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IMPORTANT TIP: USE THE KEYBOARD ARROWS TO MOVE THE MAP. LEARN THE KEYBOARD HOTKEYS. THE RED COLOURED ONES ARE THE MORE IMPORTANT ONES.

VERY IMPORTANT FACTORS

QUALITY	= ((2 x Proficiency) + readiness) / 3
MORALE	= ((2 x Proficiency) + readiness + supply) / 4

STRENGTH = equipment strength x MORALE

JUST MEMORIZE THIS: QUALITY IS THE AVERAGE OF PROFICIENCY AND READINESS WITH TWICE THE WEIGHT FOR PROFICIENCY. MORALE ALSO INCLUDES SUPPLY.

Quality and morale are used throughout the game. Notice that proficiency has twice the weight of other factors.
Readiness is the effect of wear and tear of equipment and troop fatigue. Recover more slowly if unit moved last turn or is unsupplied.
Morale is just Quality modified by the supply level of the unit.

CAUTION: Do not mistake DEFENSE STRENGTH for DEFENDING UNIT STRENGTH. The attacker also has a DEFENSE STRENGTH value used in combat.

QUALITY CHECKS (QC)

Quality QUALITY is the chance that the unit will pass the check.

TO CHANGE TO ENTRENCHED DEPLOYMENT
The unit must pass a QC or an engineering check

TO REORGANIZE AT THE BEGINNING OF A TURN
more likely if supplied, adjacent to HQ and didn't move the preceding turn.

DISORGANIZE
if, during combat, fails multiple QCs due to significant losses.

RETREAT BEFORE COMBAT
QCs for both sides can influence chances of RBC

RETREAT FROM COMBAT
Assault Strength Ratio influences RFC.
3:1 Ratio doesn't modify the QC.
(this ratio can be modified by the Force RFC Scalar parameter set by the scenario designer)

COOPERATION LEVELS

FREE COOPERATION
RESERVE AND SUPPORT attempt to respond
Nearby HQ increase likelihood of resupply.

LIMITED COOPERATION
RESERVE responds / SUPPORT doesn't respond
Attack / Defense coordination with penalties
COMBAT STRENGTHS -> -33%

NO COOPERATION
RESERVE and SUPPORT will not respond
Attack / Defense with penalties
Attack not coordinated
COMBAT STRENGTHS -> 67%

FORMATION SUPPORT SCOPE

RESERVE SUPPORT
Free Coop. - same icon background with same formation
Limited Coop. - same icon color scheme
Limited Coop. - all others
FORCE SUPPORT
Free Coop. - same color scheme
Limited Coop.- same icon background
FORCE SUPPORT
Free Coop. - same icon background
Limited Coop. - all others
FREE SUPPORT
Free Coop. - all units

COMBAT RESOLUTION

MODIFIERS = MORALE x SHOCK x TERRAIN (where applicable)

ANTI-PERSONNEL strength of the Attacking Unit X MODIFIERS
Defending unit DEFENSE strength x MODIFIERS
* Proportion of the Defending unit equipments that will be exposed to fire is the square root of this value x 100.

ANTI-PERSONNEL strength of the Defending Unit X MODIFIERS
Attacking unit DEFENSE strength x MODIFIERS
* Proportion of the Attacking unit equipments that will be exposed to fire is the square root of this value x 100.

COMBAT BEGINS!
Every shot fired by Anti-Personnel is lethal.
Shots fired by Anti-Armor must check for hit and penetration.
Thoughtest targets tend to draw fire from most lethal systems.

HIT CHECK
Chance to hit without enhanced targeting capabilities:
Restricted vision - 50% Normal vision - 33% Open vision - 11%
AGILE equipments are more difficult to hit.

PENETRATION CHECK
Uses the RATIO Anti-Armor / Armor
The chance of penetration declines rapidly, so:
1/1 Ratio - 100% chance of penetration
1/2 Ratio - 25% chance of penetration
1/4 Ratio - 6% chance of penetration
Defensive armor is divided by 3 if attacked by airplane.
Equipments may have different armor values for KINETIC and HEAT armor.

ASSAULT RATIO

ATTACKER ASSAULT STRENGTH / DEFENDER DEFENSE STRENGTH
Only include active direct ground attackers. Totals the AP an AT strengths in proportion to contribution of armored and soft equip. to Defender Defense Strength. If the Defender is armored equip., only the attacker's AT strength will be considered.
Terrain affect Odds.

QUICK CHECK (SIMPLIFIED EVALUATION)

ESTIMATE:

PROPORTION BETWEEN YOUR ATTACK STRENGTH AND OPPONENT'S DEFENSE STRENGTH
PROPORTION BETWEEN OPPONENT'S ATTACK STRENGTH AND YOUR DEFENSE STRENGTH

Your Unit Attack: 10 / Defense: 10 ↔ Opponent's Unit Attack: 20 / Defense: 10 ⇔ 10 : 20 / 10 : 15

WE CAN SEE THAT THE OPPONENT HAS AN ADVANTAGE ON THE RATIO 20/10 = 2, SO WE CAN EXPECT A HIGHER PROPORTION OF YOUR UNIT'S EQUIPMENTS BEING EXPOSED TO FIRE, SINCE THE OTHER RATIO, 10/10 = 1.

WE TAKE A LOOK AT THE TERRAIN MULTIPLIERS, WHICH MAY GIVE A BOOST TO THE ATTACK AND DEFENSE STRENGTH IN THE ABOVE RATIO. SO, IF THE OPPONENT'S UNIT HAS A TERRAIN x2 BONUS FOR AP OR AT, HIS ATTACK STRENGTH INCREASES, INCREASING THE 40/10 RATIO. WE CAN EXPECT YOUR UNIT TO BE EVEN MORE EXPOSED TO FIRE.

CHECK YOUR UNIT'S PREVAILING AT EQUIPMENTS ANTI-ARMOR AND ARMOR VALUES. ESTIMATE YOUR OPPONENT'S UNIT PREVAILING ARMORED EQUIPMENTS ARMOR VALUE. THE CHANCE TO PENETRATE DEPENDS ON THE RATIO: (FIRING UNIT ANTI-ARMOR) / (TARGET UNIT ARMOR). A 1/1 RATIO = 100% CHANCE; 1/2 = 25%.
THIS ALLOWS TO EVALUATE IF YOUR ANTI-ARMOR EQUIPMENT IS ADEQUATE TO **CONFRONT THE OPPONENT'S ARMORED EQUIPMENTS.**

CHECK YOUR UNIT QUALITY. THE HIGHER THE QUALITY, THE HIGHER THE CHANCE YOUR UNIT WILL HOLD GROUND WHEN ATTACKED OR SUSTAIN AN ATTACK.

QUICKLY ESTIMATE ASSAULT RATIO. A RATIO GREATER THAN 3:1 WILL FAVOR DEFENDER RETREAT FROM COMBAT; LESS THAN 3:1 WILL FAVOR DEFENDER STANDING.
This Ratio can be changed by the scenario designer - "Force RFC Scalar" parameter.

TIPS FOR BEGINNERS ON HOW TO EVALUATE RELATIVE STRENGTHS OF UNITS

Proficiency, Readiness and Supply (1) - VERY IMPORTANT
QUALITY CHECKS ARE USED THROUGHOUT THE GAME.
No use in having powerful equipment if they are weared out, troops are low quality and exhausted.
Used a lot when checking if units will retreat or keep fighting.

MORALE IS MULTIPLIED BY THE UNIT'S EQUIPMENTS STRENGTHS IN COMBAT RESOLUTION.

MORALE
Do a quick mental estimation of the average of proficiency, supply and readiness and adjust the result a bit in the direction of the proficiency value, since it has twice the weight of the other values.

Attack and Defense Strengths (2)
Sum of unit's equipments AP, AT and Defense strengths. Use these values only as a quick reference, since they can be misleading.

Anti-Personnel and Anti-Armor strengths (3)
VERY IMPORTANT in order to estimate the expected unit's efficiency against an opposing unit.
A Ratio between your unit Anti-Personnel Strength and the opposing unit Defense Strength is used to establish how many of the opposing unit's pieces of equipment will be exposed to your unit's fire.
The inverse is true when establishing your unit's pieces of equipment that will get exposed to enemy fire.
The same logic applies to Anti-Armor.
So, DEFENSE STRENGTH can be understood as the capacity of an equipment to prevent being exposed to fire.

COUNTER VALUES
Open menu Play > Player Options, click the right arrow and choose Edit Counter Values
Change the Default Anti-Personnel Attack Strength to Attack. This value shows the sum of AT and AP strengths already multiplied by morale, so that the player don't have to multiply the values himself. Observe that reduction in readiness and supply reduce this value.
The AP and AT values can be checked in the Unit Panel. You don't need them on the counter.
Armor Defense is important, since it shows what part of your defense value refers to armored equipment. The rest of the defense value refers to Soft Defense. AP will be confronted to Soft Defense and AT to Armor Defense.
Toggle through the counter values using the *M* key.

PROPORTION OF UNITS EXPOSED TO FIRE

Estimate **Attacking unit Attack Strength / Defending unit Defense Strength x Terrain Defense Strength modifier**
* Ratio used to calculate the proportion of the Defending unit that will be exposed to fire

Estimate **Defending unit Attack Strength x Terrain Attack Strength modifier / Attacking unit Defense Strength x Terrain Defense Strength modifier**
* Ratio used to calculate the proportion of the Attacking unit that will be exposed to fire

Notice that most Terrain Modifiers are applied to the defending unit.

BOTH ESTIMATES ABOVE GIVE US AN IDEA OF THE RELATION BETWEEN ATTACKING AND DEFENDING EQUIPMENTS THAT WILL BE EXPOSED TO FIRE

Ex: Attacking unit Attack Strength = 17 | Defense Strength = 14
Defending unit Attack Strength = 20 | Defense Strength = 10
Terrain: Mountains --> x3.5 defending unit AT | x1.5 defending unit AP. Average = 2.5
x3 defending unit defensive strength of infantry and non-static equip.
x2 static equipment defensive strength

Defending unit Exposure to Fire:
17 / [10 x 3] = 17/30. (Use only modifier to non-static, unless a lot of static equipment is involved.)
Attacking unit Exposure to Fire:
20 x (2.5) / 14 = 50/14. We use the average AP and AT strength modifiers to keep things simple. Multiply 14 by 2 (terrain modifier) if a lot of static equipment is involved.

GAME CALCULATIONS CONSIDER AP AND AT SEPARATELY AND THERE IS A SQUARE ROOT INVOLVED, BUT WE DON'T NEED TO GO THERE. **WHAT DO THESE RATIOS TELL US?**
17/25 (Defender Exposure) and 50/14 (Attacker Exposure) are ratios that evidence a favourable condition to defenders; a much higher proportion of the attacking unit equipments will be exposed to fire.

Anti-Armor must check for hit and penetration.
PENETRATION chance is determined by the relation between the firing INDIVIDUAL EQUIPMENTS ANTI-ARMOR and the target INDIVIDUAL EQUIPMENTS ARMOR.
No use in having a lot of anti-armor power from the sum of individual equipments that don't have, individually, suitable weapons to beat opposing armor.

PENETRATION CHANCE
Go through the description (4) of your unit's prevailing AT equipments and note their Anti-Armor Strengths.
Go through the description of the target units prevailing armored equipments and note their Armor Strengths and check the ratio (Anti-Armor/Armor).
1/1 ratio has 100% chance of penetration; 1/2 has 25%; 1/4 has 6%.
In an usual game situation the player won't have access to the description of the opponent's equipments. Estimation must be done by known historical OOB.

FINALLY:
When allocating forces, consider the level of COOPERATION between units
Remember that a single non cooperative unit will result in penalty.
Non cooperative units are more likely to pull out of attack earlier and increase the chance that combats will take longer.

RECONNAISSANCE LEVEL will increase all unit's strengths on the first round of combat. Ex: AP - 15 / Recon. - 30%, AP becomes 19.

ASSAULT RATIO - pay attention, since it can have an impact on the chance of retreating from combat (RFC). As a rule of thumb, more than 3:1 odds for for the attacker will lower Defender unit Quality for Quality Checks purpose; less will increase it. (This ratio can be modified by the "Force RFC Scalar" parameter)
Ex: Defender Quality - 70% / Ratio - 1.5. Check will use a Defender Quality of 100 - 30 x 0.5 = 85.

RETREAT BEFORE COMBAT (RBC)

Uses Quality adjusted by odds to make Quality Checks.
Attacker Assault Ratio 3:1 - unmodified Quality Check
(This ratio can be modified by the "Force RFC Scalar" parameter)
Adjusted for faster units to a maximum of 2:1

Odds > 8:1 proportionally decrease the chance of the unit standing. If odds are, say, 100:1 - RBC very likely.

Only one RBC attempt against a combined stack is allowed. If successful, the whole stack retreats.

The Defender must have at least 15% of the density threshold to avoid the flanked penalty during RBC.

Odds incorporate the Defender Deployment and Terrain modifiers.

IMPORTANT FACTORS

FORCE PROFICIENCY CHECK
If a Random Check against Force Proficiency AND a random check against the number of remaining rounds fails, your turn ends.

ELETRONIC SUPPORT CHECK (ESL)
Passes if a number from 1 -> Friendly Force ESL is higher than a number from 0 -> Enemy Force ESL.

COMMUNICATION CHECK
The chance to pass is equal to the Force Communication Level.
The chance increases if the Friendly ESL > Enemy ESL.
Also increases if the unit didn't move in the previous turn.
Attacks with large fractions of units failing Communication Checks will take longer.

ARTILLERY, HQ AND AIR UNITS ONLY SUPPORT IF
they pass a Communication Check.

FORMATION QUALITY CHECK
Checked at the beginning of the turn. If failed, the Formation will reorganize.
FORMATION QUALITY - Formation Proficiency and average assigned unit Quality. Reduces if many units are divided.
Passes if a Random Value from 1 to 100 < Formation Quality
OR if Number of Units with severe combat results < Random Number from 1 to Number of Units in Formation.

ELIMINATION OF HQ OR OF ALL COMMAND GROUPS
If the HQ or all the Command Groups assigned to it (if any) are eliminated, the Formation Proficiency is reduced by 50%.

NEW FLANKING RULE
If on, when the defender has two non-adjacent hexes that he can't be attacked from (for example, one sea hex to the NW and one friendly unit to the NE), then attackers 120 degrees apart no longer cause a flanking attack.

FLANK AND REAR AREAS
If a unit attacks non adjacent hexes, it will suffer Flank Attacks from defensive fire.
All further attacks on it that turn are flank attacks.

SCHOCK LEVEL EFFECT
All Units strengths are multiplied by this value.
It also affects Quality Checks.
Move Costs may decrease if Friendly Schock Level > Enemy Shock Level.
Shock Level > 100 - Time in combat may reduce
Shock Level < 100 - Time in combat may increase
Formations may arbitrarily reoganize.

CALCULATE HOW MANY SUPPLY POINTS YOUR UNIT WILL RECEIVE THE NEXT TURN
(If the unit has moved in the present turn, the values below will be reduced)
Read the Supply Level value for the hex the unit is in.
If "High Supply" is set to off (Play>Game Options), reduce it by 1/3.
If in a PM turn, reduce it by a further 1/3.
Multiply it by the Formation Distribution Efficiency.
Add 50% of this value if near a HQ.

DENSITY LOSSES MULTIPLIERS

Yellow-Green - 1 to 1.4
Yellow - 1.4 to 1.7
Orange - 1.7 to 2.0
Red - at least 2.0

FERRY CAPABILITIES

Minor Ferry Capabilities
Total in hex > 20% (including moving unit) Exempt from River Movement Cost
Total in hex > 10% (including moving unit) Adds only 1 point to Mov. Cost
Major Ferry Capabilities
Units with more than 10% can enter Super River / Suez Canal locations and create a temporary crossing point for other units.

SUPPLY

SUPPLY EXPENDITURE
1 Point per move point expended.
10 Points per combat round.
10 Points per combat round. (Ranged)
5 Points (Ranged at half strength)

Naval, Embarked and Air Units do not expend supply when moving.

SUPPLY UNITS
Treat location as if it were one supply radius closer to the supply point.

DESERTIONS
Start when the unit is Overextended and its supply level is below (100 - Proficiency)
Units only receive replacement if not suffering desertion.

HQ AND SUPPORT SQUADRONS
If the assigned HQ is eliminated OR fewer than half the authorized support squadrons are assigned:
Supply Distribution Efficiency(SDE) - 50%.
Between 50% and 100% of authorized Support Squadrons, the SDE will have this proportion.
Ressuply increases by 50% if a cooperative HQ is located with or adjacent to the unit.

UNREACHABLE LOCATIONS
Flooded Marsh, Badlands, Dunes etc.
If adjacent to a supplied location, will receive 1/4 of that value.
Unused Air Transport can supply "cut out" units. Reduced 33%-Hazy; 66%-Overcast.

SUPPLY LEVEL DROP by number of half-days in a turn, if the unit is unsupplied.

TRANSPORT ASSET SHARING
Units that do not move and are not in Local or Tactical Reserve will temporarily of their transport assets to their Parent Formation. Any unused Rail, Air or Sea Transport Capacity also contributes.

Excess Trucks and Horses can have a very strong effect on Supply Distribution.

READINESS RECOVERY
Generally the amount needed to fully recover from maximum movement.
Air Units - strongly affected by Proficiency.
Readiness is limited to no more than unit Supply Level or 33%, whichever is higher.

MAJOR RIVERS AND ESCARPMENTS
Supply beyond Major Rivers depend on Bridges or Major Ferry Capacity.
Blocked across Major Escarpments.

AIR UNITS

Low Altitude
A low altitude equipment is affected by both low and high anti-air fire.
High Altitude
A high altitude equipment is affected by high anti-air fire and a proportion of low anti-air fire.
High Altitude Anti-Air Units
Join local Air Superiority combat, regardless of mission if their base is attacked.
If Air Shock Level is less than 70%
Air Units will not defend their Airbases if attacked.
Hazy locations
Air Units Attack and Defense Strengths multiplied by 66%.
All weather equipment unaffected.
Overcast locations OR PM turn
Air Units Attack and Defense Strengths multiplied by 33%.
All weather equipment - 66%.
Local Air Superiority
Chance that an Air Unit will participate depends on the range to the unit's base, the Force Eletronic Support Level and the unit's Quality.
Quality Checks
An Air Unit is susceptible to more Quality Checks.
Failure on these additional Quality Checks will decrease its attack strengths.
Combat Support
Air Units must pass a Communication Check in order to support.
Air Reconnaissance at Sea
The range depends on the range of planes and the number of planes.
Weather in the phasing unit hex affect all unknown hexes; weather in the target unit hex, only affects that hex. HAZY -> -15% / OVERCAST -> -30%
Blow Bridge Probability
Reflects the probability that the unit will blow the bridge once it gets to the bridge location. Do not include local superiority opposition to get there.
Air Units Ship bombardment
The number of planes effectively bombarding a ship depends on the number of planes assigned to the bombardment and the MORALE.
The chance to hit depends on the Visibility*, Proficiency and Anti-Naval Strength of the Air Unit confronted with the ship's Agility.
Penetration and Damage depends on the Shell Weight confronted with the Ship's Armor Value and Durability.
*Visibility is a combination of Weather and Lighting. Weather value is the average of target hex and attacker hex values.
Torpedo Bombers
Have their Hit Probability decreased 4 times, but Damage increased 4 times.

Tip from Manual
If the enemy air force is much stronger than yours, keep your air units on Air Superiority Missions and hope for the best. Consider keeping your best ground attack units out of the action. They may be more effective as a threat, forcing your opponent to maintain a strong Air Superiority effort.

COMBAT SUPPORT

Supporting Units must pass a Communication Check.
Artillery will not support if Mobile, Retreated or Routed.

ARTILLERY SUPPORTING GROUND ATTACK
If the Attacker Assault Ratio > 100
Defender unit will expend full supply when countering the ground unit attack;
Prevent/limit from counterbattery fire from ranged defender is no longer guaranteed.
If the Attacker Assault Ratio < 100
Chance equals this number that these benefits are partial.
If the Attacker Assault Ratio < 10
Chance increase that the attack will be treated as a bombardment.

All players need to understand is that to ensure full benefits, keep the effective strengths of the forces actually assigned to ground-assault the defenders at least equal to the size of the defenders' defense strengths.

ARTILLERY EFFECTIVENESS AGAINST PREPARED DEFENSIVE POSITIONS
Tied to the Weight of the Shells. Heavy artillery may seem weak (due to low rate of fire), but 150mm or larger shells can be very effective against entrenchment.

FIRING AGAINST SHIPS

NUMBER OF ATTACKING PLANES
Assigned x MORALE / (Naval Attrition Divider /10)
NUMBER OF SHOTS PER ATTACKING COASTAL BATTERY
(102.922x Gun Anti-Naval value x MORALE / Shell Weight) / (Naval Attrition Divider /10)
NUMBER OF SHOTS PER ATTACKING SHIPS
((number of ships - Damage%) x
102.922x Ships Anti-Naval value x MORALE / Shell Weight) / (Naval Attrition Divider /10)
FIRST HIT CHECK PASSES IF:
Attacker Unit Proficiency x Attacker Shock Level >
Random (Target Ship Agility Rating) x Defender Shock Level
SECOND HIT CHECK FOR AIRPLANES PASSES IF:
Attacking plane's Anti-Naval value x Visibility >
Random (Target Ship Agility Rating) x Defender Shock Level
SECOND HIT CHECK FOR GUNS PASSES IF (includes surface ships)
100 x SQRT(Visibility) / (1 + (0.002 + 1/3 / Attacking Ship's Durability) x Range x Range) > Random (100)
Range do not include attacker and defender hexes.
IF HIT OCURRED, IT CAUSES 1 DAMAGE POINT IF
(Attacking Weapon's Shell Weight >
Random (Defending Ship's Durability / 10))
AND (Target ship's damage < 20)
PENETRATION OCCURS IF
Random (Attacking Weapon's Shell Weight / 2) >
Random (Defending Ship's Armor Value)
IF THIS CHECK PASSES
Additional Damage Points =
Random (Attacking Weapons Shell Weight / 10) x Random(50) / Defending Ship's Durability Value
TORPEDO BOMBERS
The Anti-Naval Value in the Second Hit Check is divided by 4
The Shell Weight is quadrupled for Penetration Check and for Additional Damage Check

TRANSPORT WITH HELICOPTERS

ATTACK BY ANTI-AIR
Depends on Eletronic Support Check, whether enemy noticed the hex, how much low AA fire available and unit density on the hex.
Fly over wilderness, jungles, not the enemy concentrations.
You need an Air Superiority Ratio (including local AA) of 4:1 to be safe.

NAVAL WARFARE

DAMAGE LEVEL < 100 DEBILITATE
AP and AAA strengths, Speed, Nuclear Strength and Agility.
Do not affect Defense Strength, Armor and Durability.
AIRCRAFT CARRIERS
Above 66 damage points, don't serve as carriers anymore.
TARGET PRIORITY
Carrier - 1500 | Heavy Naval or Task Force - 150 | Medium Naval - 50
Light Naval or Riverine - 10 | 100 Weight or Embarked - 40
SEA SURFACE SPOTTING
25km - 10 km at night | "All Weather Equipment" - 50km
If the Force has any "All Weather" Aircraft, all vessels are ssumed to have radar. Observer under cloud cannot observe.
IN PORT
Naval unit AGILITY is halved.
Repair is 10x faster.
AIRCRAFT ATTACKS ON NAVAL UNITS (See AIR UNITS)
COASTAL GUN AGAINST SHIP
The Number of Shots fired by coastal battery depends on the Gun Anti-Naval Value, Morale and Shell Weight. The weightier the shell, the less shots it will fire.
ATTACKING SHIPS
The Number of Shots fired by an attacking ship depends on the Number of Ships, the Damage Level of the Ships, their Anti-Naval Strength, Morale and Shell Weight. The weightier the Shell, the less shots they will fire.
CHANCE TO HIT
Depends on the *Visibility, Proficiency and the Anti-Naval Strength of the firing unit confronted with the target ship's Agility.
*Visibility is a combination of Weather and Lighting. Weather value is the average of target hex and attacker hex values.
PENETRATION AND DAMAGE
Depend on the Shell Weight confronted with the Ship's Armor Value and Durability.
SHIP REPAIR
The time taken to repair is inversely proportional to Durability, Armor, AP, AAA.
Typically about the following weekly rates in port:
Carrier - 5 | Battleship - 3 | Heavy Cruiser - 3 | Light Cruiser - 5 | Destroyer - 14
SURFACE INTERDICTION
Chance based on value of the moving stack among detected stacks.
AIR INTERDICTION also. Chance is reduced with range.
Tip from Manual
Bring the entire fleet into detection range before moving through to distribute interdiction.

KEYBOARD HOTKEYS

ENTER
Accepts the dialog box
ESC
Cancels the dialog box
F1
Brings up the help file
F2 or C
Opens the Group Composition Dialog for the unit under the mouse cursor
F9
Quick save
NUMERICAL KEYPAD or ARROW KEYS
scroll the map or center on the current unit ("5")
PERIOD < . >
Disembark the selected unit, if possible. If not, advance to the next that can disembark
COMMA < , >
Recombines or splits units
F12 or Backslash < \ >
Toggles PO Assist Mode
Slash < / >
Show the current formation path
Questionmark < ? >
Show all formation paths
<Shift> and F12 or Vertical Bar < | >
PO moves your units that are under PO Assist Control
Space < >
Hides units/dialogs while held down
<Shift> or <Caps Lock>
Speeds up battles and PO moves
A
Air Unit Report
B
Find place
<Ctrl> and B
Find next place
D
Dig in
E
Resolve all combats or ends the turn
F
Formation Report
G
Next unit on stack
H
HQs to the top
I
Range Cicles options
L
Cycles through the Loss Tolerance settings
<Shift> and L
Cycles through the Loss Tolerance settings for the stack
M
Toggles between counter Movement/Strengths display
N
Select next unit that can act
O
Brings up OOB report
P
Brings up Attack Planning Window. PREVENT RBC.
R
Refreshes the display of the current unit
T
Sets unit to Tactical Reserve
<Shift> and T
List of available Theater Options
U
Unit Report
W
Map pane weather view on/off
Y
Graphically zooms in
<Shift> and Y
Graphically zooms out
Z
Undo
Plus sign < + >
Next Unit
<Shift> and < + >
Next Unit that can act
Minus key < – >
Previous Unit
<Shift> and < – >
Previous Unit that can act
F3
Saves Map
<Shift> and <Ctrl> and F4
Saves current player's OOB

	Fortified Line	Fortified Depl.	Entrenched Depl.	Defending Depl.	Dense Urban	Urban	Mountains	Wadi	Bocage	Marsh	Badlands	Dunes	Forest	Ligth Woods	Jungle	Cropland	Hills	Open	Sandy	Rocky	Arid	Escarpments	Sup.Rivers/Suez	Rivers/Canal	Road	Anchorage	Airbase
DEFENDING UNIT AT	x5	x5	x3.5	x2	x3.5	x2	x3.5		x2	x2																	
DEFENDING UNIT AP	x4.5	x4.5	x3	x1.5			x1.5		x3																		
DEFENDING UNIT DEFENSIVE STRENGTH OF VEHICLES	x3	x3	x1.5		x1.5																						
DEFENDING UNIT DEFENSIVE STRENGTH OF INFANTRY AND NON-STATIC WEAPONS	x8	x8	x3	x2	x4	x3	x3	x2	x3		x4	x3	x2		x2		x2										
STATIC EQUIPMENT DEFENSIVE STRENGTH	x6	x6	x2	x1.5	x2	x1.5	x2	x1.5	x1.5		x3	x2	x1.5		x1.5		x1.5										
DISENGAGING UNIT RECONNAISSANCE (+0.5 for night/Heavy Rain/Snow –	x2.5				x2.5	x2	x2		x2.5		x3		x3			x1.5	x1.5						x3	x2.5			
OTHER					GX R-RV	GX RV	G+ R-				G+ R-		G+ R-RV	G+ R-	G+ R-	RV	G+ R-	OV	OV	OV	OV	OV		OV	G-R+OV	G-R+	GX R+

GUERRILLAS "G+" -> more effective | "G-" -> less effective | "GX" -> will not operate
THEATER RECONNAISSANCE "R +" -> more likely to observe (also large concentration of motorized equip.) | "R-" —> less likely to observe (also hazy or overcast)
Attack from RIVER, SUPER RIVER, CANAL, SUEZ CANAL or DEEP WATER —-> All strengths x 0.7
Only the strongest modifier is in effect. Deployments are cummulative with terrain modifiers, but only as the square root of ((square of Depl. Mod.)+(square of terrain mod.)).
MAJOR ESCARPMENT —> MOUNTAIN UNITS attacking through (losses x 3) / ARTILLERY "looking down" (strength x 1.5)
MINOR ESCARPMENT —> units attacking through (losses x 2) - Artillery and HQ not affected
OV - Open vision | RV - Restricted vision - Unless you have very advanced targeting systems (++++), restricted vision favors and open vision reduces hit probability. **Heavy precipitation is restricted vision.**

BATTLEFIELD TIME STAMPS

After all combats are resolved, the **player-turn will advance to the combat round of the MEDIAN length combat.** Combats that lasted longer than the round of the new combat phase will be accounted for by placing a TIME STAMP in those hexes.
Any unit that enters a hex with a Battlefield Time Stamp will have its movement points reduced until its unit time stamp is at least equal to that of the hex.
Combats planned for a hex with a Battlefield Time Stamp will start on a combat round as if the player-turn is the same as the hex's time stamp. All units that participate in a combat that results in a Battlefield Time Stamp have their time stamps increased to the resulting time stamp of the battlefield.
If a defender was prevented from retreating from a combat by non-participating adjacent enemy units then the combat's Battlefield Time Stamp is the greater of the time stamps of the blocking units and the time stamp of the last round of the combat.
Whenever a defender is forced to retreat-before-combat (RBC) by a unit with a Time Stamp greater than the Player-Turn's Time Stamp, there is a Battlefield Time Stamp created in the hex equal to the time stamp of the overrunning unit.