Open General

Manual

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1. Introduction

Open General is a strategy game based originally in Panzer General 2 from SSI, programed by Luis Guzmán. In the beginnings it required a previous installation of Panzer General 2, but now it's a completely independent program. It can use all material from Panzer General 2, but with many improvements. Most aspects of the game are highly customizable, so it can be used to play WW2, modern or some other kind of battles.

IMPORTANT: the screenshots of this manual were taken using different Efiles in Windows 7, so you will see some differences in buttons, colors… Don't be worried, this is just a hint of how customizable Open General is.

1.1. Getting Started

The best way to get a quick start is to go to the "Tutorial" section, where you can follow a step by step game so you can get the feel of Open General. If you want to go into the whole game, then you should start reading the "Basic Windows, Menus and Buttons" and the "Game Concepts" sections.

1.2. Using the Mouse

In Open General, when you point the mouse to buttons or hexes, you will be shown some text explaining it; this text can appear in the information bars, or beside the button. This will make easier to learn the game.

"Click" means that you move the mouse to the desired point and press the left mouse button.

"Right click" means that you move the mouse to the desired point and press the right mouse button.

2. Tutorial

The game installer includes a tutorial mini-campaign. You are offered to start it the first time that you run the game, but you can run it later by selecting it after changing to the OpenAK Efile. The campaign is meant to be played while reading the "Tutorial.pdf" file included in the *README* folder of the game.

3. Windows, Menus, and Buttons

This section explains the windows and buttons in Open General.

3.1. Start Screen

When you start Open General you can see the *Start screen*; at the bottom there are some buttons. When you point the mouse to any button, some text appears describing its function.

EFile Folder: H:\OpenGen\EFILE_OPENAK\ (No version)

Under the buttons you can see the actual Efile folder and the Efile version. The buttons are:

Select Equipment: shows the *Efile folder selection window*.

Play scenario: shows the *Scenario selection window*.

Play campaign: shows the *Campaign selection window*.

Multiplayer: starts a multiplayer game.

Play by Email (PBEM): lets you start a PBEM game or load an existing one.

Review best careers: shows a window with the best scores.

Start the Suite, to edit scenarios, campaigns…

Load game: shows the *Game Functions window*, to continue a saved game.

Settings: shows the *Settings main window*.

Load a .xlog file

Show start video.

Game version.

Exit.

3.2. Efiles

The Efile is the equipment used to play the game; there are Efiles for World War 2, World War 1, Cold War, pre-World War 1… Efiles are organized in folders, each one with its own scenarios and campaigns, start screens, music, videos… Each Efile can have different interface, as it is customizable.

3.3. Efile Folder Selection Window
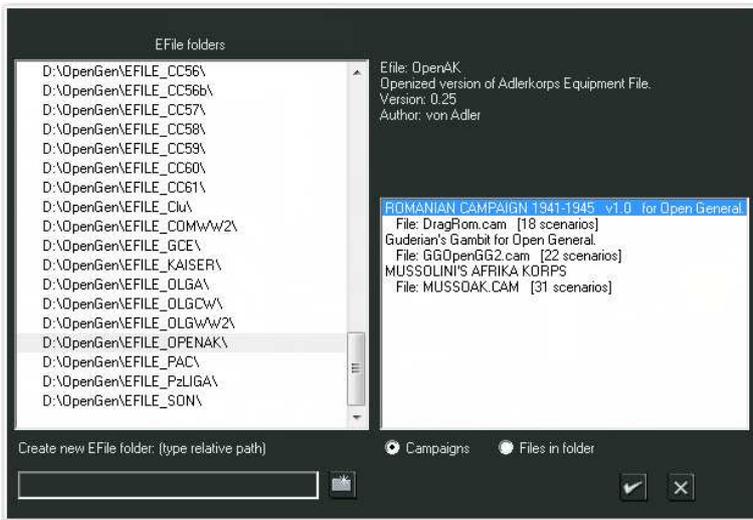
From this window you can choose the Efile folder (or *Efolder*) that you want to use, so Open General can look for the correct scenarios, campaigns and saves.

When you select any *Efolder* in the list to the left, you get the campaigns contained in that *Efolder* in the list to the right.

3.4. Scenario Selection Window

When you click the **Play scenario** button, you get the *Scenario Selection window*:
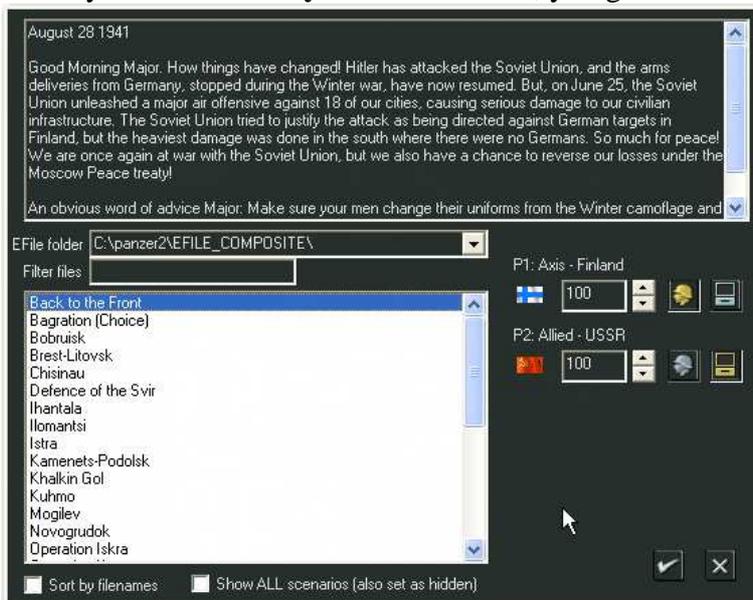
In the list are the scenarios of the Efolder; when you click one of them you can see its introduction in the upper part of the window, and to the right are the two sides of the scenario with the possibility of choosing which one you play and with one is played by the AI, and the difficulty level. The difficulty level is shown as the percentage of prestige that you get in scenario for capturing flags or each turn: if you set it at 50% you'll get half the normal prestige (more difficult) and if you set it at 200% you'll get double of normal prestige (easier); the limits are 0-500% You could set the same for the AI, but it's not usual.

3.5. Campaign Selection Window

When you click the **Play campaign** button the *Campaign Selection window* is shown:
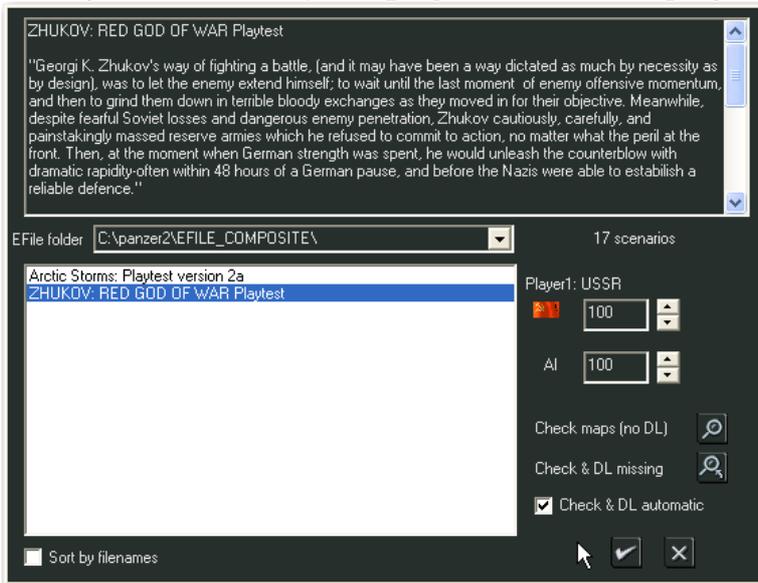
A campaign is a series of linked scenarios where you are on command of a group of units (your core) through the scenarios, gaining prestige that you can use to acquire more units, upgrade to better ones or just refit to avoid losing them.

The window is similar to the *Scenario Selection window*, but you also get some buttons to check for missing maps and download them. Images for maps are not included when the game is installed, as they are downloaded from Internet when needed.

You can choose in *Settings main window* if you want to download as JPG (70% quality, faster download) or PNG (better quality). Anyway it is a good practice to check for any missing file before starting a campaign, and eventually downloading any required file before starting, because if when the game needs a file it's still missing you cannot download it at that point, the game will close. Scenarios cannot be played if the map isn't available. You only need to download any map once.

3.6. Settings

When you click the **Settings** button you can see the *Settings main window*:
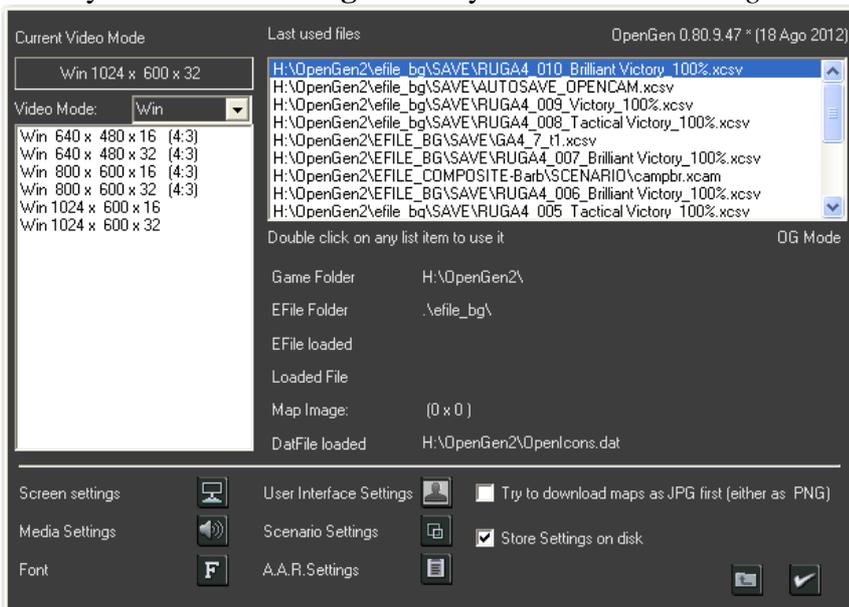
Here you can choose the video mode and see the last used files, or go to some other settings windows.

Game settings   OG Mode

Can set default experience for new units
Use current / basic strength as defined (so no reset current to basic)
Use Fuel as defined (so no reset when load)
Avoid paratroop deployment on ocean hexes using air transport
Allow setting default unit's strength for each player (also when getting prototypes)
allow settting a time frame in range between 1 and 12 months for valid prototypes
*** OG Mode ***
Allow to BLOW
Allow to REPAIR
Allow to BUILD
Allow barrage fire
Ships (not subs)can fire as FlaKs
True range 0 (cannot fire to surrounding hexes)
True spotting 0 (cannot spot surrounding hexes)
Extended LOS rules (Forest,... blocks LOS, limited Air LOS)
Air units ZOC enabled
Air units can be fired when entering AD range
Reinforces arrive when player gets active

Select AI   0.67 (06-Abr)   ☐ Disable AI

‹›

With the ⊡ button, you access the *Game settings* where you can see which of the optional rules are active in the actual scenario; these are defined by the scenario designer.

You can also see in the top right corner if you are playing in *OG Mode* or *PG2 Mode*; in this last mode many of the Open General options and rules are deactivated, so it emulates Panzer General 2 better.

MEDIA SETTINGS

Misc Sounds (Click...)   Volume   80 ━━━━━━━━━━ MAX

Bad weather sound   Volume   20 ━━━━━━━━━━ MAX

Play Sounds   Volume   0 ━━━━━━━━━━ MAX

Play Music   Volume   0 ━━━━━━━━━━ MAX

Music files: ━━━━━━━━━━

Play Videos   Intro :

Credits :   OpenCredits.avi

☐ Use MCI instead of DirectShow
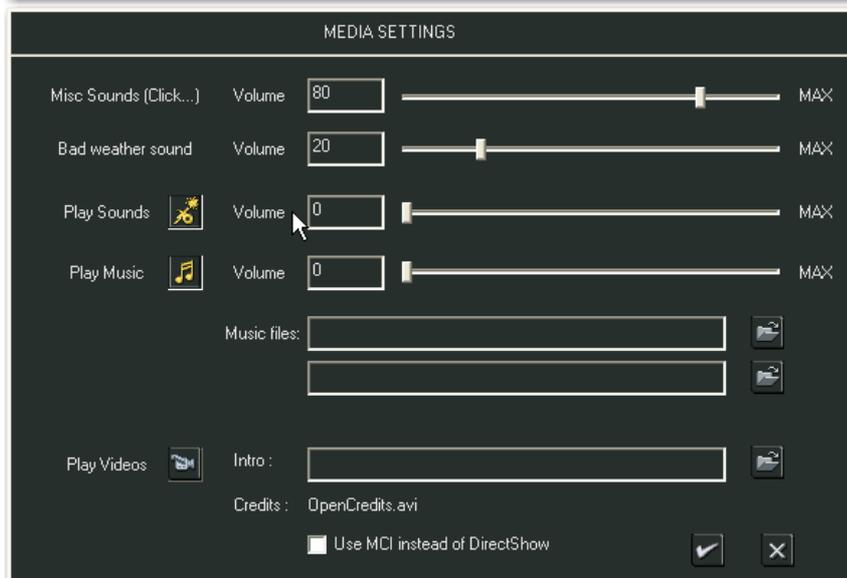
The *Media Settings* window lets you set the music and sound effects volume, and select a background music or an introduction video.

After Action Report options

☑ Include Unit's name   ☑ Include Scn played

☑ Include Country   ☑ Include Averages

☑ Include strength (Cur / Base)   ☑ Player units summary

☑ Include Killed   ☑ Forum codes

☑ Include Unit number   ☐ Include PEBM codes

     ☐ Include game score
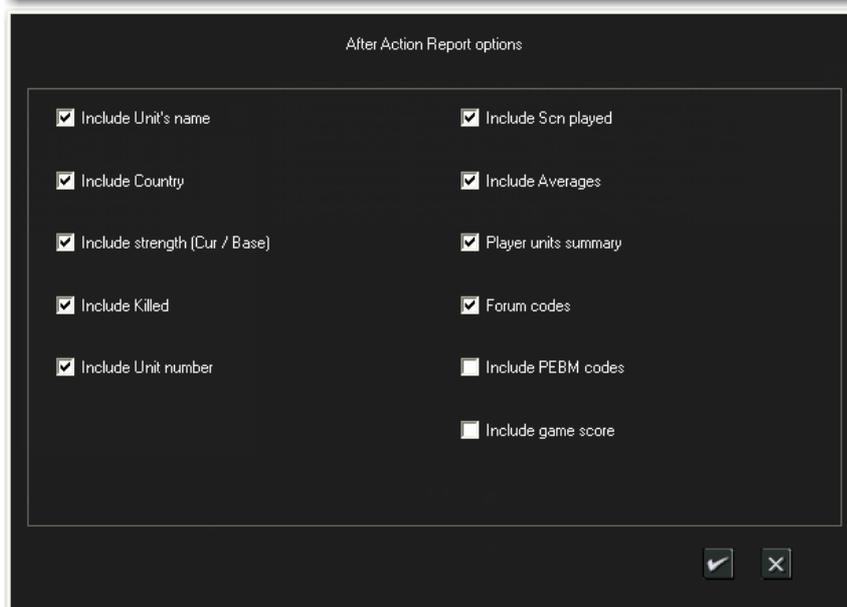
The *After Action Report options* window lets you select the details shown in the AAR.
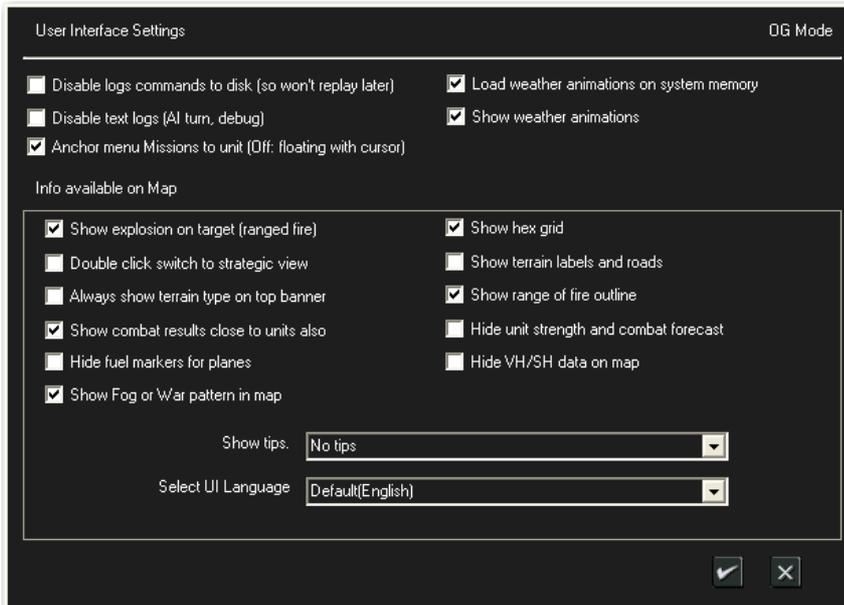
The *User Interface Settings* window lets you configure the info available in the map, if the program shows tips and the user interface language.
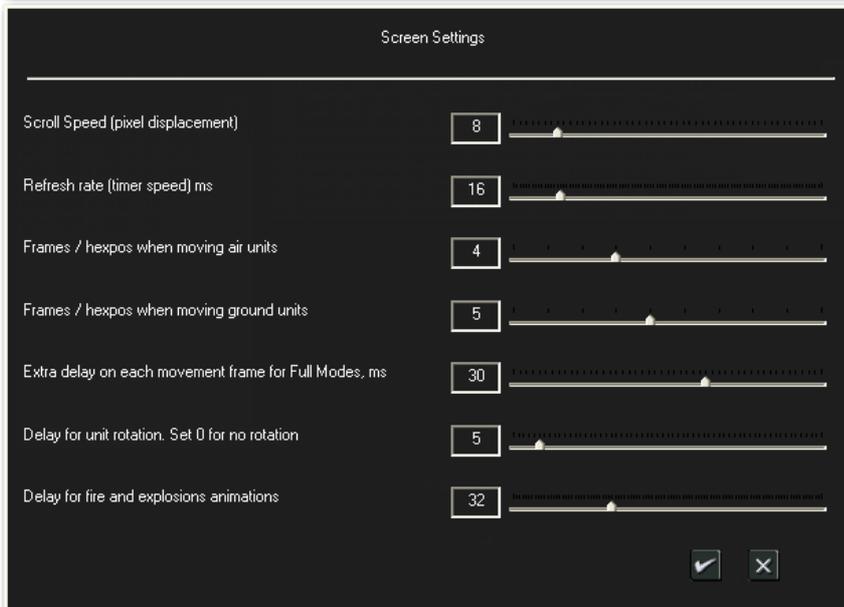
The *Screen Settings* window lets you modify the speed of animations and movement of units, so the program runs smoothly.

3.7. Videos

In some occasions like at the end of a scenario, you'll be shown a video; you can exit the video at any time by pressing any key or clicking any mouse button.

3.8. Main Game Window

The *Main Game window* is where the game is played. It has several parts: in the middle you can see the map with the units. In the upper and lower edges there are information bars, and to the right some buttons.

3.8.1. Information Bars

The upper information bar shows the terrain, combat results, turns, prestige available, weather…
When you point the mouse to any hex, it shows the terrain.
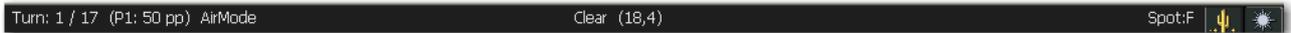
When in combat is shows the combat results.

The lower information bar shows the name, experience level, ammo… of the unit below the cursor.

3.8.2. The Map

The map is where you can play the game; it shows the units, terrain, objectives… The map scale is about two kilometers per hex, but it can be different; also unit size is variable. There can be only one unit per hex, but in the same hex there can be one ground/naval and one air unit.

The map is usually bigger than the window, so you can scroll the window by moving the mouse to the edges, or holding the middle button of the mouse and moving it

The flags that you can see in some places of the map show objectives; the flag is the one of the owner. If the flag has some border it is an especial hex. Borders can be:

Supply hex.
Victory hex.
Combined supply and victory hex.
Retreat hex.

It is possible to show a strategic view of the map with the [ ] button; this view shows the complete map at a smaller scale, and also the objectives and visible units.
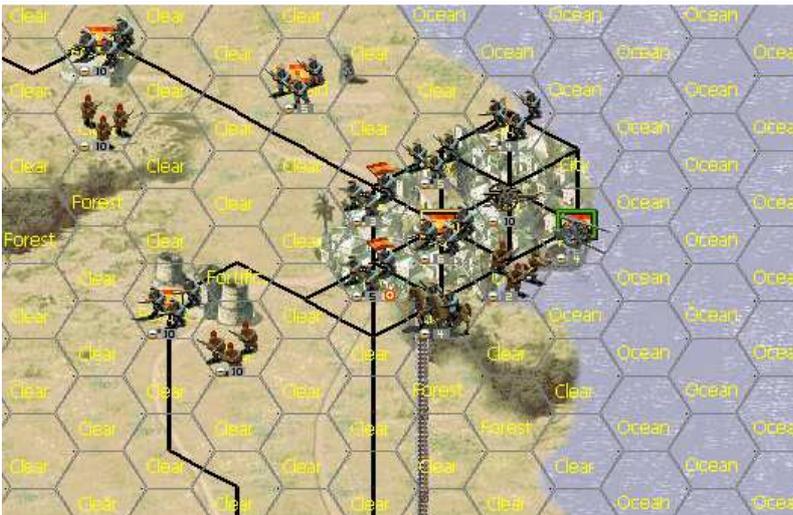
You can show the terrain type of all hexes and roads/railroads on the map by pressing the **L** hotkey or with the [button] button. To show the grid you can click the [button] button or the **H** hotkey.

3.8.3. Option Buttons

To the right of the *Main Game window* there are some buttons; if any of them is greyed it means that this option isn't available. If you point the mouse to any of them, a text will appear in the middle of the upper information bar describing its function.

Next unit: select next unmoved unit; if all have moved it's deactivated.

Cancel move: undo last movement; it's deactivated if the movement detected any enemy unit. A canceled movement doesn't spend fuel and allows the unit to do any other action.

Requisition: shows the *Requisition window* to buy new units. See the "Requisition window" section for more information.

Deploy: enters deployment mode, where you can deploy your units, initial ones or bought ones. See the "Deployment panel" section for more information.

Headquarter: shows the HQ window, where player can look at his units or buy new ones. For detailed information see the "Headquarters window" section.

Air mode: switches between air and ground units, as both can occupy the same hex.

Strategic/Battlefield map: switches between normal and strategic map. The strategic map shows the map on a small scale, with the objectives and spotted units. You can go to any part of the battlefield by clicking on it in the strategic map.

Replay: replays last turn. Only activated in PBEM.

Chat: not used yet.

Additional Options: shows additional options. See the "Additional Options menu" section for more information.

Full Screen: shows the *Main Game window* at full screen, without borders. Click it again to return to the normal view.

End turn: ends your turn and starts your opponent's turn.

Game functions: shows a window where you can save, load, start a new game or exit the program. For more information see the "Game Functions window" section.

Settings: shows the *Settings main window*.

3.9. Pop-Up Windows

There are some windows that are shown whenever needed, usually in the *Main Game window*.

3.9.1. Deployment Panel

Deployment of units in Open General can be done in several ways. In the first scenario of most campaigns, core units are already deployed; in the rest of scenarios, player's units could be deployed in deployment hexes, usable only in the first turn, or in the supply hexes and adjacent hexes (depends on terrain).

Deployment of air units is different, as they can only be deployed at airfields; some aircraft can be deployed from other units, like carriers. If the player has more aircraft than deployment hexes, he can deploy them once the first deployed ones are moved.

Deployment in the first turn.

At the start of the first turn of all scenarios of a campaign except the first, the player can deploy some or all of his core units; just select any of the units at the right panel and click in any of the deployment hexes. If you want, you can undeploy any deployed unit, just by clicking on it, unless you close the deployment panel.

Deployment hexes are darkened, as you can see in the image, but only until you close the deployment window. After that, you can only deploy in supply and adjacent hexes, just like in the following turns. New units bought after the first deployment phase can only deploy at or adjacent to supply hexes, after pressing the **Deploy** button.

You can select other patterns to show the deployment hexes by pressing **Alt + 1**,…, **Alt + 6**.

Deployment in any other turn.
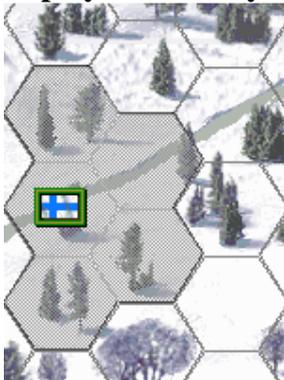
When the player buys more units in the scenario, or when the scenario designer gives less deployment hexes than core units has the player, the only option to deploy are supply hexes or combined supply/victory hexes. The hex and all adjacent hexes can be used to deploy, depending on terrain. The deployment method is the same than on the first turn.

3.9.2. Additional Options Menu

By pressing the **Additional Options** button you get these new buttons instead of the normal ones:

Status report (**B** hotkey): shows the *Turn summary window*.

Scenario intro (**I** hotkey): shows the scenario intro.

List of hotkeys (**K** hotkey): shows the hotkeys.

Show terrain labels and data (**L** hotkey): shows the terrain type and the roads/railroads.

Show grid (**H** hotkey): toggles the view of the hex borders over the map.

Music On-Off: turns background music on and off.

Sound effects On-Off: turns units rounds on and off.

Show combat results on map also: shows the combat results in the map, over the involved units.

Show spotted hexes on map (**Tab** hotkey): shows spotted hexes.

Hide unit strength & combat estimated (**U** hotkey).

Show range of fire for selected unit (**Ctrl+R** hotkey).

Video and other options (**/** hotkey): shows the settings window.

Done (**.** hotkey): returns to normal buttons.

3.9.3. Game Functions Window

The *Game Functions window* is shown by clicking the **Game functions** button.
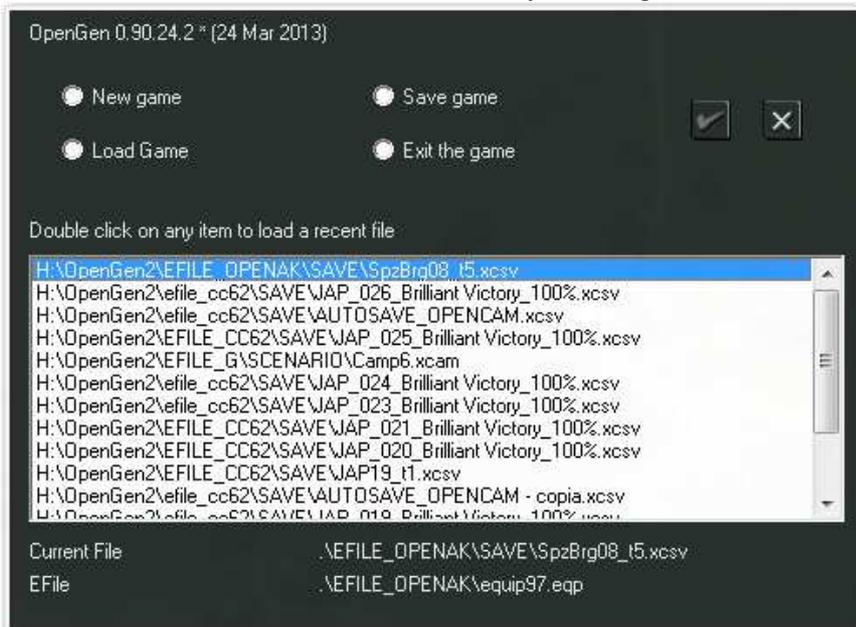
It has four main orders: **New game**, **Load game**, **Save game** and **Exit game**; it has a list of the recent files used, so you can double click in any of them to load them, and in the lower part it shows the current file loaded and the Efile in use. At the top you can see the game version that you are using.

New game
Returns to the Start Screen, where you can choose a new Efile, campaign, scenario…
Load game
Shows a new window, where you can select any saved game for the actual Efile; you can sort the saves by date and choose if you want to see PG2 saved games, OG saved games or both. When you

select any saved game, the name of the campaign or scenario is shown in the lower left part of the window, and the sides and prestige settings in the middle right.
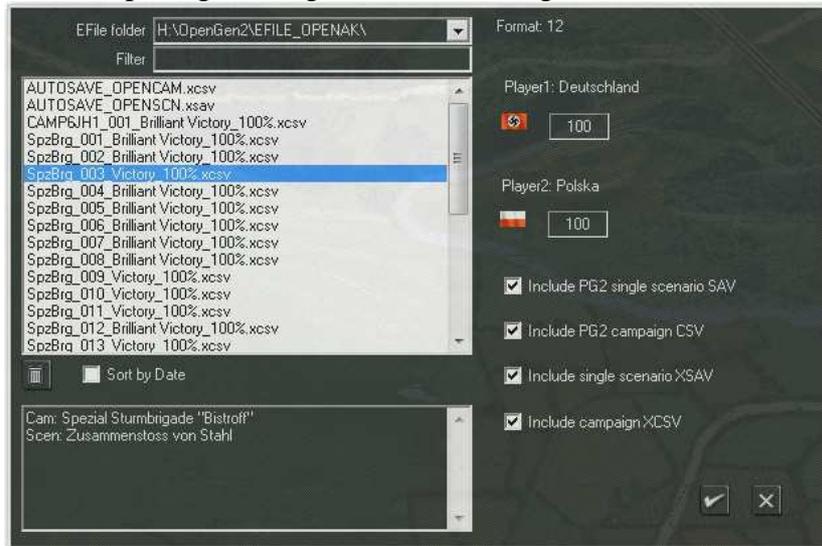
To load the saved game, just double click on it or select it and click the **Accept** button. You can delete the currently selected saved game by clicking in the small dustbin icon just below the saved game list.

Save Game

When you select this option a new window appears where you can save the current game. The window is similar to the Load game one, but here you can type the name of your saved game; it gives a default name, but it can be changed.
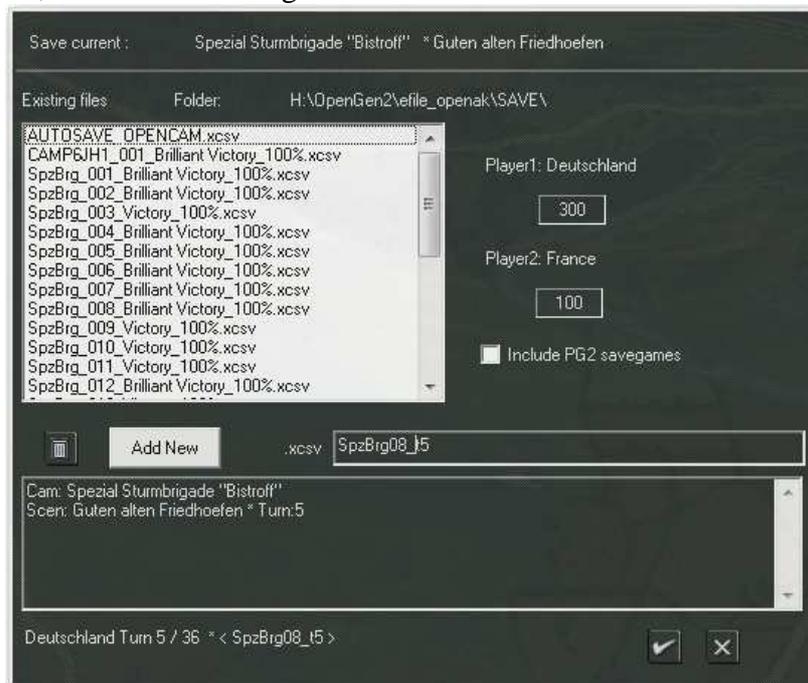
To save your game, type another name if you want and click the **Accept** button. You can delete the currently selected saved game by clicking in the small dustbin icon just below the saved game list.

The game saves the scenario at the end of your turn (AUTOSAVE_OPENSCE if a standalone scenario, AUTOSAVE_OPENCAM if a campaign's scenario) and at the end of each scenario of a campaign. Of course you can save anytime, except during the AI's turn.

Exit game

If you select **Exit game**, a new window asks you for confirmation, and if you click the **Accept** button, you exit the game to your desktop.

3.9.4. View Unit Window

You can go to the *View Unit window* by right clicking on any unit in the map, the *HQ window*, the *Purchase window* or the *Upgrade window*.

At the top of the window you get the unit's image, with its experience bars and its flag. Over the unit's image the unit abilities are show; you can point the mouse to this zone to see an extended explanation of them. If the unit has any transport you can see a wheel icon in the lower right corner of the unit's image; you can change the window to show the transport's stats by clicking in one side of the icon. Below the image is the unit's name and its statistics; you can get a detailed explanation of this statistics and the abilities at the "Units Statistics and Abilities" section.

At the bottom of the *View unit* window you have six buttons controlling some actions, with the "**Exit**" button at the end.

Mount - Dismount in organic transport. A mounted unit uses its organic transport stats if attacked, unless it has the *Dismount if attacked* ability.

Embark - Disembark in non-organic transport (naval, air, rail, helo). Embarking and disembarking can only be done if the unit has done nothing. See the "Embarking and Disembarking" section for more info.

Supply. Resupplies the unit's fuel and ammo, and ends its turn. For more information go to the "Supply Rules" section.

Replacements. Replaces lost strength points and resupplies the unit; this ends the unit's turn. See the "Replacements" section for a longer explanation.

Rename. You can change the unit's name; just type the new name in the window that appears.

Exit the *View Unit window*.

3.9.5. Turn Summary Window

At the start of any turn, the Turn Summary window appears; you can show it anytime with the **B** hotkey.

At the top there are the campaign and scenario names. At the left is the date, the player whose turn it is, the side and if it's played by human or the AI, the current prestige available to the player and the prestige modifier. In the middle it's the weather. At the right it's the turn number and the total turns of the scenario, and the turns available to each victory type. At the bottom of the window you have the helo transport points available and the buttons for **Save game**, **AAR** and **Accept**.

3.10. Secondary windows

The *Requisition*, *Headquarters* and *Dossier* windows can be accessed from several other windows; when you exit them you return to the window from which you accessed them.

3.10.1. Requisition Window

Player can buy new units, if he has enough prestige. To buy any unit press the **Requisition** button; then the *Requisition window* will show.
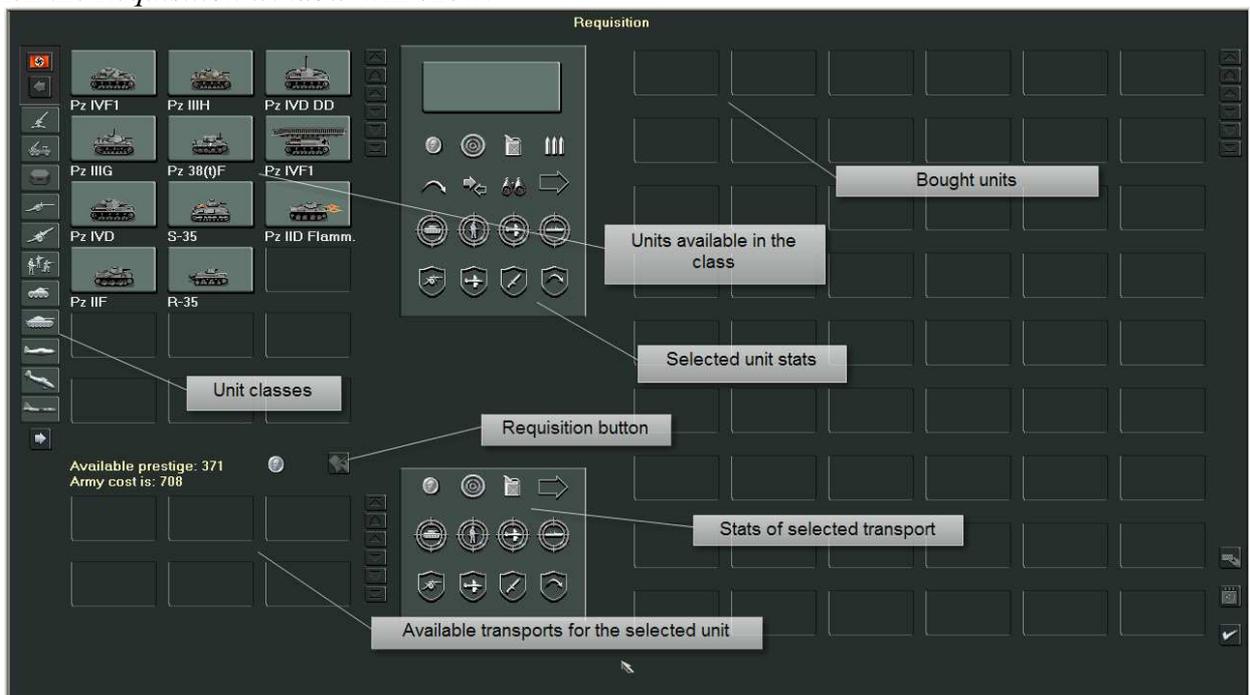
First you select the class of the unit that you want to buy (the small arrow at the bottom of the classes displays the naval classes), and then you click in the desired unit; if there are more units than fit in the window, you can use the buttons to the right to scroll the list; you can also select units from other countries defined as allied in the scenario, by clicking the arrow button in the upper left

corner of the window, just below the flag. When you have the unit selected, you can choose a transport (if allowed). After you have selected the unit and its transport, press the **Requisition** button, and the unit will appear in the window's right. To deploy your new units, just press the **Exit** button, in the lower right corner of the window, and you will be shown the *Deployment panel*.

Some units are self-propelled, like tanks, so they don't need a transport, but others like most artillery units need one to move fast or to move at all.

3.10.2.   Headquarters Window

The *HQ window* allows you to examine your units. To enter it you must click the **Headquarters** button.

To the right of this window you can see new buttons:

Dossier: shows the *Dossier window*. For more information see the "Dossier Window" section.

Inspect Unit: shows the *Inspect Unit window* for the selected unit.

Go to Unit: shows the selected unit on the map.

Requisition Unit: shows the *Requisition window*. For more information see the "Requisition Window" section.

Overstrength Unit: adds a strength point to the selected unit each time that you click on it, with a limit of the base unit strength plus its experience bars. Only available before a scenario starts.

Upgrade Unit: shows the *Unit Upgrade window*.

Reassign Unit: removes the unit from the core and gets back its cost in prestige points; can only be used between battles.

Game Function: shows the *Game Functions window*.

Core units cost and cap values: shows the unit's costs and the cap values.

AAR: shows the *After Action Report*.

Exit: exits the *HQ window*.

Some buttons could be deactivated depending on turn and campaign options.

When you point the mouse to any unit you get some info about it in the upper border of the screen. If you click in the unit you get its stats in a panel to the left of the window.

When a unit has at least one experience bar, it is possible to give it more strength than its "normal" maximum. Each experience bar allows for one strength point over the normal maximum, which is paid in prestige points in the *HQ window*, before the start of the scenario. You can do this by selecting the unit and pressing the **Overstrength** button one time for each overstrength point. If the unit gets damaged in a scenario, the **Replacements** button only restores its original strength, not the overstrength one.

3.10.3. Upgrade Window

Units can be upgraded to more powerful equipment when it is available; upgraded units keep its experience.
Units can only be upgraded between scenarios, in the HQ window.
Upgrading costs prestige points, and if the player downgrades a unit to another one with a lower cost, the difference is not recovered.
To upgrade any unit, just press the **Upgrade Unit** button and the *Upgrade window* will appear.
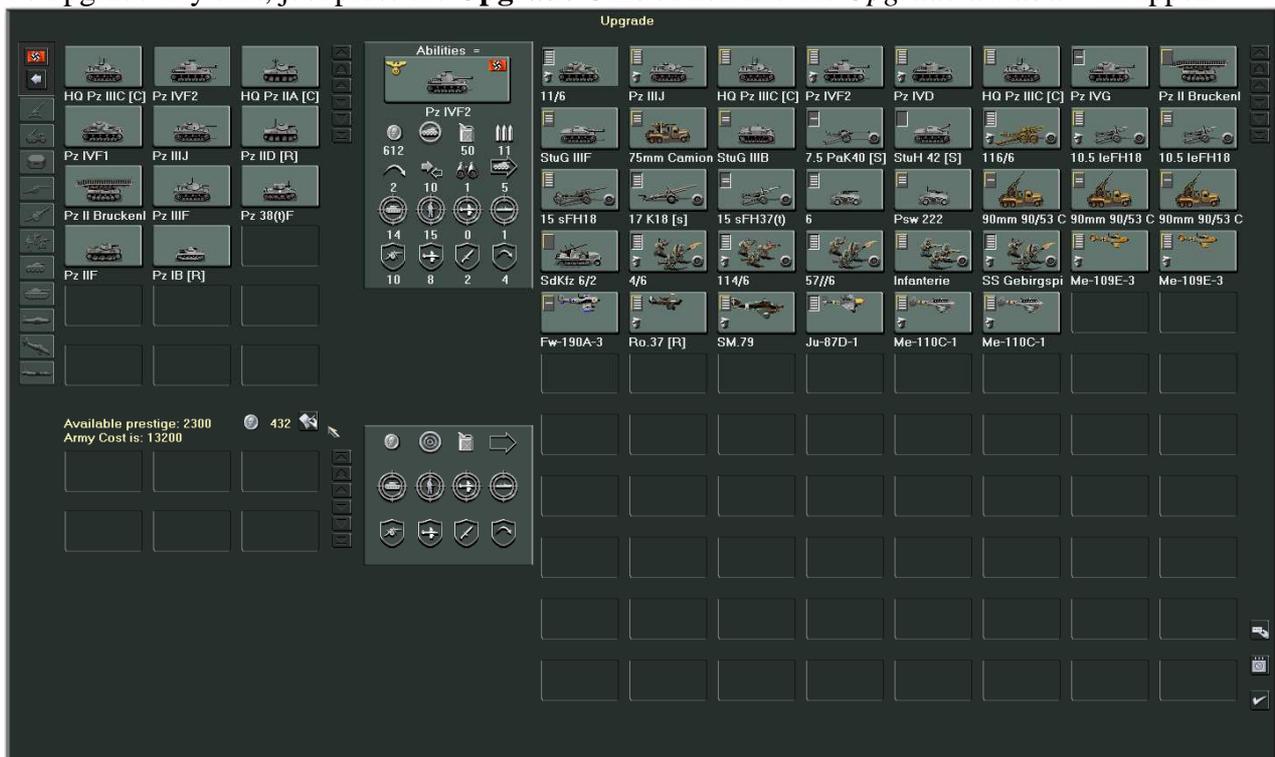
Just select the unit to be upgraded from the list at the right, select the new equipment and/or transport in the left of the window and press the **Upgrade** button. You can select allied countries equipment with the small arrow beneath the flag in the upper left corner

3.10.4. Dossier Window

When you click the Dossier button, the Dossier window is shown.

In this window, you get your general's portrait and name; if you click in the name you can change it. Below the name is the total score of the campaign and the average score of the scenarios. Next you get the total number of each class of victory and to its right the casualties inflicted and taken, by type of unit. The medals are different for each victory type.

3.10.5. Inspect Unit Window

When you click in the unit icon in the left part of the window, or in the **Inspect Unit** button the *Inspect Unit* window appears. In this window you get more info about the unit, like battles where the unit got an experience bar, destroyed units, leader generation probability or leader abilities.
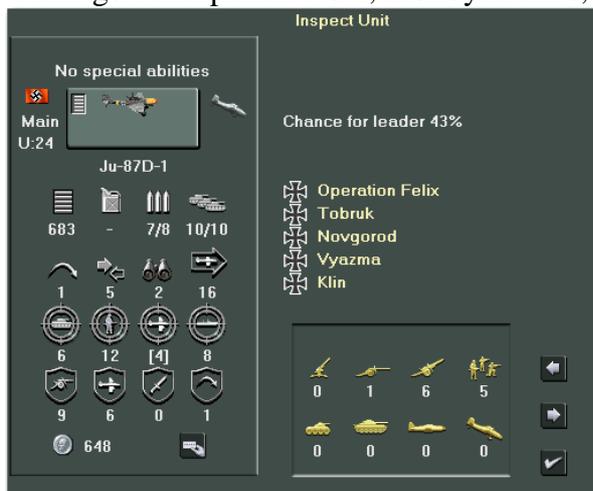
This is a *Inspect Unit* window from a unit without leader. You can see the chance of generating a leader.

This is a *Inspect Unit* window of a unit with leader: you get the leader's photo and name, and two symbols to its right that, when pointed with the mouse, tell you about his abilities.

The buttons with arrows at the lower right of the window allow you to go to the previous or next unit.

3.10.6. AAR Window

The *AAR window* shows the *After Action Report*. You can copy it and paste where you want (forum, document, mail…) to record you performance or show you core and other information.

The *AAR* contains the game version, the Efile folder and Efile version, the campaign/scenario name, the prestige settings, played scenarios with result and prototypes gained, current scenario, info about the prestige, and info about your core units. Some of the info of the *AAR* can be customized in the *Settings window*.

4. Multiplayer Game

Actually Open General only support "hotseat" multiplayer. This is done by two players alternating to take their turn in the same computer. To do this, just start any scenario, but set both sides as human controlled.

5. Play by E-mail

PBEM is playing a scenario by one player making his turn and then sending it by e-mail to his opponent; then he does the same and so on until the end of the scenario.

When playing PBEM, both players must use the same version of the game, and the same version of the same Efile; if not, there could be problems.

To start a PBEM game, just click the **Play by e-mail** button in the *Start screen*.
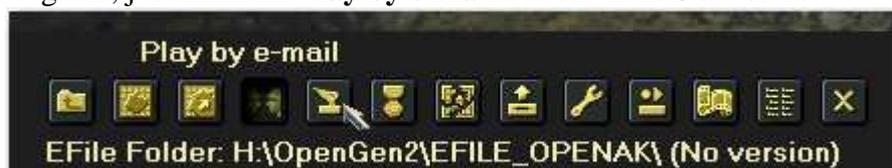
Then the *Play by e-mail window* appears; here you can start a new game or load an ongoing one.
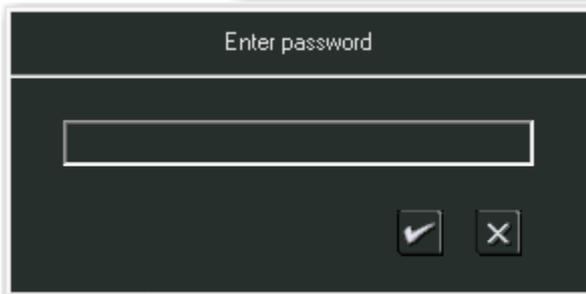
When you start a new game, you must enter a password, which is used to protect your turn, so other people cannot access it.

Then you select the scenario and play the first turn; when you finish your turn, the game saves the scenario and ends. The players that starts the PBEM plays Side 1.
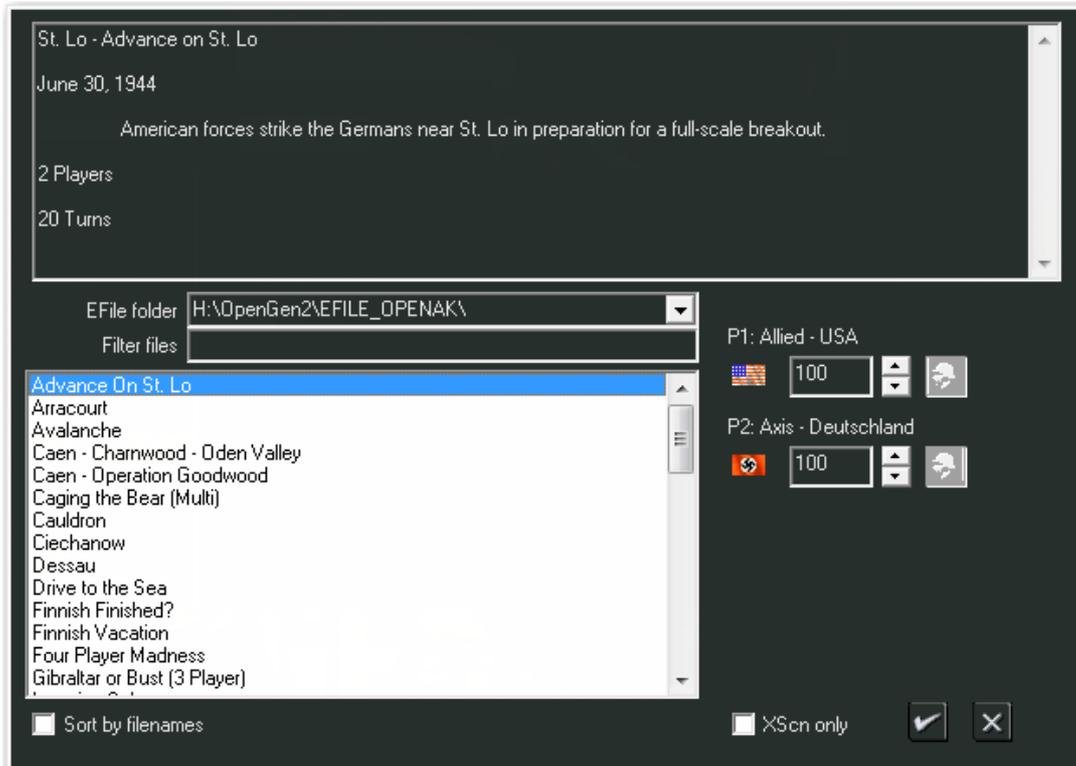
Then you must e-mail the save to your opponent; it's in the *Save* folder of the actual Efile, and has .XEML extension. The other player receives it and saves it in the same folder.

To name the saves you can use the standard **Scenario**+**Player1**+**Player2**; the game adds the turn to the end.

The other player click the **Play by e-mail** button, selects *Load game* and loads the save that he just received; after entering his password he has access to the scenario.
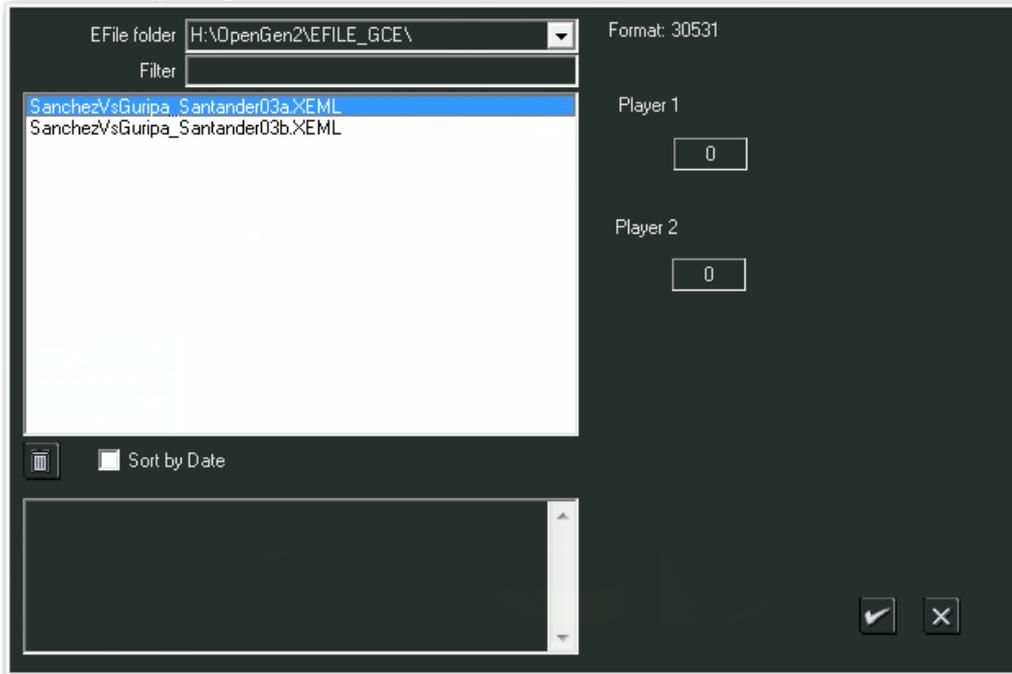
When the *Main game window* appears, the **Replay** button is active; by clicking it, he can look at a replay of its rival's turn. Then he plays its turn and sends the save to the first player, and so on until the end of the scenario.

6. Game Concepts

The following is a list of terms and concepts used in the game. Many of them are necessary to get the most of your units.

6.1. Beginning a Battle

To begin a battle, you must click the Play Campaign or Play Scenario button in the Start Screen and then select the one you want at the Campaign Selection window or the Scenario Selection Window.

6.2. Bridging units

Units with the *Bridge* ability can act as temporary bridges for other units. To do so, the unit must be in a river hex, and then its icon becomes a bridge. If the unit moves, the bridge disappears.

6.3. Campaign

A campaign is composed of several linked scenarios, where you have some units that you carry from one scenario to the next: these units are your core units, and they gain experience and sometimes leaders as they survive each combat; they can also be upgraded to better equipment.
In some campaigns you go to different series of scenarios depending on your result in the previous one; these are known as "campaign paths".

6.4. Combat

Combat usually can only be done against a detected enemy unit that is within attacking range. To attack select the attacking unit and point to the enemy unit: the estimated result of the attack will be shown; be warned that combat results will be nearly always different from this estimation, as there is a random factor involved. If you want to make the attack, just click in the enemy unit. When you select the attacked unit and there is both an air <u>and</u> a ground enemy unit in the same hex, remember to use the **Air mode** button to select if you want to attack the air unit or the ground unit; the same

goes if there is just an air unit in the hex and you want to attack it with a ground unit, as the game will be in ground mode.

When any attack happens, it can result in losses for one or both units, retreat or destruction.

Each unit can attack once per turn, if:

- It has ammo greater than 0.
- There is an enemy unit within attacking range.
- Weather allows the attack.

All units can move and attack or attack and move, except artillery and air defense; they can attack after moving only if they have the *Mechanised* ability. Anti-tank units suffer a penalty if they attack after moving.

Some terrain types give bigger initial entrenchment levels, making them easier to defend.

In close terrain, like cities and mountains, units attack the *Close defense* value of the enemy unit, penalizing the non-infantry units. The only exception is when a *Rugged defense* happens, when the *Ground defense* value is used.

Infantry and AT are very good at defending close terrain, especially against tanks. On the other side, tanks and self-propelled artillery are very good in open terrain, where other units must be entrenched to survive.

Units that can attack have a small circular icon to the left of their strength number, like the 10-strenght tank or the 6-strength vehicle in the image; units that cannot attack lack this icon, like the gun.

6.5. Core and Auxiliary Units

When you play a campaign, your army consists of core and auxiliary units. Core units are carried from one scenario to the next, so they will gain experience and become more powerful; auxiliary units are available for the present scenario only. Core units have black strength numbers, while auxiliary units have white strength numbers.

Core units left undeployed at scenario start can be deployed later in supply hexes or hexes adjacent to them.

6.6. Engineers

Units with the Engineer ability ignore the defender's entrenchment when attacking. This makes them immune to rugged defenses, and very useful to attack highly entrenched defenders.

6.7. Entrenchment

Entrenchment represents the defensive structures occupied by the unit. It needs some preparation, so if the unit spends some turns without moving (it can attack, resupply…) it will increase. If it

moves from the hex it will lose all its entrenchment. Some units entrench faster than others: usually infantry entrenches faster, while tanks are slower.

Class	Entrenchment speed
Infantry	3
Tank	1
Recon	2
AT	2
Flak	1
Fortification	1
GTP	1
ART	2
AD	2
Others	0

Base entrenchment is the entrenchment gained by any unit after one turn in a hex. The maximum entrenchment is the base entrenchment plus 5; the scenario designer can set bigger values.

Entrenchment is important as it favors the defender, and increases the possibility of a *Rugged defense*. Each attack suffered by an entrenched unit lowers its entrenchment by one.

Terrain	Base entrenchment
Clear	0
Town	3
Airfield	0
Forest	2
Bocage	2
Hill	1
Mountain	2
Snow/sand	0
Swamp	0
Ocean	0
River	0
Fortification	4
Port	1
Stream	0
Escarpment	0
Impassable river	0
Rough	2

Units lose entrenchment when attacked, even if the attack has no effect. Successive attacks in the same turn facilitate further attacks. A common tactic to attack a heavily entrenched unit is to attack it first with artillery/airplanes before the main attack by one or more units. Some units ignore entrenchments, so they are very useful attacking this fortified units.

6.8. Experience

When any unit is involved in combat, it gains experience, and when it is successful it gains more. Experience levels are shown as a bar in the upper left corner of a unit's icon; the maximum number of bars is five .When two units fight, their relative experience levels affects combat and casualties. Units with two or three experience bars are veterans, while units with four or five are elite.

Experience is awarded according to strength points eliminated, weighted by the difference between attack and defense values of the units.

A unit with more than one experience bar can be overstrengthened.

6.9. Game Turns

Battles in Open General lasts a specified number of turns. In each turn the active player is given the chance to move units, attack with them, resupply… To end your turn you must click the **End Turn** button on the *Main Game window*.

In each turn, units of the active player usually can move once and attack once, in either order; there are exceptions to this rule, like artillery and air defense units, that must attack before moving., or units with the Recon ability, that can move several times using phased movement, or tanks that overrun. Some leaders also modify this general rules.

Units that have moved have the strength number darkened, like the 10-strenght tank in the image; units that can attack have a small circular icon at the left of its strength number, like the 6-strenght vehicle. If a unit moves or attacks, you can select another unit, make any actions with it and then return later to the first to make any actions that it is allowed.

6.10. Initiative

Initiative represents the unit reaction speed in combat. It is determined by equipment, terrain and experience of the units; it also it's adjusted by a random value, to simulate combat uncertainty. Higher values are better, as units with higher initiative suffer less damage. In a *Rugged defense* the attacker's initiative is zero.

The unit that wins the initiative gets a bonus to the attack and defense, and the unit that loses gets a negative modifier to both.

6.11. Lasting suppression

Units with the Lasting suppression ability and tactical bombers inflict suppression that last the entire player turn. For example, if one of these units inflict 2 points of suppression to an enemy unit, the enemy unit uses 2 strength points less than its total strength for the rest of your turn.

6.12. Leaders

When any unit gains an experience bar (when it reaches 100 experience points or multiple, with the limit in 500), it has the opportunity of 20% of generating a leader. Leaders are exceptional figures, and have two abilities that add to the unit stats or give it some special capabilities: one of the abilities is determined by class, while the other is random.

Units with a leader have a small icon dependent of its country next to its strength number. You can see the leader's abilities by inspecting the unit; in the inspection window the leader shows as a small head icon in the lower left corner; when you point the cursor to it, its abilities are shown.

Class leader abilities:

- **Tanks**: "Aggressive Maneuver". Movement increased by one.
- **AT** (Anti-Tank): "Tank Killer". Removes the initiative penalty for firing after moving.
- **Artillery**: "Marksman". Attack range increased by one.
- **Recon**: "Elite Recon Veteran". Spotting range increased by two.

- **AD** (Air Defense): "Mechanized Veteran". Unit can fire after moving.
- **FlaK**: "FlaK Support". Multiple interception and support fire.
- **Infantry**: "Tenacious Defense". Ground defense increased by 4.
- **Fighters**: "Skilled Interceptor". Can intercept more than one enemy aircraft attacking adjacent friendly units in the same turn.
- **Tactical bombers**: "Skilled Assault". Not affected by *Out of the sun* (they cannot be surprised).
- **Ships:** "Marksman". Attack range increased by one.

Random abilities (some doesn't apply to some classes):

- **Aggressive Attack**: attack values increased by 2.
- **Aggressive Maneuver**: movement increased by 1.
- **All Weather Combat**: not affected by weather.
- **Alpine Training**: can move through forest and mountain as if they were clear terrain.
- **Battlefield Intelligence**: cannot be surprised.
- **Bridging**: unit treats river hexes like rough terrain. While in a river hex it works as a bridge.
- **Combat Support**: unit lends its experience bars to all adjacent units; ground units to ground units and air units to air units.
- **Determined Defense**: defense values increased by 2.
- **Devastating Fire**: unit can attack twice each turn; it can fire twice (overruns not included) or fire once and then resupply or reinforce in the same turn.
- **Ferocious Defense**: no unit can ignore this unit's entrenchment.
- **Fire Discipline**: unit uses half ammunition in each attack.
- **First Strike**: unit fire first if it wins the initiative (for this purpose, it uses initiative plus experience).
- **Camouflage Expert**: in forest, city, desert, bocage or mountain, unit can only be spotted by adjacent units, and fires at the first unit that enters its ZOC.
- **Infiltration Tactics**: unit ignores entrenchment like engineers; it can also act like a bridging unit.
- **Influence**: reduced cost to upgrade or reinforce (halved when playing at 100%)
- **Liberator**: unit gives additional prestige when taking enemy flags (twice, when playing at 100%)
- **Overwatch**: each turn the unit surprises the first enemy unit that enters its attack range.
- **Overwhelming Attack**: some suppression points become kills.
- **Reconnaissance Movement**: unit uses phased movement.
- **Resilience**: unit is more difficult to destroy.
- **Shock Tactics**: unit causes lasting suppression.
- **Skilled Ground Attack**: +4 to attacking ground units.
- **Skilled Reconnaissance**: increased spotting range by 1.
- **Street Fighter**: unit ignores entrenchments in cities.
- **Superior Maneuver**: unit ignores enemy's ZOC.

6.13. Movement

When any unit is selected and capable of moving (has fuel and hasn't moved), the hexes within movement range are shaded; you only need to click in one of them to move the unit to it. If the hex is very far, the unit will use his transport (if any); you can know which hexes will need the transport, as the cursor will change to a truck to reflect this. If the unit can move to a terrain that its organic transport cannot enter, a dialog will appear allowing the unit to discard the transport to be able to move there; the same will happen if the unit hasn't fuel and can move without transport.

Only air units can occupy any hex occupied by a non-aerial unit. When you want to select an air unit in a hex occupied by a ground <u>and</u> an air unit, you must click the **Air mode** button to be able to select the air unit; if the button is deactivated you'll select the ground unit.

Movement uses fuel, one point per movement point used; aircraft minimum fuel use is one third of its turn movement.

Movement could end before reaching the target hex if the unit moves adjacent to an enemy unit, or it tries to enter any hex with a previously undetected unit; in this last case an ambush will happen.

Movement by roads is faster, especially to some transport types.

Usually movement is done in one phase, but some units (from the *Recon* class or with the *Recon* ability) can use phased movement.

If you press **Shift** and then select a unit, the unit will move only by spotted hexes; if you press **Shift** with a unit already selected and then click in some hex within range, the path that the unit will follow will be marked.

If the moved unit wasn't surprised nor detected any enemy unit, you can cancel immediately its movement by clicking the **Cancel Move** button, at the right of the *Main Game window*.

Units that can move have normal strength numbers, like the gun or the 6-strength vehicle; units that have moved have their strength number darkened, like the 10-strength tank.

6.13.1. Movement Cost

Each unit has some movement points per turn, which are expended when it moves. The movement point cost of each hex depends of the terrain that the hex represents, the weather and the unit movement type. To see a table that shows this, you can point with the mouse to the symbol of the unit's movement type in the *View Unit window* or in the *Inspect Unit window*. Each movement point expended uses one fuel point.

Movement could end before reaching the destination if the unit moves adjacent to or is surprised by a previously hidden enemy unit.

6.13.2. Mounting and Dismounting Units

Units with organic transport can travel greater distances in a turn, or move if the unit doesn't have movement points of its own. Organic transport is transport that is assigned permanently to a unit, so it cannot be shared (trucks, cars, half-tracks…). To buy or change the organic transport of a unit you must upgrade it between battles.

Units can only mount or dismount before moving; units that move with its transports remain in them until the next turn, and if attacked it uses its transport stats, unless its infantry.

6.13.3. Embarking and Disembarking in Non-Organic Transports

Many units can embark in naval, air, rail or helo transport. This allows the units to move faster than with its organic transport (trucks, bicycles…). Each unit embarked uses one transport point of the type of transport it is using; when it disembarks it frees the transport point, to be used by any other unit. Transport point cannot be purchased and are given by the designer of the scenario.

When any unit is embarked in a non-organic transport and can disembark in a hex, the pointer becomes a different icon to show the possibility of disembarking. To disembark just press **Control + click** in the desired hex.

The method to embark depends of the non-organic transport used.

Naval transport

The unit must be in a port hex, hadn't done any action, be able to use naval transport and the player must have some naval transport available. You can know how many units you can move by naval transport by pointing the mouse to any port; the number of available transports will show in the top info bar.

If all conditions are fulfilled, then you can right click in the unit and click the **Embark/Disembark** button; the unit will embark in a sea transport.

Units in naval transport can disembark in any coastal hex that the unit can enter normally.

Air transport

The unit must be in an airfield hex, hadn't done any action, have the *Airmobile* or *Airborne* ability and the player must have some air transport available. You can know how many units you can move by air transport by pointing the mouse to any airfield; the number of available transports will show in the top info bar.

If all conditions are fulfilled, then you can right click in the unit and click the **Embark/Disembark** button; the unit will embark in an air transport and can be moved.

If the unit has the *Airmobile* ability it can only disembark in an airfield hex; if it has the *Airborne* ability, it can paradrop in any hex that could be entered by the unit.

To be able to carry its organic transport into the air transport, the unit's organic transport must be also *Airmobile*/*Airborne*.

Rail transport

The unit must be in a station hex (or in a railway hex if it has the *No station* ability), hadn't done any action, be capable of moving by rail transport and the player must have some rail transport available. You can know how many units you can move by rail transport by pointing the mouse to any station; the number of available transports will show in the top info bar.

If all conditions are fulfilled, then you can right click in the unit and click the **Embark/Disembark** button; the unit will embark in a train transport.

Helo transport

The unit shouldn't have done any action, must be able to use helo transport and the player must have some helo transport available. You can know how many units you can move by helo transport in the briefing window, at the bottom left.

If the conditions are fulfilled, then you can right click in the unit and click the **Embark/Disembark** button; the unit will embark in a helo transport.

6.14. Multiple Attacks

A unit not only loses strength, entrenchment and sometimes (lasting) suppressed strength after an attack. Also, his fighting ability is diminished the more battles it fights during a turn: its initiative and defense is reduced by each attack.

6.15. Overrun

Units with the *Overrun* ability and Tank class by default can do a special attack called "Overrun". If the attacking unit destroys the defender (usually weakened by previous attacks), it can continue its movement and attack again; this way, one of these units can destroy several enemy units in one turn.

6.16. Phased movement

Units with the Recon ability and the Recon class by default can move more than once in a turn. They can move, stop, and continue moving, as long as they have more movement points. For each stop, one movement point is deducted.

6.17. Prestige Points

Prestige points (PP) represent the influence of the player over the High Command. They are earned in the scenario (prestige per turn, or by conquering flagged hexes), or after the scenario, depending on victory level.

Prestige points can be used to:
- Repair damaged units during the scenario.
- Buy new units before, during or after the scenario.
- Upgrade units after the scenario.
- Overstrength units before the scenario.
- Build bridges, fortifications, ports and rail stations.

When you select any scenario or campaign to play, you can modify the prestige earned: default is 100%, with a 0%-500% limit.

This modifier affects the turn prestige and the flagged hexes prestige. For example:
- Turn prestige: 400
- Total flagged hexes prestige: 200

If you play at 50% you will get 300 PP ((400+200)/2), if you play at 100% you will get 600 (400+200) and if you play at 200% you will get 1.200 ((400+200)*2)

To change the prestige modifier use the arrow buttons.

6.18. Ranged Fire

Ranged fire is different from artillery and air defense fire. Some units can attack at ranges greater than one hex, but are affected by terrain: hills, mountains, cities, forest and bocage cut the line of fire of these units, making an attack impossible.

If the defending unit is attacked from a range greater than its own, it cannot counterattack, so it's a good idea to attack units from out of their firing range.

6.19. Replacements

Damaged units can be repaired in the scenario spending prestige points. Strength points recovered depend on available prestige, hex terrain and enemy proximity. Using replacements preserve the unit's experience and leaders, and resupplies the unit.

To give replacements to any unit, right click on it and press the **Replacements** button.

6.20. Rugged Defense

Rugged defense could occur by two causes: automatically if any unit tries to move in the hex of a hidden unit (in air units is known as *Out of the sun*, and in naval units as *Surprise contact*), or if an <u>infantry</u> entrenched unit is attacked by an adjacent enemy unit; in this last case the probability of a *Rugged defense* depends of the experience of both units, the unit's classes and the entrenchment level of the defender.

This represents units with enough time to prepare good defensive positions or ambushes. If the entrenchment is zero, or if the attacker is any unit with the *Engineer* ability, there is no possibility of a *Rugged defense*.

6.21. Spotting Units

At the start of any turn, all hexes are unspotted, except the ones adjacent to cities, port or airfield owned by the active player, or within spotting range of friendly units. The spotting range of air units is halved in *Overcast*, and the one of other units is halved in rain or snow. When any hex is spotted in a player's turn, it stays spotted the full turn. When a unit moves, it spots all hexes within its spotting range; enemy units detected could be attacked only if within attack range.

Spotted hexes can be shown in two ways: first one is enabling the Fog of War (FoW) with **"Alt+9";** with this option unspotted hexes are shadowed and hexes spotted by known enemy units or cities are shown by red binoculars:

or if FoW is deactivated, with the **"Tab"** hotkey or the ![binoculars icon] button:

The black binoculars show your spotted hexes, while red binoculars show hexes spotted by known enemy units or cities.

When static units (units with movement points equal to 0 and without transport) are spotted, they stay known even when out of spotting range of your units.

6.22. Strength

Units have at least one strength points or are destroyed. The current strength is shown below the unit icon in the map, as a small number. The base strength is the strength at which the unit is replenished between scenarios (usually for free) and can be seen in the *View Unit window* or in the *Inspect Unit window*, in the form of two numbers separated by a slash: first one is the actual strength and the second is the base strength. Units with greater strength make stronger attacks.

Strength points can be replenished to base strength with the Replacements button, at the cost of some prestige; by pointing the mouse to the Replacements button you can see a text over the unit icon that shows the cost and the strength points restored. The strength points recovered can be modified by terrain or enemy adjacent units.

Experienced units can be overstrengthened to its base strength plus its experience bars.

If unit is without ammo, its strength to attack and defend is halved.

6.23. Supply Rules

When a unit shoots (in attack or defense) it uses an ammo point; when it moves, it spends one point of fuel for each movement point used, except in snow, when it uses two points of fuel for each movement point. Both, ammo and fuel can be replenished by resupplying.

Some units are resupplied automatically: air units in or adjacent to an airfield and naval units in a port that end the turn there, and ground units that do nothing in the turn.

Resupplying can be done manually, by clicking in the Resupply button of the View Unit window. The resupply is modified by some terrain and enemy units adjacent. Resupplying doesn't cost any prestige points.

Units that receive replacements automatically resupply.

Supply hexes are where you can deploy requisitioned units in the second and following turns of a scenario. Capturing an enemy supply hex doesn't automatically allow you to deploy from it, you must check the supply hex characteristics by pointing to it with the mouse: if the appearing text says that is a supply hex for owner of for you side, you'll be allowed to deploy from it.

If a unit doesn't have ammo, it cannot attack and defends with halved unsuppressed strength and halved initiative. If a unit doesn't have fuel, it cannot move and have its initiative halved; if it is a plane and isn't in an airfield or adjacent hex, it crashes and it is destroyed.

6.24. Support Fire

Support fire is given by some units when a friendly unit is attacked; it happens BEFORE the attack that triggered it. If the attacking unit is destroyed by the support fire, or if it suffers kills plus suppression equal to its strength the attack is broken. There are two types of support fire: units adjacent to the attacked unit give full strength support fire, while others do it with halved strength. Artillery units give support fire to all ground units attacked by ground units within their range.

The air equivalent of support fire is interception. Fighters adjacent to bombers or attacked ground units can intercept the attacking air units, but fighters can only do one interception each turn and attacking air units can only be intercepted once each turn.

6.25. Suppression

Suppression represents combat results different from destruction; suppressed strength points aren't available in combat. It only lasts one combat turn, but the suppression inflicted by bombers or units with the *Lasting suppression* ability lasts one player turn. You can see the actual suppression of any pointed unit in the lower right part of the window. If any units suffers more kills plus suppressed strength points than its actual strength it must retreat, and if it cannot retreat it surrenders or is destroyed instead.

6.26. Terrain

Each hex of the map represents one terrain type; you can see the terrain by pressing the L hotkey. Terrain affects movement, entrenchment and when some options are activated, line of fire and line of sight.

In cities forests and mountains, defending and attacking infantry attack the ground defense stat of the enemy unit, which gives infantry units an advantage in those terrain types.

Rivers are hexes that can delay movement, as many units must use all its movement points to enter them, and some cannot be entered at all (*Impassable rivers*); bridging units are very useful there, as they create a temporary bridge by entering the river, so other units can cross faster.

6.27. Using Artillery and Air Defense

Both of these unit types can attack their targets without retaliation. However they usually must use transport to move, so they will be very vulnerable and can't provide support fire in this condition; even dismounted they are very vulnerable to attacks, so take special care with them.

6.28. Victory Conditions

In each scenario, you must achieve some conditions to win; if you don't meet any of those victory conditions by scenario's end you lose. Depending of the turn in which you achieve them you can earn one of three victory levels:

- *Brilliant Victory*: it could grant you a prototype.
- *Victory*.
- *Tactical Victory*.

Victory conditions can be:

- Conquer all Victory Hexes (VH).
- Kill all enemy units or just some of them.
- Keep some VH a number or turns.
- Conquer certain VH in a number of turns.
- Retreat from the map a number of your units.

Some of these conditions can be asked for simultaneously, but you must only meet one of them to win the scenario.

The victory conditions are written in the scenario introduction, but during the game you can look at them by pressing the "**B**" hotkey.

Some units can't take hexes; you must look in their stats.

6.29. Weather

Weather is determined randomly, based in the month and area of the battle. Possibilities are, best to worst: *Fair*, *Overcast*, *Rain* or *Snow*.

Bad weather usually benefits the defender and the side with air inferiority, because of the impossibility of air units to attack in bad weather, except for units with the *All weather* leader. Bad weather is good to refit and refuel.

You can see the weather at the top right of the screen, or at the turn briefing when you press the "**B**" hotkey. If you point to the weather icon a message will appear with an approximate weather forecast.

Bad weather affects air to ground or ground to air combat, as attacking strength is halved except with *All weather combat* leader of ability. In rain or snow defense is modified by +3.

Also weather could affect ground condition, which could make unit's movement costs different. Ground condition can be *Dry*, *Frozen* or *Mud*, each with different movement costs. Ground condition appears next to weather, at the top right of the window.

When there are several continuous turns of rain, the ground condition changes to Mud, and after several turns without rain, it changes to Dry. In case of several turns of snow, the ground condition changes to Frozen, and after some without snow, it changes to mud.

6.30. Zone of Control

The six hexes around a unit are its zone of control. When any unit moves into the zone of control of a unit from other player, the unit's movement is finished, unless the moving unit has the Recon ability. Air units usually don't have a zone of control.

7. Unit Statistics and Abilities

When you right click any unit, you get a window with its stats; by pointing to each symbol, you get a brief explanation about it.

Experience level: each 100 experience points you earn an experience bar, with a maximum of 5. Experience increases unit efectivity.

Fuel: available or total fuel, depending on window. When it reaches 0 unit cannot move and have a penalty when attacked, until resupplied.

Ammo: available or total ammo, depending on window. When it reaches 0 unit cannot attack, and have a penalty when attacked, until resupplied.

Strength: actual or total "health" of the unit, depending on window. When it reaches 0, the unit is destroyed.

Range: distance in hexes that the unit can attack.

Initiative: ability of the unit to react in combat, used to calculate the results of combat. It could be modified by terrain and experience.

Spot: range in hexes that the unit can spot. Can change depending on weather.

Movement: the unit's movement points. Movement points are spent depending on the entered hex terrain and the ground condition. The icon shows the movement type, and if you point to it a table with the movement costs shows.

Hard attack: strength of the unit when attacking armored units. If it is 0 the unit cannot attack this target type.

Soft attack: strength of the unit when attacking unarmored targets. If it is 0 the unit cannot attack this target type.

Air attack: strength of the unit when attacking air targets. If it is 0 the unit cannot attack this target type.

Naval attack: strength of the unit when attacking naval targets. If it is 0 the unit cannot attack this target type.

Ground defense: unit's ability to defend against ground and naval attacks.

Air defense: unit's ability to defend against air attacks. Air units use it to defend against any attack type.

Close defense: non-infantry unit's ability to attack infantry units in mountain, forest or city, or to defend in mountain, forest or city against infantry. Also used in *Rugged defenses* to defend by the attacking unit.

Range defense: unit's ability to defend against ranged attacks from ground units. It is <u>not</u> used to defend against artillery attacks.

Cost: unit cost in prestige points.

Any attack value that is bracketed means that the unit cannot start that type of attack, but it can defend with the value.

To the right of the unit's icon there is a symbol to show its class; if you point to this symbol, you can know the target type of the unit. Target types are Hard (attacked by *Hard attack* value), Soft (attacked by *Soft attack* value), Naval (attacked by *Naval attack* value) and Air (attacked by *Air attack* value).

When you point at any unit in the map, some of its stats are show at the right of the lower information bar.

7/5 Exp:138 Ent:0 Fuel:49 Mov:4 Ammo:15

In this example, the unit has an actual strength of 7, a base strength of 5, an experience of 138, is entrenched 0 levels, has 49 fuel points, 4 movement points and 15 points of ammo.

7.1. Comparing units

You can compare the stats of one of your units with any spotted enemy unit. To do so you must click the arrow button in the upper left corner of the game window, then click in your unit and then point the mouse to any enemy unit.

The compared stats will appear at the left side of the window, like in the following image:
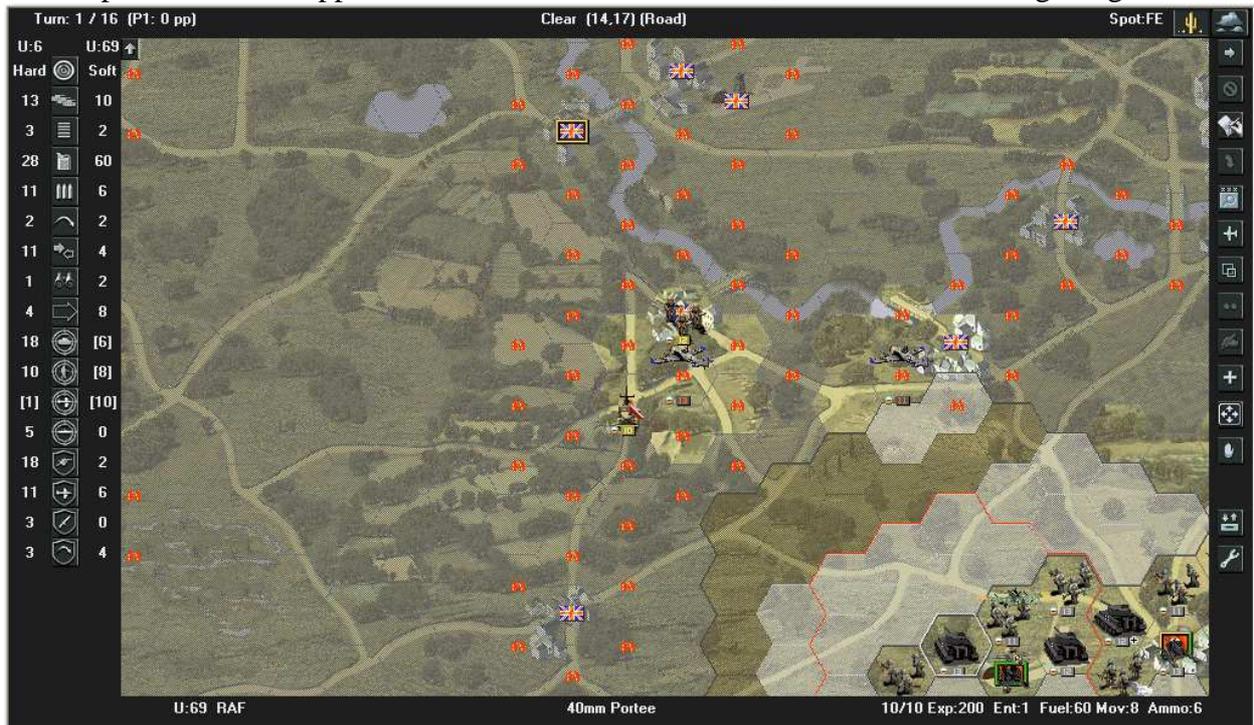
7.2. Unit abilities

- **Lasting suppression**: suppression inflicted by the units lasts until end of turn.
- **Can blow**: unit can destroy bridges, airfields…
- **Engineer**: unit ignores enemy entrenchment when attacking.
- **Bridge**: unit acts as a bridge when in a river hex.
- **Mountain**: unit moves in mountain, hill and rough hexes like in clear terrain.
- **Recon**: unit can use phased movement.
- **Dismount**: unit dismounts its transport when attacked. If infantry it doesn't dismount when attacked.
- **Support fire**: unit gives support fire.
- **Air support**: can supply air units, the same than an airfield.
- **Air Transportable**: transport can be transported by plane.
- **Can Air Attack**: unit can attack air units.
- **Combat support**: unit lends his experience bars to adjacent units.
- **Carrier deploy**: units can be deployed from carriers.
- **Capture**: unit can conquer flagged hexes.
- **Mechanized**: unit can move AND fire.
- **Marine**: unit can move after landing from a naval transport.
- **No-surrender**: unit doesn't surrender when it cannot retreat.
- **Sapper or Build/Repair**: unit can build and repair.
- **Dismount after move**: unit dismounts from its transport after completing movement.
- **Cannot use dirt airfields**: unit can't refuel nor deploy in airfields defined as dirt or built by sappers during the scenario.
- **Rocket bomber**: unit can attack ground units within full range.
- **Cut LOS**: unit cuts LOS through it.
- **Allow LOF**: unit doesn't cut LOF.
- **No ZOC**: unit hasn't ZOC.
- **Evade**: unit has a 50% probability of evading any attack, like submarines.

- **No leader**: unit cannot get a leader.
- **All weather**: unit can attack despite bad weather.
- **Drop mines**: unit can create minefields.
- **Clear mines**: unit can clear minefields.
- **Overrun toggle**: allows overruns for self propelled units; for tanks disable overruns.
- **Intercept toggle**: can intercept; for AD/FlaK disables interception.
- **No need station**: can embark and disembark from trains without a station.
- **Counter battery**: unit can attack enemy artillery units in range that attack friendly units.
- **No Ammo penalty**: unit doesn't suffer penalty for defending without ammo.
- **Partisan**: unit cannot be surprised.
- **Exploit success**: can move after attacking if the enemy unit is killed or retreats.
- **Torpedo bomber**: can attack adjacent units if both are located at sea.
- **ASW**: can attack submarines.

8. Unit Classes

This is a list of default characteristics of the different classes in Open General; some of them can be modified by the Efile designer, so always look at the unit's abilities in the *Inspect unit window*.

8.1. Ground Classes

8.1.1. Air Defense

This class represents towed and self-propelled air defense units. They can attack enemy aircraft within their range, and protect units in range from air attacks.

Self-propelled units are more flexible than towed ones, as they can move and be ready for action immediately, without the need to dismount.

If the option is activated, they can intercept enemy aircraft: they are attacked if they fly within range of an unspotted air defense unit.

8.1.2. Anti-tank.

This class represents towed and self-propelled anti-tank units. If they move and then attack they suffer a penalty to initiative.

8.1.3. Artillery

This class represent towed and self-propelled guns than can attack from a distance, give support fire and if option is enabled do barrage fire and destroy some terrain.

8.1.4. FlaK

These units that can attack ground units and behave like Air Defense units with range 1.

8.1.5. Fortifications

Those are static units with high defense values. If you cannot bypass them, you must use a combination of artillery and aerial bombardment, followed by an assault by units with the engineer ability.

8.1.6. Infantry

Units from this class by default dismount from transport if attacked. They are good at combat against other classes in difficult terrain, like cities, mountains or forests.

8.1.7. Recon

These units have phased movement by default. They usually have greater spotting ranges than other units. Use them to scout enemy positions before launching an attack.

8.1.8. Tank

Units from this class have the overrun ability by default. If they are used properly they are a very powerful weapon.

8.1.9. Transport

Transports can be horse wagons, mules, trucks, half-tracks… They provide transport for other units, specially towed units that cannot move without them. Only infantry units and units with the *Dismount if attacked* ability dismount when attacked; other units are attacked while in their transports, using their usually weak stats.

8.2. Air Classes

8.2.1. Air Transport

Air transport is a non-organic transport represented by air transport points, so units with the Airmobile or Airborne ability can be transported by air, faster than by their own means. See the "Embarking and disembarking" section for more information.

Air transports are very vulnerable to fighters and air defense units, so its better to provide fighter escort.

8.2.2. Fighter

Units from the fighter class can attack other air units, escort bombers and defend adjacent ground units from air attack.

8.2.3. Level Bomber

Level bombers can attack terrain, inflict lasting suppression, prestige loss and ammo/fuel loss.

8.2.4. Tactical Bomber

Tactical bombers include light bombers, medium bombers, fighter-bombers, dive bombers and specialized ground attack aircraft.

They inflict lasting suppression and can attack submarines if have a "Naval attack" greater than cero.

8.3. Naval Classes

8.3.1. Aircraft Carrier

The aircraft carriers can deploy and resupply some planes in its own hex. They are usually very vulnerable to attacks

8.3.2. Capital Ships

Battleship

Battle Cruiser

Cruiser

Light Cruiser

Those classes can make ranged attacks and move and shoot in either order.

8.3.3. Destroyer

The destroyer class consists of destroyers, destroyer escorts, patrol craft, torpedo boats and other minor vessels.

Destroyers can create/remove minefields (if the scenario option is activated) and attack submarines.

8.3.4. Naval Transport

Naval transport cannot be purchased: it's set up by the scenario designer. These units carry another unit from one port to any coastal hex. They are highly vulnerable, so they should be protected from attacks.

8.3.5. Submarine

Submarines are units that can only be attacked by destroyers of tactical bombers, and sometimes can evade an attack.

9. Optional Rules

9.1. Air Missions

Air missions are a new way of employing the air units in the game. Instead of "normal" units that move like ground units, when this rule is activated planes start the turn in an airfield, the player select one mission for them by pointing the mouse at them and pressing the desired number in the keyboard, and then click in the target hex; the selected mission becomes the default mission for the plane. By default all missions return to base at the end of the second player's turn. The air missions are:

- **Rest**: the unit doesn't move and resupplies its ammo. If you don't do anything with the unit, it will execute this action.
- **Recon**: the plane flies to the desired hex and can be intercepted by AA or enemy fighters, but only with halved strength; in this case plane returns to base immediately. When it arrives to its target, it returns to base immediately.
- **Move/attack**: the unit moves to the target hex within range, where it can attack any ground unit or adjacent air unit. If it is adjacent to a friendly bomber and the unit is a fighter, it will give escort to the bomber. Also it can defend adjacent ground units from air attack.
- **Wild weasel**: it can only target spotted AD or FlaK. It can be intercepted (mission won't be aborted). Upon arriving to its target it attacks without suffering any interception and returns to base immediately.
- **Ground supply**: the unit resupplies the target friendly ground unit.
- **Change base**: the unit moves to another hex that must be an air supply hex, and take it as its base.

Air missions need airfields and adjacent hexes to base the planes (carriers and dirt airfields can only base one plane); if you have more planes than available hexes, the planes cannot be used. Air missions also disable fuel for planes.

When you embark any unit in a transport, the unit must move and disembark in the same turn, or it will be back to the base and disembark there.

9.2. Barrage

Units with the Can bombard/barrage ability sometimes can do barrage fire. For barrage fire to work it must be enabled by the designer and the unit must have the ability to do so.

When any unit can do barrage fire, the pointer becomes a crosshair when it is over hexes that it can attack; to do the barrage just by clicking on them. Units present in a non-visible hex attacked by a barrage could lose strength points, and terrain could be destroyed.
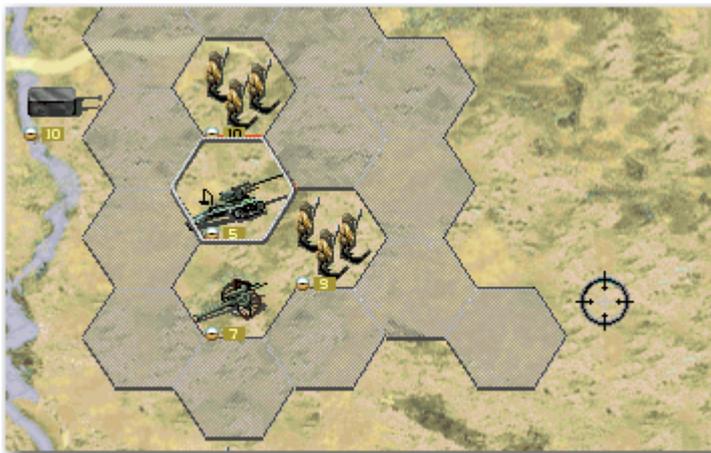
9.3. Build and Repair

Some units can modify the terrain of the hex where they are. All this options must be enabled by the scenario designer to work.

Some of these actions last several turns until finished. To know the turns until the end of the action, point to the unit and you will see it at the right part of the upper information bar.

9.3.1. Bridge destruction

To destroy a bridge, any unit with the *Can blow* ability must be in the bridge. When you point to it you will get a menu with the "**1 Blow**" option; just press the **1** key in the keyboard to destroy the bridge.

9.3.2. Bridge construction

To build a bridge a unit with the *Sapper* ability must be in a river hex. When you point to the unit you get a menu with the "**3 Bld Brigde**" option; just press the **3** key in the keyboard to start the construction. The construction of a bridge costs 16 PP.

9.3.3. Fortification construction

To build a fortification, a unit with the *Sapper* ability must be in a hex and hasn't done any action. If you point to the unit, you get a menu with the "**7 Bld Fortific.**" option; just press the **7** key in the keyboard to start the construction. The construction of a fortification costs 12 PP.

9.3.4. Airfield construction

To build an airfield, a unit with the *Sapper* ability must be in a clear hex and hasn't done any action. If you point to the unit, you get a menu with the "**5 Bld Airfield**" option; just press the **5** key in the keyboard to start the construction. The airfield construction costs 20 PP.

Airfields built this way are considered dirt airfields, so they can only supply one aircraft per turn, the one located in its same hex.

9.3.5. Port construction

To build a port, a unit with the *Sapper* ability must be in a coast hex and hasn't done any action. If you point to the unit, you get a menu with the "**6 Bld Port**" option; just press the **6** key in the keyboard to start the construction. The construction of a port costs 12 PP.

9.3.6. Railroad station construction

To build a railroad station, a unit with the *Sapper* ability must be in a rail hex and hasn't done any action. If you point to the unit, you get a menu with the "**4 Bld Station**" option; just press the **4** key in the keyboard to start the construction. The construction of a railroad station costs 18 PP.

9.3.7. Terrain destruction

To destroy a hex, any unit with the *Can blow* ability must be in the hex and hasn't done any action; when you point to it a menu is shown with some actions, "**1 Blow**" among them; just press the **1** key in the keyboard to destroy the hex.

9.3.8. Repair

To repair any destroyed facility, road or rail, any unit with the *Sapper* ability must be in the hex, and hadn't done any action; when you point the mouse at it, it shows the possible actions, one of them "**2 Repair**"; you only need to press the **2** key in the keyboard to start the repair.

9.4. Counterbattery

Some artillery units could have the Counterbattery ability, so they will fire to enemy artillery units in range attacking friendly units, once per turn.

9.5. Extended LOS

When this scenario option is activated:
- Mountains, hills forest and city hexes cut LOS to the hexes opposite them.
- Units in forest hexes aren't spotted by other ground units, unless adjacent.
- Units in forest or city hexes aren't spotted by air units more than 2 hexes away.
- Units than cannot move and are spotted, remain located, but can only be inspected if within spotting range.

9.6. Extended Naval Rules

When *Extended naval rules* are in effect, the following changes occur:
- Ships return fire to artillery and forts.
- Ships can only attack submarines at range 1.
- Destroyers can escort naval transports against submarine attacks, just like fighters escort bombers.
- Submarines need direct LOF to attack.

9.7. Hangars

When this rule is enabled (at Efile level), carriers have a limited capacity to carry/resupply aircraft. To land a plane in a carrier, just move it to the carrier's hex; it will land automatically.
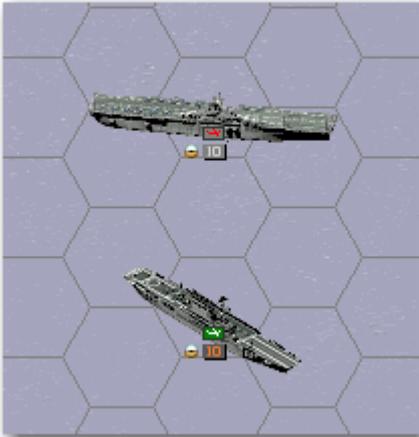
Carriers have a small symbol over its strength number: if the symbol has a white plane, the carrier has some empty hangars; if the plane is red the carrier is full; if the symbol is completely white then the carrier is empty. In the image, the carrier at the top is full, while the one at the bottom has some free hangars.

When you right click in a carrier, the view unit window is different than for other units: it has two new buttons at the bottom and a new column at the right with all hangars shown. The new button with the arrow (*Toggles planes/carrier*) toggles the window between carrier and aircraft view; the other one (*Launch unit from hangar*) launches the selected aircraft from the carrier so it appears in the map. You cannot launch a unit that has landed in the same turn.

While unit are landed, they can be resupplied or receive replacements

Carrier view

Hangar view

9.8. Interception

If this option is enabled, AD and FlaK classes can attack aircraft that fly within its range (1 hex for FlaK), if they are undetected, or if the plane ends its movement within their range.

9.9. Minefields

In Open General, minefields aren't units, but a terrain characteristic. This refers to minefields created during the scenario, or defined that way by the designer; you can always use minefield units when designing a scenario.

Mines can be created in the scenario by units with the *Drop mines* ability, and cleared by units with the *Clear mines* ability; naval mines can be created and removed by destroyers and units with the same ability.

If any unit enters a detected minefield, it uses all its movement; if any unit enters an undetected minefield, it suffers some damage and ends its movement. When in a minefield, any unit has 1 movement point and decreased defense.

To clear a minefield, the unit must be in the mined hex: you must point to the unit and then a menu will show, with the "**9 Clear mine**" option; just press the **9** key in the keyboard and the unit will try to clear the minefield. If the unit fails to remove the minefield it will be suppressed to some extent.

To create a minefield, the unit must be in the hex without doing any previous action: you must point to the unit and a menu will appear, with the "**8 Minefield**" option; just press the **8** key in the keyboard and the hex will be mined. Creating a minefield costs two ammo points to the unit.
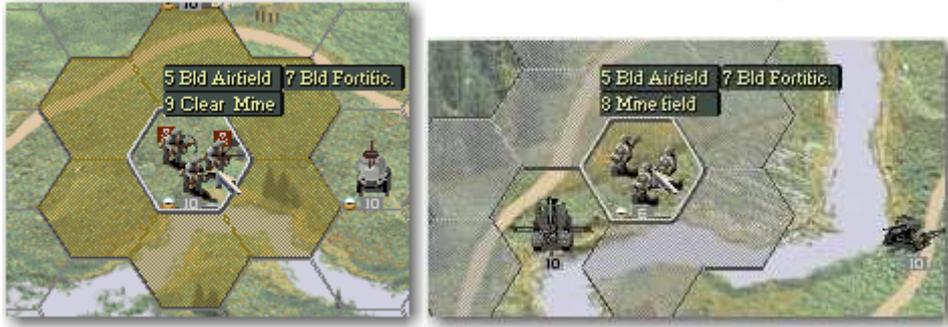
9.10. Triggers

Triggers are hexes that give special rewards when any ground unit enters them. There are seven types of trigger:

- Unit replacements: Unit is fully resupplied and reinforced.
- Troop improvement: Unit gains random or defined by a parameter experience.
- Prototype: A proto is awarded from units available from next month to current scenario with a 9 months' time frame.
- Commendation: Unit gets a random leader, if available.
- Extra prestige/Good press: Random or defined by parameter increase in prestige.
- Change AI stance: toggles the AI stance between Aggressive and Defensive.
- Reveal to the player the map for one turn (Spy info on enemy): random or defined by parameter range in hexes of map revealed for that turn.

When a player's unit enters the trigger hex, a message will inform the player, but no when it's the AI who does it.

10. Links

Here you have some links to the main webpages with material for Open General and Panzer General 2:

Luis Guzmán's web page:

http://luis-guzman.com/

JP's Wargame & History Forums:

http://www.panzercentral.com/forum/viewforum.php?f=178

Kaiser General:

https://sites.google.com/site/jkpanzer/

Steve PG2 Campaign:

http://hosted.wargamer.com/pg2campaigns/steve/pg2.htm

Gilestiel PG2 Mapfinder:

http://pg2mapfinder.gilestiel.eu/

Adlerkorps:

http://www.adlerkorps.com/

The MG Bunker:

http://sites.google.com/site/themgbunker/

OpenGeneral & PanzerGeneral (polish):

http://www.pg2.net.pl/

Polecam (polish):

http://opengeneral.pl/polecam.html

Polish forum:

http://www.forum.gildiageneralow.pl/opengen/0/

Rayydar's (German):

http://www.rayy.de/raiders/pages_e/RayyFrames2N.html

Panzerliga:

http://www.panzerliga.de/en/index.php

11. Acknowledgements

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To my wife and daughter.

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For comments, suggestions… you can write me at gbs6711@gmail.com

12. Version history

0.1   First released version, full of mistakes (game, spelling, translation…) :p

0.2   Some restructuration done. A longer description of non-organic transports added.

0.3   Adapted to exe v0.90.23. Changes made to "Folder structure", "Movement", "Initiative", "Leaders", "Weather and Ground Condition", "Unit abilities" and "Efile Folder selection".

0.4   Reordered to mimic the Panzer General 2 manual. Many new sections and images added.

0.5   Added triggers and hangars. Tutorial section now refers to a separate document. Some corrections and additions here and there. Completed Multiplayer and PBEM sections.