Litko (https://litko.net/).

Notes

# Glossary

1d6Roll of one six-sided dieM/TCMorale/Training Chec2d6Roll of two six-sided diceMLRSMulti-Launch RocketAAAnti-AircraftSystemAAGAnti-Aircraft GunMPMovement Point(s)ADMArtillery Delivered MinesMRRMotorized or MechanAFVArmored Fighting VehicleRifle Regiment	
AA Anti-Aircraft System AAG Anti-Aircraft Gun MP Movement Point(s) ADM Artillery Delivered Mines MRR Motorized or Mechan	ized
AAG Anti-Aircraft Gun MP Movement Point(s) ADM Artillery Delivered Mines MRR Motorized or Mechan	ized
ADM Artillery Delivered Mines MRR Motorized or Mechan	ized
Diff. Defined	ized
AFV Armored Fighting Vehicle Rifle Regiment	
AP Armor Piercing MRTR Mortars	
ARM Armored NAT Nation name	
ARTY Artillery NATO The North Atlantic	
ATG Anti-Tank Gun Treaty Organization, international alliance	
ATGM Anti-Tank Guided Missile formed after WWII to	
B Bridge deployed defend Europe agains	t
BN Battalion potential communist	
C Command Range aggression.	
CAS Close Air Support NATO-al- Nations not in NATO,	but
CDO Commando lied supporting NATO in the	ne
CEV Combat Engineering war	
Vehicle NoE Nap of Earth mode. T	
D6 Six-Sided Die helicopters in a unit i	
<b>DPICM</b> Dual-Purpose Improved  Conventional Munitions  mode are flying about feet off the ground. The	
takes immense conce	
Design Your Own tration and limits the	ir
EGER East German offensive capability, b	ut
EW Electronic Warfare allows them to use ter	rain
F Flying mode as cover.	
FFE Fire For Effect OF Opportunity Fire	
FP Firepower OffBA Off-board Artillery	
GDS Guards On-board Artillery	
GMRR Guards Motorized or Mech- onized Pife Posiment  OOB Order of Battle	
anized Rifle Regiment OOC Out of Command  GTR Guards Tank Regiment Operations Phase	
The remains of monday	
FRO Flayer Ald Card	
FAGE Also called life Wars	
HQ Headquarters Pact", this internation alliance was formed by	
IP Improved Positions the Soviet Union after	•
Line of Sight  WWII and encompass	
LT. COL. Lieutenant Colonel European allies	7.5

# Glossary

Abbreviations	Definition
PACT-al-	Nations not in the Warsaw
lied	Pact but supporting the So-
	viet Union and the Warsaw
	Pact in the war.
PARA	Parachute troops
R	Reduced Command Range
RECON	Reconnaissance
REGT	Regiment
RR	Recoilless Rifle
S	Soft Target
SAM	Surface-to-Air Missile
sov	Soviets (Union of Soviet
	Socialist Republics)
SPA	Self-Propelled Artillery
SPAAG	Self-Propelled Anti-
	Aircraft Gun
SPM	Self-Propelled Mortar
SPSAM	Self-Propelled Surface-to-
	Air Missile
SR	Special Rule
SW	Support Weapon
T	Towed unit
TEC	Terrain Effects Chart
TERT	Territorial Troops
TR	Tank Regiment
US	United States of America
USSR	Union of Soviet Socialist
	Republics (Soviets)
VP(s)	Victory Point(s)
WAW85	World At War 85 series
WGER	West German
WIA	Wounded In Action. The
	reverse side status of a
	Leader marker.
xd6	Roll of 'x' number of
	six-sided die

## Acknowledgments

Wow, what a long road - to the starting gate! I want to thank all the fans - old and new - of the World At War 85 system, for their invaluable input, patience, and forbearance as I waded through all of the old rules, FAQs, games, modules, articles, fan-made expansions, fan-made house rules, counters, and markers in order to develop workable spreadsheets (and more spreadsheets, so many spreadsheets) that were the technical spine of the re-design and development of this series. Matt Lohse has my undying thanks, as he was instrumental in collating all of the different units from ALL of the previous editions games/modules/articles into a giant unit value spreadsheet. Matt is also the designer of the base scenarios and maps for what will be Volume 5 of the series, Strike Force Africa. Without him this project would not have happened. Thanks Matt!

First and foremost I must profusely thank my loving family who spared much time for Dad to make some games; my creative, development, and consulting team members, without whom this would have been a one-man project and still going for twenty years; and, of course, I would like to thank David Heath, and his amazing Lock 'n Load Publishing team for the kind of support I wish we all had in all our endeavors – unflagging, understanding, and exhibiting complete faith in the project – and in me - when I myself would waver.

# Design & Development Notes

Those who have played the old edition of this series will note sections in blue in the rules you have just finished browsing.

What happened behind the scenes to make the blue changes come about?

When I had my first conversation with David Heath about taking on the development of this series, he emphasized that all the many modules, needed to be waded through and be combined to produce only standalone games. All the counters, maps, player aids and dice you need would be included in the Volume you purchase. As we move forward and add games to the series, again, each new game will be complete. (Should there be expansions they would be to an individual game, and would require no more than what comes in that standalone game and its expansion in order to play its scenarios.) We would call those standalone games Volumes in the series. We have come to use Volumes and Modules interchangeably, but now they both mean standalone games.

That journey has led to new scenarios for the East Germans in Volume 1, Storming the Gap; existing and fan-based scenarios and units being used as the basis for what will be new Volumes; and the potential to mine even more of the large library of articles for scenarios and units down the road.

Matt Lohse launched this project for me for sure, and I am ever grateful to him.

He had been working hard on the project long before I got to the helm, but once it became my responsibility he presented to me a valuable gift: he had manually compiled an amazing spreadsheet, collating all of the different unit values from ALL of the previous editions games/modules/ articles. This allowed me to get an overview of what was needed to re-imagine the series; cull out the duplicates; make sure the same unit had the same values in every potential game; and generally get a handle on quality checking the unit values. While mining all this valuable data I discovered there was actually a great deal more work to do: the existing values on the pieces needed to be completely redesigned in to order to logically jive with each other. Each class needed its own balance: tanks, infantry, guns, Support Weapons; even aircraft. That took a huge amount of time but has proven to be invaluable in play balancing.

Once I had unit values, the production team headed by David Heath started by addressing that there are TEN values on many counters. That was a lot of values to cram onto a 5/8" counter, but necessary as it is the combat system! In my forty-five years of gaming I have rarely seen a game even approach that number of values on the counter itself (and I thought the old Red Star/White Star had a few, but when I went back to them it was only 5...).

With all those values we had to make the counters larger. So we took the opportunity to completely redesign them to address previous issues fans had brought to our attention. We started with choosing an enlarged, clear typeface which made for what we think is a radical improvement in readability on the new \(^34\)" counters.

Lock 'n Load's signature rounded-corners came with the new size. The next step was to remove the national flags on the background of the counters in favor of solid national colors.

Visually, I found the flags broke up the art and the fonts, acting like camouflage (which is made for making things harder to discern, not easier). The result of these and other changes we hope you like, and find easier to read.

Marc Von Martial, our Map and Counter Artist Extraordinaire, masterfully redesigned the maps based on my sketches of the old maps, but allowing for my crazy idea to make all the maps geomorphic. I must thank him again for his patience as we worked to get the alignment of the geomorphic elements correct. One benefit of the geomorphic maps was of course that we could add a Battle Generator to the series. The geomorphic maps that will be in every Volume will mean the only limit is your imagination: if you have two Volumes and eight maps and want a huge 2-map x4-map playing space? The maps will fit together any way you desire. That capability, combined with a new, balanced Points System based on the new unit values means WaW85 will be easy to use to generate forces for your Battle Generator scenarios.

It allows you to develop your own scenarios quickly and be able to balance the forces as you need. I hope in the end it will allow more map configurations to be brought to the table - large or small - than anyone might possibly need in a lifetime of playing the World At War 85 series.

With re-imagined, redesigned counters and unit values, geomorphic and redesigned maps, it was time to address re-drafting the Core Rules and collecting various module and Scenario Rules into either new Core Rules, or stripping them if they were found to be unnecessary.

I really wanted to focus the rules on the existing time and unit scale, and that meant making some design decisions which trim exceptions to the rules in favor of simplifying them. Also the rules needed to be reorganized: after I and my amazing Core Rules team made four or five false starts, we hit upon what you see here and hope it meets your needs for ease of locating rules when you are learning, or having the inevitable conversation that starts "How do I do this?..." On the other hand, we did work to make the rules flow as logically as possible, and hope that you find that things follow naturally enough so there is less rules referencing needed. And, of course, the Player Aids are to assist with that as well, keyed to the new organization.

Balancing which rules we needed in the Core Rules and which would only appear in each Volume that needed them, we decided that the Core Rules would have as many rules as possible, so they truly are a reference for the system, even if you do not need all of the rules (like, say, Night Fighting) in the Module you have purchased. In this respect we took a page from LnLT 5.0 - recently released as of this writing - where the modern rules are in with the WWII rules, even if you bought a WWII-only module.

In the end, as our lead play-tester put it, we hope you find that "...everything is familiar, but in a lot of ways everything is different. I mean that in a good way..."

I hope you find the games enjoyable! Sabot Up!

**Keith Tracton** 

December 2018

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## 1.0 Index

### **Symbols**

#### +1 DRM

Concealment 62

Cross-Bridge or Cross-River Assault 71

EW Effects 35

EW Markers 35

Infantry Assault Bonuses versus Vehicles '71

Long Range Fire 61

Smoke hex 61,77

Target is a Landed Helicopter 62

Volley Fire 61

#### +2 DRM

Move & Fire Action 68

#### +2 FP Dice

Anti-Aircraft Fire 34

Anti-Aircraft Fire from Ground Units 86

#### -1 DRM

Composite/Reactive Armor 61

Cross-Bridge or Cross-River Assault 71

EW Markers 35

Infantry Assault Bonuses versus Vehicles '71

Move & Fire Action 68

Night Assault 71

Point Blank Range Fire 61

Target is a Landed Helicopter 62

#### A

Aids(Player) 15,83

#### Airborne

Cards 21

Parachute Drops 85

#### Ammo

Anti Tank Guided Missile 24. See also ATGM HE Firepower(HE FP dice)

AP Firepower (AP FP dice) 23

AP, or Armor-Piercing Firepower 24, 53

HE, or High Explosive Firepower 53

High Rate of Fire HE 53

Missile 66

Missile Ammo Check 66

#### **Amphibious**

blue/green 46

Counter 7

Movement 46

Movement Points (MP) 26

Opportunity Fire 46

#### Anti-Aircraft Fire 34, 47

Action STEP 43

Anti-Aircraft Fire from Ground Units 86

AP Firepower 23

Counter 7

Headquarters, or HQs 28

Leaders 29

Nap-of-Earth 48

104

Parachuting units 87

Results versus Close Air Support 64

Support Weapons, Modifiers &

Restrictions 59

Towed Units 46

Anti-Tank

Counter 7

On-Board Indirect Fire Abbreviations 73

Support Weapons, Modifiers & Restrictions 59

Armor

Armor Modifiers 60

Armor Value and Save Value for Heavy Armor 25

Armor Value and Save Value for Light Armor 25

Breaching Minefields 81

Color bands and Attachments 17

Combat 59

Composite/Reactive Armor 61

Counter 6-8

Maximum Defensive Bonus 62

Mortar fire [Off-Board vs On-Board FP

dice 76

Reactive 28

Rubble, Clearing Rubble & Fires 65

Soft Targets-Vehicles and

Troops 26

Special Ability Triangles 28

Strike Procedure 76

Support Weapons, Modifiers & Restrictions 59

Artillery

Action Step 74

ADM (Artillery Delivered Mines) 78

Applying Events or Friction 36

Artillery Strike/Strength 21

Canceled/reduced 75

DPICM Strike Reduction Check 79

FFE marker & Scatter Check 74

Fire for Effect Marker (FFE) 20

Formation Uses 42

Indirect Fire Range 74

Indirect Fire Summary Chart '76

Markers 18,74

MLRS (Multi-Launch Rocket

Systems) 78

Off-Board Artillery Fire 73

OFF-BOARD ARTILLERY STEP 42

Off-Board versus On-Board FP dice 76

On-Board Artillery Fire 73

On-Board Indirect Fire Abbreviations

73

Player Aids & Tracks 16

Purchase your Units 95

Smoke Marker 19

Strike Procedure 78

Strike Types 75

Towed Units 46

Types 73

Unit Scale 15

Assault(s)

Action 70

Action STEP 42

Counter 6

Counterattack 70

Ending 72

Firepower 27

Ground & Amphibious Movement 46

Helicopters 47, 48, 50

HQ Bonus 71

Infantry Assault Bonuses versus

Vehicles 71

Initiate 70

Modifiers 71

Night 71,85

Resolution 70, 71, 72

Retreating 72

Stack(ing) 43

To-Hit Value 27

Vehicle 71

**ATGM** 

Composite/Reactive Armor 61

Counter 8

Direct Fire at a Target in Blocking

Terrain 62

Maximum Defensive Bonus 62

Minimum Range 61

REACTIVE ARMOR: 28

ATGM HE Firepower(HE FP dice)

HE FP dice 24

Attachments

Cards 22

Casualties only 91

Color bands and Attachments 16

Defender Bonus 91

Purchase your units 94

B

Battlefield Event 31

Black

Anti-Aircraft Fire 60

AP Firepower (AP FP dice) 23

ATGM Minimum Range 61

DPICM (Dual-Purpose Improved Conventional Munitions) 79

\_\_\_\_\_

HE Firepower (HE FP dice) 24

Minimum Range Requirement 58

Movement Points 68

Off-Board Artillery Fire 73

Special Ability Triangle Chart 28

Triangle 8

Blind

Spot 56-58

Blocking

ATGM Direct Fire at a Target in

Blocking Terrain 62

Blocking and Obscuring Terrain 55

Blocking Terrain obstacle Height & Blind Spots 56-57 Check for Drift 86 Designate Drop Zones and Landing Hexes 85 Line of Sight (LOS) 54 Maximum Defensive Bonus 62 Blue Amphibious 26 Anti-Aircraft Fire 60 AP/HE Firepower 7, 23, 24 Ground & Amphibious Movement 46 Missile Ammo Check 66 MISSILE RELOAD STEP 42 Objective markers 89 Rules 12 Bonus Assault Modifiers 71 ATGM Direct Fire at a Target in Blocking Terrain 62 Combat 58 Command 61, 74 Counter 6, 27, 28 Defender 91 Defense 59, 61, 62 Direct Fire Restrictions and Modifiers 60 Fire 65 HQ 61,71

Infantry Assault versus Vehicles 71

Leaders 29, 61 Maximum Defensive Bonus 62 Morale/Training 28 Night Targeting Checks and LOS at Night 85 Rubble 65 Soft Target 26, 62 Spotters 74 Strike Procedure 76 Terrain 61 Transferring Leaders 38 Turn Length and Objectives 91 Vehicle Assault 71 Breaching Minefield Depletion 81 Minefields 81 Mine Plows 60 Bridge Bridge-laying Units 82 Collapse 31 Counter 10, 20, 27, 82 Ground & Amphibious Movement 46 Markers 83 Movement Actions 82 Movement Points (MP) 26

C

Cards 21, 22

Battlefield Event/Friction 31, 36

Close Air Support 30, 33, 34, 64

Color bands and Attachments 16

Command Range and Determining

Command status 40

Counter Reference 8

Electronic Warfare 31, 35

End Operations 15, 30, 33

Formation 30, 37, 80, 91

Game Play 15

Green Hex 8

Grey Hex 8

Initiative Phase 30

MISSILE RELOAD STEP 42

Objective(s) 90

Operations Phase 30

Ops Complete marker 37

Optional 22, 92

Player Aids & Tracks 15, 16

Rebuild the Formation Deck 32

Red Hex 8

Scratch Force 30

Second Formation 22

Special Ability Triangle Chart 28

Unit types 18

VALUES 23

#### Chemical

Counter 21

Defense 79

Effect size 79

HQs 79

Movement 79

Removal 80

Strike markers 80

#### Close Air Support

Activate 22

Attack 34

Blue AP 23-24

Card 30, 33

Counter 7, 33

Green AP 23

Optional 22

Results 64

Terrain Height

55

#### Combat 58

Assault Action 70

Color bands and Attachments

17

Direct Fire Restrictions and

Modifiers 60

Disrupted 18, 49

Fire 20

Formation Card 37

HE Indirect Fire 76

Landed 48

Lift-Off 52

Passengers 49

Prerequisites 58

Results 63

Rubble 20

Strike Procedure 76

UNIT and CARD VALUES 23

Unsaved hit 59

#### Command

Command Bonus 28

COMMAND STEP 38

Counter 6, 8, 9, 18, 27

EW Effects 35

Formation Cards 22, 37

Headquarters (aka HQs) 27, 61, 71

Leader Bonus 29, 61

Opportunity Fire 66

Ops Complete & Out of Command

Markers 31

Out of Command 39

Range 40

Special Ability Triangle Chart 28

Spotters 74

Status 40

Units Always in Command 41

#### Composite/Reactive Armor 61

Orange 61

Special Ability Triangles 28

#### Concealment 62

Maximum Defensive Bonus 62

Counter 6-11, 17

ARM 59

Close Air Support 22

Color bands and Attachments 16

Command Bonus 27

Command Range 40

Double Sided 19-20

Game Play 15

Helicopter Modes 46

Leader Health 17

Loading 50

Ordnance Expenditure 35

Range 57-58

Soft Targets 25

Support weapon diamond 17

Transferring Leaders 38

Units 16

Unit Scale 15

#### D

#### Defender

Bonus 91

#### **Defensive Bonus**

ATGM Direct Fire at a Target in

Blocking Terrain 62

Combat 58-59

Concealment 62

Direct Fire Restrictions

and Modifiers 60

Infantry and unarmored 77

Maximum 62

Rubble 20

Save Value 26 Weather 83 Soft Targets 26 Weather Changes 83 Terrain 61 F Deploy(ed)(ing) Fire "B" Bridge-laying unit 27 Action 43 Headquarters to the Map 38 Anti-Aircraft 23, 34, 60, 64, 86 Disruption 65 Artillery On/Off Board 73 Effects 65 ATGM Direct Fire at a Target in Blocking Terrain 62 Landing: Check for Disruption 87 Bridge Collapse 31 Passengers 64 Burn Out 31 REMOVAL STEP 42 Clearing 66 Unsaved hit 59 Close Air Support Attack 34 E Combat 58 Electronic Counter 7-9, 11, 20 Cards 22 Direct 43,53 Counter 9 Disrupted 53, 65 Electronic Warfare Enhance 7 EW advantage 92 EW Effects 35 EW & EW Reducing 19 Fire Markers 31 Operations Phase 30 Helicopter Movement 47 Selection 35 High Rate 53 Warfare card 31, 35 HQ 28 Event Inappropriate 53 Applying 36 Indirect 43, 73, 74 Battlefield 31, 36 Indirect Range 74 Events/Friction 36 Jungle 20 Game Play 15 Leaders 29 Optional 21 Loading, Unloading and Opportunity Squalls 84

Fire 51

Long Range 61

Markers 31

Minefield Depletion 31

Minimum Range 58

Missile Ammo 66

Modifiers 60

Move & Direct Fire Action 43

On/Off-Board Indirect 69, 73

Opportunity Fire 66-67

Ops Complete 53

Point Blank 24, 61

Range 57

Restrictions 60

Rubble 65

SMOKE 77

Special Ability Triangle Chart 28

Spotters 74

Spreading 31-32

Strike Procedure 76

Terrain 44,65

Vehicle Assault bonus 71

Volley Fire 61

Firepower 58

AP 23, 53

Assault 27

Counter 6-7

Direct Fire Action 53

Foxholes 19

HE 24, 53

Range 57-58

Range Color 24

To-Hit number (To-Hit) 24

Formation(s)

Cards 21-22, 30

Casualties only 91

Designated Formation card 80

Initiative Phase (Turn 1 only) 30

Missile Ammo Check 66

Operations Phase 30

Rebuild the Formation Deck 32

Supporting Assets 16

Unit Scale 15

G

Gray

Assets 17

Helicopters 41

On-Board Artillery Fire 73

On-Board Indirect Fire 43, 69

Triangle 8

Green

AP Firepower 7, 23

ATGM 61, 62

Circle 26

Composite/Reactive Armor 61

Ground & Amphibious Movement 46

Helicopter Transport units 51

Minimum Range Requirement 58

MISSILE 42,66

Special Ability Triangle Chart 28 Transport units and Passengers 49 H Hedgehogs 19 HE Firepower 24 Counter Reference 6-7 HE Firepower (HE FP dice) 24 Indirect Fire 73 Helicopter. See also [Nap-of-Earth] Helicopters Anti-Aircraft Fire 48 Assaulting 48 Counters 46 DISRUPTION REMOVAL STEP 42 Fire 47 Flying 47 Ground unit 48 Hovering 48 Movement & Modes 46 Nap-of-Earth 46, 47 NOT attachments 41 Same hex 48 Stacking 45 Transport units 51 Unloading into an Assault 50 HQ(s) Always in Command 41

Bonus 61, 63, 71 Command Bonus 27-28 Command Range/Status 40 COMMAND STEP 38 Damage Results 63 Deployment 38 EW Effects 35 EW & EW Reducing 19, 35 EW placement 35 Minefields 80 Out of Command 39 Parachute Landing 85 Reduced strength 17 Spotters 74 Stacking 45 Strike hex 77 Transport/Passenger 49, 64-65 Unsuppress HQs 32

#### Ι

#### Improved Positions 19

Counter 10

#### Inactive

Direct Fire Actions 43

Opportunity Fire 66

#### Indirect Fire 73

Action STEP 42

Counter 8

Disruption 65

EW Effects 35

Assault Hits 72

Gray Triangle 8, 28 M HQs 28 Minefields 80 Leaders 29 Breaching Minefields 81 Long Range Fire 61 Depletion 81 On-Board 69, 73 Hidden Minefields 81 Point Blank 61 HQs 81 Range 74 Leaders 81 Rubble/Fire Creation 65 Morale/Training 82 Spotters 74 Plows 60 Strike Types 75 Support Weapons, Modifiers & Restrictions 59 Initiative Missile Phase 30 Ammo Check 66 Sequence of Play 30 Anti-Aircraft 25 Interception 34 AP Firepower 23 L Black Triangle 28 Leaders 29 Counter 7, 9, 10, 19 Chemical Strike 79 Failed reload 42 Command Bonus 29 Range 25, 28 COMMAND STEP 38 Reload Step 42 HE Strikes 76 Morale/Training Minefields 80 CHEMICAL 79 Modifying Morale/Training 29 Clearing Rubble 65, 82 Stacking 45 Combat Lift-Off 52 Targeted 63 Command Range 40 Transferring 38 Counter 6 Line of Sight (LOS) 54 DISRUPTION REMOVAL STEP 42 Anti-Aircraft Fire 34 EW Markers 31 Helicopter 48 HQs 28

Terrain Height 54

Leaders 29

Minefield 81

Missile Ammo Check 66

MISSILE RELOAD STEP 42

Night Targeting Checks 84

Removing EW Effects 35

Spotters 74

Substituting 28

#### Movement

Action 43, 44

Action STEP 42

Activation 37

"B,F,H,T" 26-27

Black AP/HE FP 68

Bridge-laying 82

Categories 45

Counter 6

Flying 47

Ground & Amphibious Movement 46

Helicopter 46. See also [Nap-of-Earth]

HQs 39

Maximum 26

Minefields 80

Move & Fire 68

Points 26

Rivers 46

Road or Trail 45

Rubble Hexes 65

Terrain Effects Chart 44

Towed Units 46

Transport colors 26

Transporting 49

Unloading 50

Unloading into an Assault 50

#### N

#### Night Rules 84

Assault 71,85

Bonus/Restrictions 85

LOS 84

Target Check 84

Weather 85

#### 0

#### Opportunity Fire 66

Amphibious Units 46

Combat Lift-Off 52

Flying 47

Formations 37, 60

Helicopter Transport units 51

Loading 51

Nap-of-Earth 47

Out of Command 40

Passengers 66

Support Weapons 60, 67

Unloading 51

Unloading into an Assault 50

Vehicle Assault bonus 71

#### **Ops Complete**

Actions 37, 43 Assault Action 70,72 **Passengers** Combat 59 Disruption removal 64 Counter 9, 37 Helicopter 48, 51, 64 Counterattack 70 Loading 50 Direct Fire 53 Opportunity Fire 51, 52, 66 Fire Hex 66 Ops Complete 50 Leaders 38 Stacking 45, 49 Loading 50-51 Strike Procedure 77 Minefields 80-81 Transport units and Passengers 49 Move & Fire Action 68 Unloading 50 Movement 44, 46 Unloading into an Assault 50 On-Board Artillery Fire 73 Pillboxes 19 On-Board Indirect Fire Action 69 On Board Strikes 77 Questions 12 Remove 38 R Rumble Hexes 66 Range 57 Support Weapons 66-67 AP Firepower(AP FP dice) 23 Volley Fire 61 ATGM 61 Orange Command 40 Composite or Reactive Armor 28 Counter 6, 8 Out of Command Direct Fire 53, 60 Command STEP 38 Effective 58 Counter 18, 31 EW Effects 35 Morale/Training Check 40-41 Flying 47 Opportunity Fire 66 HE Firepower (HE FP dice) 24 Refresh Step 38 High Rate of Fire 53 Units 39-41

Hovering 48

HQ Command 22 Fire 31 Indirect 74 S Long 58, 61 Sequence of Play 30 Maximum 58 Smoke 77 Minimum 58, 74, 76 Additional 77 Missile Ammo Check 66 Adjacent MRTR/SPM 74 +1 61 -1 61 Nap-of-Earth 48 Counters 9, 19, 21, 31 Night 85 Indirect Fire Summary Chart 76 Orange 28 Thinning 31 Point Blank 58, 61 Squalls 84 Value 24 Effects 83 Reactive Armor. See Composite/Reactive Armor Night 85 Counter 8 Strike 76 Red ADM 78 Arrow 20 Artillery 73 Diamond 17 Chemical 79 Recon 41 Counter 11, 21, 32 Soviet/PACT 89 DPICM 79 Triangle 8, 28 FFE counter 20,74 Reduction HE 76 DPICM 79 Indirect Fire Range 74 EW & EW Reducing 19 Indirect Fire Summary Chart 76 MLRS 78 MLRS 78 Rubble 65 Scatter 74, 78 Clearing 82 Smoke 77 Counter 11, 20 Spotters 74 Engineers 66,82

Types 75

Units 76 Check 63 Results 64 Support Weapons 59 Deployed 59 Stacking 45, 49 Holding Box 60 Towed Units 46 Mine Plows 60 Units 49 Opportunity Fire 67-68 Unloading 50 Ops Complete 67-68 Unloading into an Assault 50 Parachute Drops 86 Triangle 28 Red Diamond 17 ATGM Minimum Range 61 Stacking 45 Composite/reactive Armor, Elite, Transfer (INF) 32 Indirect fire Recon, Missiles(AP) 28 Surprise Counter 8 Surprise and Interception 34 Minimum Range Requirement 58 On-Board Indirect Fire 43, 69, 73 Recon 41 Transport Special Ability Triangle Chart 28 Combat Lift-Off 52 Spotters 74 Combat Results 63, 64 Counter 26, 51 Disrupted 64 Unarmored 25. See also Soft Targets Unit 16 Helicopter 51 Landed mode 48, 51 Attached units 17 Loading 50 Bridge-laying 82 Load/unload 49 Categories 45 Counters 13 Movement Points 26, 50 Opportunity Fire vs Helo passengers Map Markers 18 52 Name of 6 Ops Complete 50 Scale 15 Passengers 49, 64 Towed 46 Post-combat Missile Ammo Types 18

Values 23

Vehicles 15

V

#### Vehicle

Assault bonus 71

Categories and Movement 45

Direct Fire Action 53

Eliminated 65

Infantry Assault Bonus vs Vehicles 25, 71

Terrain 61

#### **Vehicles**

Soft Targets 25

W

#### Weapon

Support Weapons, Modifi ers & Restrictions 59

#### Weapons

Helicopters 48

#### Weather 83

Battlefield Event 83

Change 83

Counter 11

Effects 85

Night LOS 84

Squalls 84

#### White

Combat Strength 17

Counter 7

Ground & Amphibious Movement 46

Range Value 25

#### Wrecks 65

Counter 9, 20

Creation 65

Stacking 65

#### X

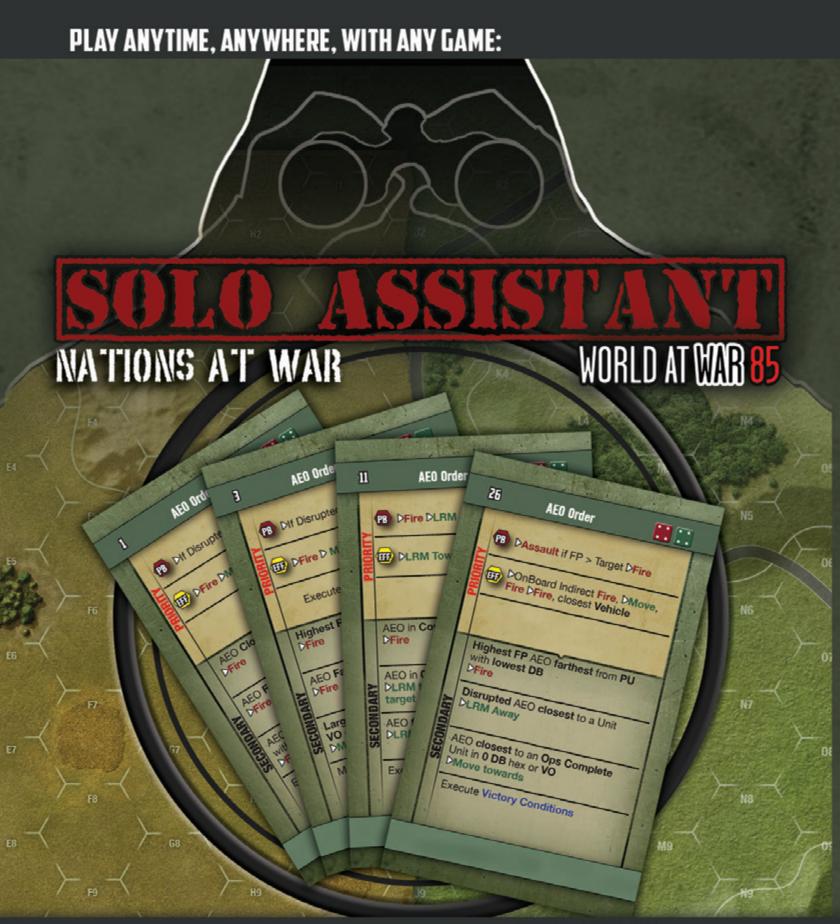
X= number of D6 15

#### Y

#### Yellow

Counter 8

Special Ability Triangle Chart 28



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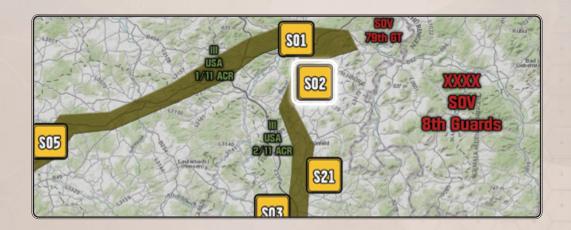
# Starter Kit Scenario: A Matter of Bridges

# Mengshausen, WEST GERMANY, ON the FULDA RIVER, SOUTHWEST of BAD HERSFELD:

The opening Soviet advances had efficiently brought the 39th Guards Motor Rifle Division and the 79th Guards Tank Division to the banks of the Fulda River and its tributaries, near Bad Hersfeld. The U.S. plan was to blow or block any bridges the Soviets might attempt to cross. In response, Soviet flanking forces fanned out to seize river towns and crossings farther north and south of Bad Hersfeld. The Soviets were methodical: they knew that with so many of their vehicles coming down the valley from Eisenach into the Fulda Gap, and if the general advance slowed, a gigantic, vulnerable traffic jam would develop on the roads to the river crossings. And they had so far been lucky, as the fighting between what their NATO counterparts called Phase Lines Concord and Bradford had been short and sharp, allowing the Soviets to maintain their momentum.

The Americans scrambled to respond, deploying what immediate reserves they had. U.S. infantry, supported by TOW ATGM teams and TOW-armed Jeeps, occupied hasty defenses near the bridges targeted by the Soviet formations. These units were tasked with forcing the Soviet armor to deploy, and slow their advance. But the '79th GTD's reconnaissance assets had done their jobs well, pinpointing the locations of the waiting American ambushes. To counter the Americans, the '79th shifted its tanks away from the flanks and toward the river crossings already secured. In one sector of the offensive, the Soviet 247th Guards Motor Rifle Regiment was deployed to ferret out the defending American infantry-heavy teams.

Some of these American troops were from the 1st Squadron of the U.S. 11th ACR, and deployed in the town of Niederaula. Once the Soviets cleared them out, the 247th would attempt to press on, and cross the Fulda River, intending to wreak havoc behind the American positions.

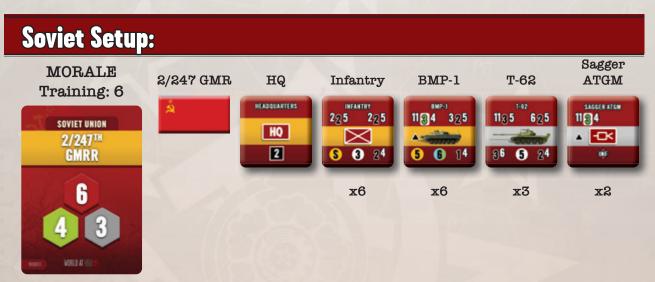


# Starter Kit Scenario: A Matter of Bridges

### **ORDER OF BATTLE**



SET UP before the game begins, on or north of hex row 2-Gxx.



ENTER on or later TURN 1 or later on the south edge of the board at either 2-A10 or 2-A4, when activated.

### **Soviet Support Setup:**



- ADD THE DESIGNATED FORMATION CARD TO THE DECK BEFORE THE START OF THE OPERATIONS PHASE OF TURN 2.
- REMOVE THE DESIGNATED FORMATION CARD FROM THE DECK BEFORE THE START OF THE OPERATIONS PHASE OF TURN 4.



### **SCENARIO ESSENTIALS**

#### **PLAYABLE AREA:**

Map 2, top edge is North (2-W02 to 2-W13).

#### GAME LENGTH:

Eleven turns. Use two End Operations cards.

#### **SCENARIO RULES:**

- 1. Soviet Initiative: The Soviet 2/247th GMR has the Initiative.
- 2. Objective Victory Points: For each Objective, the Soviet player rolls 1d6. On a result of 1 or 2 the objective is worth 1 Victory Point; on a 3 or 4, it is worth 2 Victory Points; on a 5 it is worth 3 Victory Points; on a 6 then it is worth 4 Victory Points. If the total of the 4 Objectives is less than 6, add 2 to the lowest VP rolled (maximum of 4) and use that VP value instead. The Soviet player writes these down immediately, but reveals the points assigned to each objective during the Victory Determination phase of Turn 11.

**Design Note:** This is a slight variation on the Victory Conditions from the actual scenario in Storming the Gap.

**3. Soviet Initial Invasion Planning:** At the start of Turn 2, shuffle the Soviet Designated formation card into the Formation Deck. Remove the Soviet Designated Formation card from the deck at the end of Turn 3.

**NOTE:** This is a learning scenario. Beginning players should not add the Battlefield Event card into the Formation deck for this scenario. Experienced players should feel free to add it back in.

### **OBJECTIVES**

All Objective markers are NATO (blue) at start

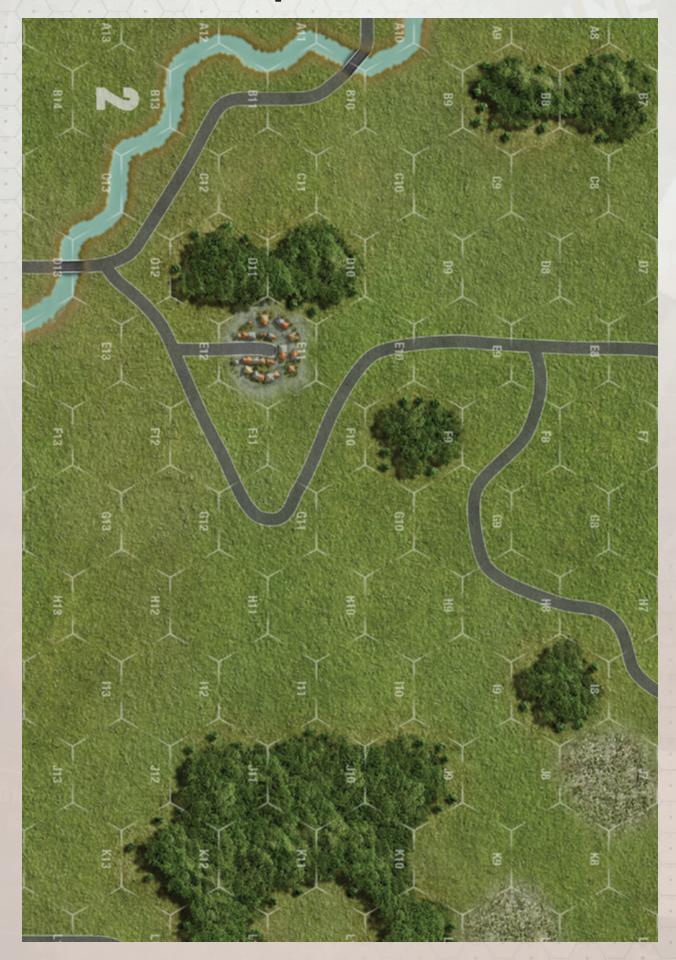
- » Objective A: Mengshausen, West Germany
- » Place OBJ A marker in 2-S5. Indicates all contiguous hexes of that town, including T5.
- » Objective B: Kruspis, West Germany
- » Place OBJ B marker in 2-16.
- » Objective C:
  - Kaulhausen, West Germany
- » Place OBJ C marker in 2-O10.
- » Objective D:

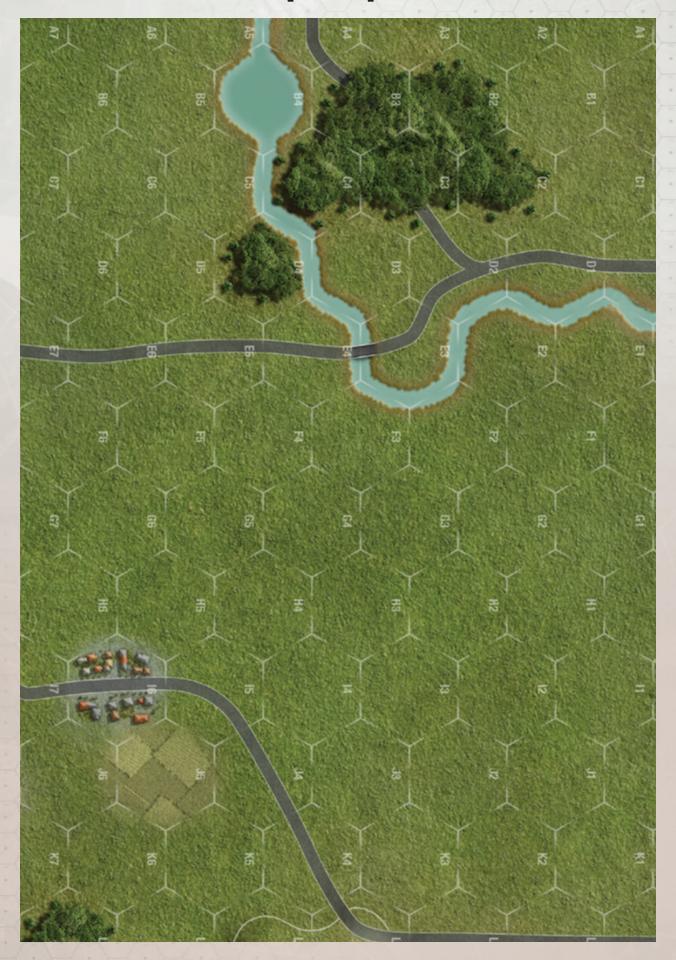
Asbach, West Germany » Place OBJ D marker in 2-S11.

# **VICTORY CONDITIONS**

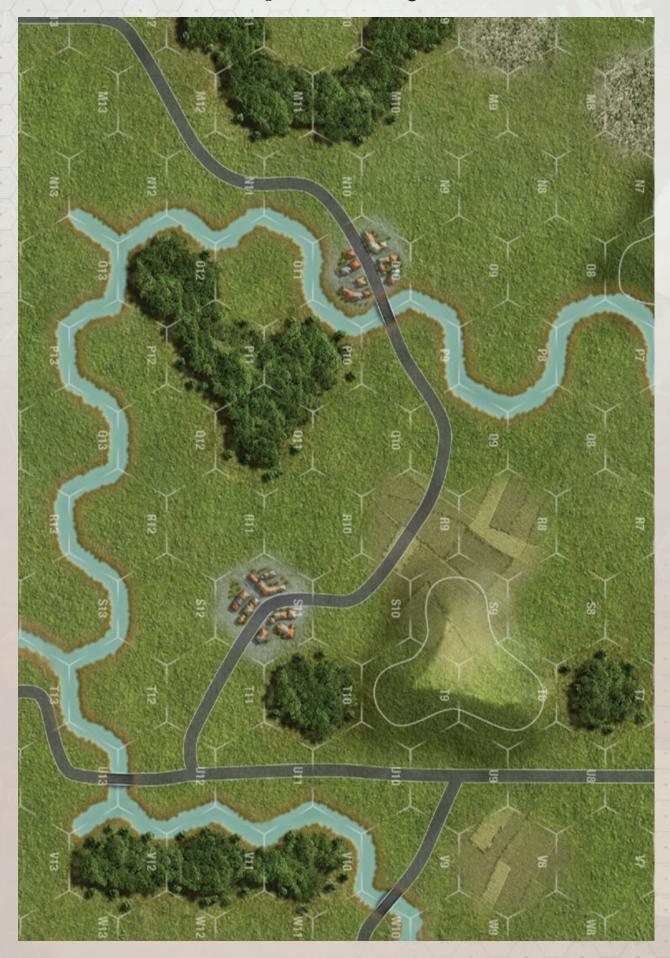
To win, the Soviets must control 6 points of objectives at the end of Turn 11. Any other result means the US wins.





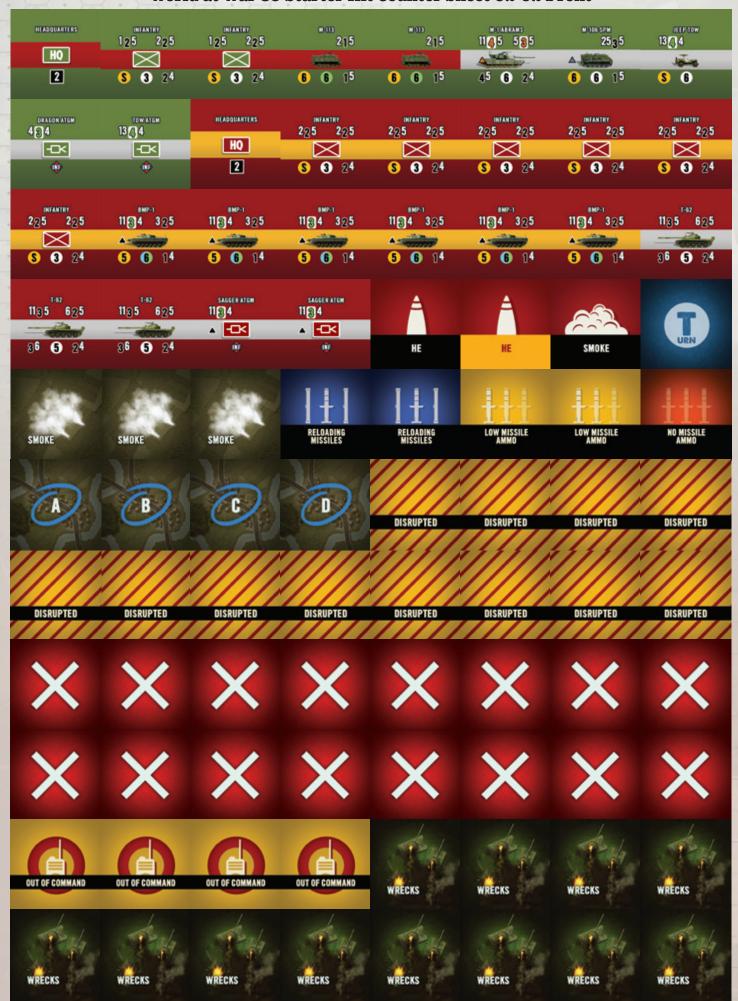


Map Piece Bottom Right

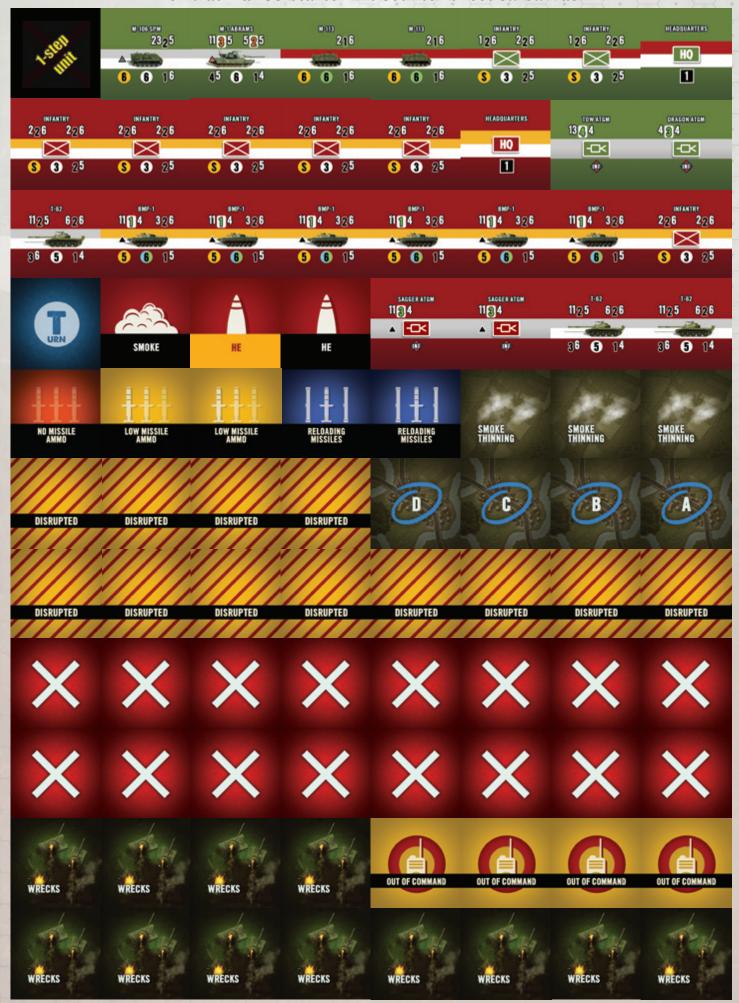




#### World at War 85 Starter Kit Counter Sheet 02-02 Front



#### World at War 85 Starter Kit Counter Sheet 02-02 Back







#### Missile Ammo Usage Chart If the Missile Reload If the Missile Reload attempt attempt **Firing Unit Type Description FAILS SUCCEEDS** Leave the 59 **MISSILE AMMO Infantry ATGM and SAM** SW ATGM **Support Weapons** RELOADING Example: marker on the unit Remove the Place a **Alternative Armament MISSILE AMMO NO MISSILE** ATGMS for SW ATGM RELOADING **Tanks and Anti-Tank AMMO** Guns marker Example: marker on the unit Place a **HELICOPTERS** (Including Helicopter Transports); or **Dedicated ATGM MISSILE AMMO** NON-TRANSPORT GROUND VEHICLES with GREEN **Vehicles** (ATGM), and or BLUE AP FP + BLUE RANGE (SAM) **All Helicopters** marker on the unit Place a **NO MISSILE TRANSPORT GROUND VEHICLE Infantry Fighting** with GREEN (ATGM), Vehicles with ATGMs **AMMO** marker on the unit

# Starter Kit Scenario: A Matter of Bridges

# **Formation Cards**













# **Terrain Effects Card 1**

TERRAIN	IMAGE	MP Cost Ground Troops	MP Cost Ground Vehicles	MP Cost Helo NOE or Flying	Defense Bonus Troops	Defense Bonus Vehicles
			Hexes			
CLEAR	イ。 イ。 人 人 、 人	1	1	1	0	0
CULTI- VATED		1	ટ	1	+1d6	0
ROUGH		2	3	1	+1d6	+1d6
CITY		1	2	1	+2d6	+1d6
WOODS		1	ટ	1	+1d6	+1d6
HILL		UPHILL = +1 + COT  DOWN HILL = Only COT	UPHILL = +1 + COT  DOWN HILL = Only COT	1	+1d6 if attacked from downhill otherwise 0	+1d6 if attacked from downhill otherwise 0
HILL- CITY		1	2	1	+3d6 if attacked from downhill otherwise +2d6	+2d6 if attacked from downhill otherwise +1d6

There are two types of terrain symbols on WaW85 maps, called Hexes and Hex Sides; and Fortification markers that can be added to any map. The Hexes are listed first. Note that the Hex Side and Fortification sections have fewer columns, as they do not directly generate Defensive Bonuses, nor do they affect LOS.

**MP = Movement Points;** # = Cost in MP, or Level in Height; Y = YES; • = NO; P = Prohibited; OBSCURES = Obscures LOS; BLOCK = Blocks LOS; UPHILL = Unit is moving from a lower Obstacle height hex to a higher one; Downhill = Attacker is at lower unit height than the target unit; COT = Cost of other terrain in the hex; NOE = Nap of Earth mode helicopter; AMPH = Amphibious unit;

TERRAIN	IMAGE	Assault Modifiers (13.1)	LOS Effect	Possible Conceal Bonus Troops	Possible Conceal Bonus Vehicles	Obstacle Height	Unit Height Ground Units
			Hex	es			
CLEAR	${ ightarrow}_{\kappa}$		·	•		0	0
CULTI- VATED		•	OB- SCURES	Y	•	0	0
ROUGH		¥.	OB- SCURES	Y	Y	0	0
CITY		Y	BLOCK	Y	Y	1	0
WOODS			BLOCK	Y	Y	1	0
HILL			BLOCK			જ	ಒ
HILL- CITY		Y	BLOCK	Y	У	3	2

**Amphibious Transport** = Amphibious Ground Transport unit; Defense Bonus: +(#)d6 = Unit gains the # of added d6 in defense; No Roads = Disregard any Road terrain on the map under the marker, unless the marker is removed.

# **Terrain Effects Card 2**

TERRAIN	IMAGE	MP Cost Ground Troops	MP Cost Ground Vehicles	MP Cost Helo NOE or Flying	Defense Bonus Troops	Defense Bonus Vehicles
Hill- Woods		1	Hexes 2	1	+2d6 if at- tacked from downhill otherwise +1d6	+2d6 if at- tacked from downhill otherwise +1d6
All Water		P	Amphibious Ground: * Other Ground: P	1	•	-1d6
Wrecks	WRECKS	COT	COT	1	+1d6	+1d6
Smoke	MOKE SMOKE THINNING	+1 COT	+1 COT	1	+1d6	+1d6
Rubble	RUBBLE	2 No Roads	3 No Roads	1	+2d6	+1d6
Cleared	CLEARED	2	3	1	+2d6	+1d6
Fire	FIRE	P	Р	P		
Burnt Out	BURNT OUT	2	3	1	+2d6	+1d6

<sup>\*</sup> Amphibious Ground - from water hex to water hex: 1; to or from a non-water hex: 1/2 of a unit's MP (round up); Other Ground: P

TERRAIN	IMAGE	Assault Modifiers (13.1)	LOS Effect	Possible Conceal Bonus Troops	Possible Conceal Bonus Vehicles	Obstacle Height	Unit Height Ground Units
			Hex	ces			
Hill- Woods			ВГОСК	Y	Y	3	ಒ
All Water	) s				•	-1	Amphibi- ous Units only: -1
Wrecks	WRECKS		OB- SCURES	У	Y	0	AS OTHER TERRAIN IN HEX
Smoke	MOKE SMOKE THINNING	·	BLOCK	Y	Y	20	AS OTHER TERRAIN IN HEX
Rubble	RUBBLE	Y	BLOCK	Y	Y	AS OTHER TERRAIN IN HEX	AS OTHER TERRAIN IN HEX
Cleared	CLEARED	У	BLOCK	У	Y	AS OTHER TERRAIN IN HEX	AS OTHER TERRAIN IN HEX
Fire	FIRE		BLOCK			20	Р
Burnt Out	BURNT OUT	У	OB- SCURES	У	•	AS OTHER TERRAIN IN HEX	AS OTHER TERRAIN IN HEX

# Terrain Effects Card 3

TERRAIN	IMAGE	MP Cost Ground Troops			
		Hexes			
River*	25	Crossing via a bridge hexside = +0 MP. May also be carried as Passenger in a AMPHIBIOUS TRANSPORT unit.  Otherwise = Prohibited			
Road*	- 115 - 111	When crossing a Road hex side, the COT of the hex entered becomes 1 (including Hill hexes) (See 9.4 Road or Trail Movement)			
Bridge*	BRIDGE	River hexsides may be crossed at Bridge hex sides, paying the COT of the hex entered after crossing (See 9.5 Movement)  On the Bridge marker the arrow points to the specific hexside with the bridge.			

TERRAIN	IMAGE	Assault Modifiers (13.1)	Cross-Bridge or Cross-River Assault Bonus
		Hexes	
River*		Crossing via abridge hexside = +0 MP.  AMPHIBIOUS unit or AMPHIBIOUS TRANSPORT unit may cross a River hex side if they begin their Movement Action adjacent to the river hex side, and then USE ALL their MPs to cross it, and move into the adjacent hex. This in- cludes any COT of the hex entered.  Otherwise = Prohibited	¥
Road*	ns	When crossing a Road hex side, the COT of the hex entered becomes 1 (including Hill hexes) (See 9.4 Road or Trail Movement)	
Bridge*	BRIDGE	River hexsides may be crossed at Bridge hex sides, paying the COT of the hex entered after crossing (See 9.5 Movement)  On the Bridge marker the arrow points to the specific hexside with the bridge.	Y

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– many, many thanks, all! With love to D, I, S and M & D

### Why we do what we do

We love playing games, as well as designing and developing them. We give praise and thanks to God for blessing us so we can follow our dreams and passions. We also thank you our fans, friends and family for making this possible for us.

# **NATIONS AT WAR 3.0 READY TO DEPLOY:**



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# WORLD AT WAR 85 CORE RULES

#### It is the summer of 1985 and WORLD WAR III HAS BEGUN...

The World At War 85 series of games (WaW85) are fast-paced, platoon-level simulations of combat during the Third World War. The series' Action begins in 1985, and brings to life the troops, tanks, artillery and aircraft of that time period, as conflict erupts around the globe.

RULES INCLUDE: Movement, direct fire, move & direct fire, assault, and on-board indirect fire Actions; terrain, line of sight, and concealment; missile minimum range and ammunition replenishment checks; point blank and long range fire; soft, light armor, and heavy armor targets; off-board artillery strikes; ATGM and alternative ammunition support weapons; attack helicopters and helicopter transports; flying, nap-of-earth, hovering and landed helicopter modes; close air support; electronic warfare; improved positions; random and placed minefields; optional random battlefield events and friction; weather, including weather level, squalls and mud; parachute drops; amphibious movement; night combat.

Play one of the many scenarios provided in any Volume of the *World At War 85* series, or use the included **BATTLE GENERATOR** to design your own.

These Core Rules are designed to be used with every game in the series - once learned, you will be able to play any game in the series. Individual game Volumes are each COMPLETE STANDALONE GAMES.





Complexity:

Solitaire Playability

12+

1-2

1-4h

AGES
PLAYERS
TIME

#### Game Credits:

➤ Executive Producer
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➤ Lead Design Keith Tracton

➤ Dev. Leads

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