

# GAME MANUAL

GOLD EDITION

# ADVANCED TACTICS





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# FROM WARSAW TO PARIS... AND THEN ON TO LONDON!



The development team behind the award-winning game *Advanced Tactics: World War II* is back with a new and improved game engine that focuses on the decisive early days of World War II! *Decisive Campaigns: The Blitzkrieg from Warsaw to Paris* is the first in an innovative series of operational World War II wargames that also include a strategic element. *The Blitzkrieg from Warsaw to Paris* simulates Germany's military successes in Poland and France in 1939 and 1940 (including also a hypothetical "Sea Lion" invasion of Great Britain if you do well enough).

Well researched and packed with depth, including detailed unit data down to the squad and vehicle level and historically realistic combined arms gameplay, *The Blitzkrieg from Warsaw to Paris* also features an easy-to-learn interface and a ferocious AI. Before each campaign, players choose actions and options at a strategic level which can have far-reaching effects on how the actual battle unfolds, with many plausible hypothetical outcomes.

Once in the battle, players move regiments and divisions, coordinate attacks and manage logistics in what we feel is the definitive game on the campaigns of the early Blitzkrieg. There are also unique actions for individual historical generals to give a particular objective or front the extra needed push to victory. *Decisive Campaigns: The Blitzkrieg from Warsaw to Paris* also includes a unique multiplayer feature where players can split up Axis or Allied armies between several people to add an added level of realism and cooperation!



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# 1. ADVANCED TACTICS: GOLD EDITION™

Thank you for purchasing Advanced Tactics: Gold Edition!

## 1.1. MINIMUM SYSTEM REQUIREMENTS

To play Advanced Tactics: Gold, your computer system must meet these requirements:

<b>OS:</b>	XP, Vista, Windows 7
<b>CPU:</b>	1.5 GHZ , recommended: 2 Ghz
<b>RAM:</b>	1.5 GB, recommended: 2 GB
<b>Graphics:</b>	software accelerated, no particular video card required
<b>Sound:</b>	Basic Soundcard
<b>HD space:</b>	500 MB, recommended 1 GB

## 1.2. INSTALLATION PROCEDURES

Insert the game CD into the CD-ROM drive. Setup will run automatically. If Setup does not start, run Setup.exe from the Windows directory on the CD.

When the Setup screen appears, click Install Advanced Tactics: Gold. Double-click the Advanced Tactics icon. On the introductory screen, click "Play".

## 1.3. UNINSTALLING THE GAME

Please use the Add/Remove Programs option from the Windows Control Panel to uninstall the game or the Uninstall option in the Advanced Tactics menu item under the Start Menu.

## 1.4. PRODUCT UPDATES

In order to maintain our product excellence, Matrix Games releases updates containing new features, enhancements, and corrections to any known issues. Keeping up with these updates is made easy and is free by signing up for a Matrix Games Member. When you're signed up, you can then register your Matrix Games products in order to receive access to these important game-related materials.

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Remember, once you have signed up for a Matrix Games Member account, you do not have to sign up again – at that point you are free to register for any Matrix Games product you purchase. Thank you and enjoy your game!

## 1.5. GAME FORUMS

Our forums are one of the best things about Matrix Games. Every game has its own forum with our designers, developers and the gamers playing the game. If you are experiencing a problem, have a question or just an idea on how to make the game better, post a message there. Go to <http://www.matrixgames.com> and click on the Forums hyperlink.

## 1.6. NEED HELP?

The best way to contact us if you are having a problem with one of our games is through our Help Desk. Our Help Desk has FAQs as well as a dedicated support staff that answer questions within 24 hours, Monday through Friday. Support questions sent in on Saturday and Sunday may wait 48 hours for a reply. You can get to our Help Desk by going to <http://www.matrixgames.com/helpdesk>.

## 1.7. TECHNICAL SUPPORT

Should you have a technical problem with the game, the best way to get help is to post a note in the Technical Support sub-forum within the Advanced Tactics forum at <http://www.matrixgames.com>. You'll then hear back from our personnel, or from one of the many helpful players of the game. This is usually the fastest way to get help. Alternatively, you can email your problem to [support@matrixgames.com](mailto:support@matrixgames.com).

## 1.8. ADVANCED TACTICS: GOLD EDITION NEW FEATURES

The following features have been added to Advanced Tactics in the Gold version:

- » Actioncards that you can play on specific hex or on specific unit
- » Extra layer of landscapetype graphics you can paint on a hex to display extra information or symbols

- » Conquest of a hex can result in an actioncard being triggered ("You conquered Paris!")
- » Battle Stack point rule for normal, artillery and air attack. This rule will terminate the gamey exploit of attacking the same hex over and over until it breaks.
- » Original Owner rule option so that reconquered original territory from ally returns to ally when liberated.
- » Items can belong to up to 4 different ProdMod categories. Each peoples have 4 different prodmods. This will allow much more complicated ownership influence of production.
- » ItemType can set XP, Mor, People, MoveType of the subformation that they cause to be produced
- » Production prediction takes into account resource use, and resources can now be seriously presented and used by the player. For example: Raw, Fuel, Manpower...
- » LocationTypes can be drawn by overdrawing a graphic over the hex graphic instead of replacing the landscape of the hex.
- » LocationTypes can now require research and resources to be build
- » LocationType building can be limited to certain value in certain areaslot.
- » Building a locationtype can change the value of an areaslot
- » Messages can now play a sound file when they are shown to player
- » Version is checked and remembered per player so in PBEMs you can see who's on which version. This will be useful when patches will come up later for possible cheat bugs.
- » Regimes can mirror their silhouette pictures for their SFTypes
- » Research cards can have cost in Resources instead of in Political Points.
- » MoveType overrule on subformation level
- » Readiness loss per Attack is an option
- » Penalties in first rounds of attack for attacker rule is now an option
- » Prevent Hit statistics for SFTypes (like a halftrack can catch a hit for an infantry) is now an option
- » Defensive Hitpoints for each SFTYPE to per unitgroup that attacks them. To create special vulnerabilities.
- » Resource rules that can influence movement and attack scores of SFTYPE. Can be used to model Fuel.
- » An enormous load of new EXECs and CHECKS (like 100 extra checks and execs)
- » Stringlists as separate data-object, they allow easy importing and exporting of data sheets for scripting purposes.

- » Tempstrings in event editor, so you can now dynamically build text replies for messages.
- » Lose EP on movement rule option
- » Allow Free Movement rule (for making for example a free deployment phase) option
- » Resource costs can be charged for road and bridge building
- » Declare War costs rule option
- » Battles can cause movement delays (ap penalty on hex) rule. This makes it very hard to attack in waves if there is a serious defense.
- » Airfield Surprise Rule and Air Intercept Chance Rule: these 2 new air rules will make it possible to eliminate the huge air stock always wins problem.
- » Naval Movement can get ambushed rule
- » Alliances!
  - » Allies share recon rule
  - » Allies support ally in combat versus other ally rule option (or stay neutral in that battle)
- » 3 Zoom modes
- » Campaign Room functionality (a scenario without map stuck in command center screen with special background and title)
- » New Random algorithm
- » Neutral Sea Hex sharing rule (for example Japan and American naval units can share hex)
- » Giving of units to ally
- » Giving of hexes to ally
- » Giving of research to ally
- » Resource window (with predictions of next round levels after and before production uses resources)
- » Full hide enemy rule option (for free deployment phase)
- » Moddable systemgraphics (everything is moddable)
- » Execs to play background music and wavs
- » Watch the AI move while its moves come in while it's making it.
- » Scriptable startup of game through startup text files and optional mod files to chose from
- » A combat detail screen for those who like to study exactly how each modifier was used.
- » The AI has been increased by almost a factor of 100x on huge maps.
- » Option to give locationtypes NoHQ or AutoProd settings

- » A hell of a lot of small changes to rules and bug fixes
- » Save/Load speed improvement
- » AI works in separate thread now.
- » Extra hex painting, roads and rivers graphics options
- » More map and troop type graphics options
- » Hex coloring has been added. This should help those wargamer who suffer from some forms of color deficiencies to better see who owns what terrain.

## 1.9. INTRODUCTION

Welcome to the new version of Advanced Tactics! Advanced Tactics: Gold It challenges the wargamer on the tactical, operational and the strategic level with more grognard battle and production rules, seasons, climates, more peoples and alliances as well as other new strategic factors. In addition, you must now manage your industrial resources: oil and ore.

Advanced Tactics: Gold is not just one game, its a wargame construction set. It can do random 4X games, operational and strategic games, or even Roman era or space exploration games. The imagination of scenario designers is basically the limit of what the game can do (while designing human only play games).

Development from Advanced Tactics to Advanced Tactics: Gold focussed on giving scenario designers more options and adding rules and features to the engine.

Advanced Tactics: Gold brings fresh features and rules, fresh manual and wiki, fresh scenariobank, fresh graphics and fresh random games and troop types.

Though Advanced Tactics might not be the most fashionable game around, VR Designs keeps turning back to it. VR Designs has grown fond of the community playing it and the players that are building scenarios for it and hopes to keep supporting them with increasingly refined and expanded versions of the game.

The Scenariobank on [www.advancedtactics.org](http://www.advancedtactics.org) will stay in continued operation as it is an easy way for scenario designers to share their creations with others. The new import/export zip functionality should aid in making sharing scenarios even easier.

I hope you enjoy Advanced Tactics: Gold (ATG)!

Kind regards, Victor Reijkersz

## 1.10. WORD OF THANKS

I want to thank all the players, testers and scenario designers that have been playing Advanced Tactics throughout the years... and in some cases Peoples Tactics before it! Without them I could never have brought the game to the stage of Advanced Tactics: Gold.

## 1.11. STARTING PLAY

Random games start with everyone at peace and a standing infantry army distributed among your cities. Will you attempt to remain neutral while you build up your armies and industrial capacity or will you launch a surprise attack on an unsuspecting player? Will you make an alliance to only later stab your ally in the back by revoking it? Will someone betray you? Just remember you reap what you sow: get a reputation as a back stabber and it may become difficult to get allies in future games.

Whatever you do, have fun! Winning is always more enjoyable than losing, but much can be learned in defeat. You'll be a better gamer and more appreciated by the wargaming community if you put up a good fight even when things aren't going your way. Who knows, with a little luck and some shifting alliances things could even turn around.

Playing the tutorials and the AI is a good way to learn the basics and develop your mastery of the ATG game system and the art of war within it. If you have experience with the original Advanced Tactics, you are already well on your way. Just realize that the game AI does not have anywhere near the critical thinking skills of a human player. In standard random games the AI is given certain advantages to make it more competitive. It is not perfect and may do things that seem stupid at times. It is also possible that things can begin to go badly for you in an AI game. The tendency then is to get frustrated at the game, but try adjusting your force mixture to counter new conditions on the battlefield (e.g. building bazookas and/or anti-tank guns).

## 1.12. GENERAL TACTICAL AND STRATEGIC ADVICE

In this game, troop quantities and equipment technology being equal, it will be skill and mastery of the art of war which will bring victory. The first thing a good general should do is conceive a plan. This is especially true in this game. You should buy the weapons you need for your plan to succeed. Players without a plan will buy the wrong equipment and subsequently lose. Do not get tempted to just build a little bit of everything available!

Your plan should be flexible, since as you might have heard that in war, plans rarely survive first contact with the enemy. A simple, flexible plan should outline which parts of the front (or expected front) should be attacked, and which parts should be defended. A smart general will also designate some areas behind the front in which to gather reserve forces. More concretely, you'll have to decide what to produce and if you want to invest production capacity in higher tech levels for those weapons. The earlier in the game you get intelligence about the enemy, the better. For example, building many light tanks when the enemy has medium tanks may not be the best course of action.

Aircraft are basically an offensive weapon as they are best used in destroying or weakening enemy units at critical locations. However, they can also be used to good effect to blunt an enemy attack. Enemy AA will usually be found in his offensive armies, though it will be a very resourceful general that is able to afford AA guns to cover all of their army. Mastery of the sky also allows you to use paratroopers in offensive operations. Dropping troops far behind the

lines can cause an enemy without reserves enormous troubles and facilitate a quick advance for your main force. Also, bombing missions on bridges, forts, and towns will prove much easier to conduct if not intercepted.

No battle will be decided by air alone though, especially not if the terrain is rugged and provides good cover against aircraft. For waging a successful land campaign, a lot of strategies are possible. But the basics remain effective, too, such as using tanks for offensive operations and infantry for defensive operations. For countering enemy armor, the most effective weapon is anti tank guns or your own armor, preferably stronger (e.g. medium over light tanks). Even massed infantry could do reasonably well countering attacking enemy armor formations. Try to hold a line where the terrain is the most rugged, since armor will fight less well there. Also, equip your infantry formations with some sort of anti-tank weaponry, like bazookas or anti-tank guns. Having one or more armored formations behind the line to counterattack any breakthroughs will pay off. For breaking through enemy defensive lines you should try to focus all your armor on a small part of their front and then use the speed of armor to breakthrough into the rear. Preferably, armor should make some sort of encirclement of part of the enemy front. Strong positions should be softened up with artillery and air strikes before attacking with your armor. If the terrain is not suitable for armored attack, make sure you have mortars and artillery with your infantry. Of course even the strategies and counter strategies described above can be countered. But as a rule of thumb they should work. It all depends on the flexibility of your plan and your willingness to change tactics.

Reserves can be crucial. Since fresh green troops will die very easily, it is more than advisable to have battle-worthy, fully-trained troops behind the line to counter any enemy breakthroughs. These reserves should at least be partially mobile to move quickly to any trouble spot.

Artillery can be very easy to underestimate. While it might give you casualties, it probably won't produce them in large numbers. Casualties from artillery are not the only thing you should worry about, however. Artillery reduces unit Readiness dramatically and hurts their Morale if they're exposed to it for multiple turns. Massed artillery fire will reduce your troop's combat value by 50% or more. This preparation, possibly combined with an air strike, will greatly increase the enemy's chances of breaking your lines wide open. If possible, use airpower to destroy enemy artillery; otherwise, try a small-scale offensive if enemy artillery is massed.

The ultimate game-winning tactic on land is encirclement. If you manage to cut off enemy troops from their supplies, they will be sitting ducks. Pick an area that lacks production capability (e.g. no towns, or towns too small to supply the enemy in the area) to surround to increase their supply drain.

And last but not least, always keep an eye on your supply. Make sure you have adequate roads to provide supply in all eventualities. If there are bridges on the map, make sure you build more at crucial points, as one bridge can easily be destroyed by an aerial bombing mission. A prudent general will always keep some engineers just behind the front to make sure bridges can quickly be repaired and supplies can flow smoothly.



## 1.13. MANUAL SETUP

Chapter 2 of this manual explains what you see on the screen and what button does what and how to give orders.

Chapter 3 gives you a quick overview of the rules in the Advanced Tactics: Gold scenarios.

Chapter 4 goes in depth on the actual rules. Keep in mind that chapter 4 is designed to be true for any scenario you play with AT Gold. Be they classic scenarios, user made scenarios from the scenariobank (Roman Empire, Eastern Front divisional level to space games) or AT Gold rules scenarios. This means chapter 4 often refers to so called rulevars instead of to meaningful exact numbers. This is done because different scenarios use different rules (and rulevar settings).

The best way to use this manual is to read chapter 2 first. Then chapter 3 and then start playing and use chapter 4 for specific questions that might popup while playing.

Part of this manual, especially chapter 4 is based on the Advanced Tactics wiki. Check it out by surfing to [www.vrdesigns.nl](http://www.vrdesigns.nl) or [www.advancedtactics.org](http://www.advancedtactics.org).

## 2. INTERFACE

### 2.1. MAIN MENU SCREEN



When the game is launched, you will see this screen and it is where you select what you want to do: load a scenario, load a saved game, create a new random game, create a new classic AT game, install a ZIP file or visit the Advanced Tactics website.



uploader uses the export zip functionality of AT Gold this will always be the case, but with some older AT entries to the scenariobank it might not always have been done properly.

## 2.1.6. EDITOR

This button directly starts up the editor with an empty scenario.

## 2.2. NEW RANDOM GAME SCREEN



Select from the following options to create your random game. After you have made your selections, press the Make button to create your random game. Large maps can take a little while to create so be patient. To return to the main screen without creating a random game, press the back button.

### 2.2.1. WORLD SIZE

You can select one of the following sizes for your random game: Small (41 x 21 hexes), Medium (61 x 31 hexes), Large (71 x 41 hexes), X-Large (91 x 61 hexes), XX-Large (131 x 91 hexes) and Unplayable Large (171 x 121 hexes).

### 2.2.2. PLAYERS

Select between 2 to 14 players.

### 2.2.3. WORLD TYPE

Select one of the following four world types for your random game: No oceans (map is all land with a few lakes), Dry World (approximately 20% water), Wet World (approximately 50% water) and Oceania (approximately 80% water).

## 2.2.4. MAP LOOP

There is no map edge on the horizontal plane (the world is round). Note that with small maps on wide screen monitors set to high resolution the map may not scroll but units can still move off the edge and appear on the other side of the map. If you have a very widescreen monitor you might avoid playing small world maps.

## 2.2.5. MIRRORISH

You can only select this option if you are making a two-player map. It will ensure the map is sort of a mirror of itself with the central axis running from diagonally from the northwest to southeast. With this option, you can ensure a reasonably fair random map.

## 2.2.6. SHROUD

Selecting this option covers the map in total darkness for all players, including the player that created the map. Only map hexes that belong to your Regime will be visible at game start. As you move your units during game play, additional hexes come into view.

## 2.2.7. ONE TOWN START

Each player will start with only one city and one unit (Supreme HQ). Combining this option with Stone Age and/or No Roads will make for a slow mobilization of your military and create a race to discover and claim additional cities and resources.

## 2.2.8. STONE AGE

Your unit production options will be minimal at game start (engineer, rifle, staff, horses, trucks, and trains). Some Regimes may have militia in addition to the others.

## 2.2.9. CRATES AND HIDDEN AI

When playing with shroud activated and this option activated random crates will be placed on the map. When you capture a crate you will get a surprise. You will find either a mercenary base, a research laboratory or an enemy town controlled by the AI.

## 2.2.10. HIDDEN STATS

Normally in new random games you will be able to see the core statistics of your enemy in the statistics screen. With this option on they will be hidden.

## 2.2.11. AI ALLIED

If there are more than two AI players, they will be allied. Essentially this means that one AI player will not declare war on another AI player. Little if any cooperation will occur between them.

## 2.2.12. NO ROADS

You'll have no roads (railroads) and will have to build them with your engineers.

### **2.2.13. WILD LAND**

Less towns and more wilderness.

### **2.2.14. DESERTED LAND**

Even more wild than wild land and thus even less towns and even more wilderness.

### **2.2.15. DEPLETED LAND**

Less resources (raw and oil for example) will be placed on the map.

### **2.2.16. COSTLY RESEARCH**

Research will be more expensive when this option is turned on.

### **2.2.17. NO CLIMATE**

Always summer...

### **2.2.18. FULL RANGE**

You have all four seasons: winter, spring, summer and fall. And you will have four climate zones: arctic, temperate, subtropical and tropical. In addition deserts will be placed on the map.

### **2.2.19. ARCTIC-TEMPERATE**

You have all four seasons: winter, spring, summer and fall. And you will have two climate zones: arctic and temperate.

### **2.2.20. SUBTROPIC-TROPIC**

You have all four seasons: winter, spring, summer and fall. And you will have two climate zones: subtropical and tropical. In addition deserts will be placed on the map.

## 2.3. SCENARIO SETUP SCREEN

Once a scenario has been loaded, or a random game created, you will see the following screen. Custom scenarios may have additional items on this screen. This screen contains a narrative description of the scenario or random game. Other items on this screen are explained below.



### 2.3.1. FOG OF WAR

Selecting this option hides all enemy units not currently visible to your units based on their recon level. For serious game play you are advised to select this option.

### 2.3.2. PBEM PROTECTION

Selecting this option makes cheating in PBEM game more difficult. It will be impossible to save a PBEM game in the middle of a turn; it can only be saved after the turn has ended. All players will be notified if you access your turn more than once (e.g., to replay a turn to reverse an unlucky result). Reinstalling the game or playing a turn from a different PC will also count as cheating in this case.

**It is of course possible that there is a legitimate reason for a player to load their turn twice or reinstall the game. That is why the punishment for this is only a public notification message to the other players via the game. If you are forced to do this, it is recommended that you communicate this to the others players before they see the game notification message.**

### 2.3.3. PASSWORDS

Select this option to require each player to enter a password on their first turn. This option is advised for any serious Play by Email (PBEM) game. Not only does it assure secrecy, but also it prevents accidental logins in your opponents turn.

Keep track of your password. If you forget it, there is no way to recover it.

### 2.3.4. HIDE REAL-TIME AI

By default, as the AI is taking its turn, you will be able to watch what is happening within view of your units. If you don't want to watch this, select this option. By selecting this option, it can also speed up the time it takes the AI to complete its turn. You can always play back the AI's turn using the History feature when it is your turn again.

### 2.3.5. SHROUD

Selecting this option hides all hexes except those your units have enough recon to see. The game will remember the last state of any hex seen. It is always a good idea to recon certain areas again to ensure you have up to date information. This option is automatically selected if you create a random game with shroud.

### 2.3.6. SHROUD PEEK

Selecting this option gives all players a one-time view of all map hexes at the start of the game. It does not reveal the location of units. This is a useful option if you want the map known while still hiding the building of fortifications, airfields and the expansion of national borders outside your recon level.

### 2.3.7. OPPONENTS

By clicking on a Regime of your choice, you can switch the player of that Regime between HUMAN, AI, AI+ and AI++. The AI is the Artificial Intelligence (the computer) which can be given a bonus (AI+) or a super bonus (AI++) in its production power. A normal bonus is 100%, while a super bonus is 250%.

**This game comes with an adaptive Artificial Intelligence, but due to the complexity of the game system rules, you should consider finding a Play by Email (PBEM) opponent to have a really challenging game. If you are easily defeating the standard AI, consider giving it bonuses by selecting AI+ or AI++.**

### 2.3.8. MINI-MAP

This isn't an option but simply provides you a view of the map if shroud has not been selected by the scenario designer or during random game creation. If shroud has been selected the mini-map will be all black. During game play the mini-map will change to reflect areas you have revealed with your units.

### 2.3.9. EDIT

This button opens the ATG game editor and is meant mainly for scenario designers.

### 2.3.10. START

Click this button to start the game with the specified settings

### 2.3.11. SCENARIO WEBSITE

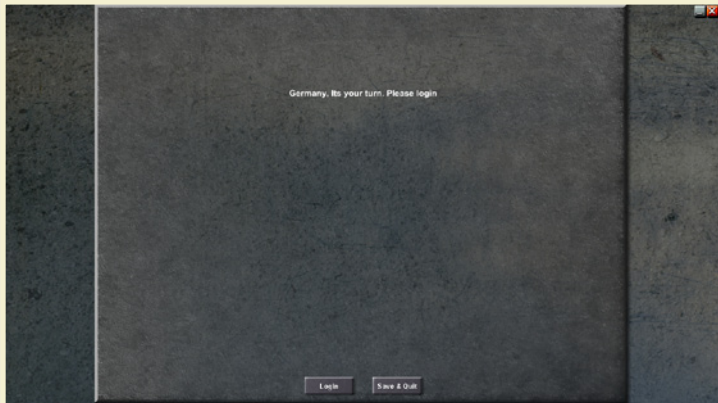
This button, if available, is used to launch your web browser to a website containing an extended description of a custom scenario. This is only present if the scenario designer put it in.

## 2.4. GAME LOOP SCREEN

This screen is shown in between turns when processing is going on of rules like events, supply and production.

When an AI is moving and you're not hiding the real time AI then the History Screen is temporarily opened so that you can see the AI moves while they come in. This AI watching variant of the History Screen will close automatically if the next AI has to start making moves or if you have reviewed all history moves or if you press the Back button.

Eventually a human player will have to take a turn. The following screen will then appear:





Then the player has to log-in and provide a password if playing with passwords. Once you have succeeded in logging in the following screen will appear:



Once logged in the player will be presented with some statistics on production and losses and will have to press start turn. These stats can be reviewed later at leisure in the statistics screen. The player has to press Acknowledge button to continue. Then any messages might be shown:



If there are any messages these have to be clicked away. These messages can later be reviewed at leisure in the decision room screen.

After all messages, if any, have been reviewed the main game screen will be opened.

## 2.5. MAIN GAME SCREEN



This screen is your command console and it is where you will manage your war efforts. The Main Map dominates most of the view; to the right of the Main Map is, at top, your Regime name (if anything other than “Your Regime”), the number of Political Points you have (PP), the Date (Dat), and a Mini-Map. Beneath the Mini Map is information on the currently selected hex on the Main Map. Beneath the Main Map itself is a long row of buttons. These are used to control various functions of the game.

### 2.5.1. ORDER BUTTONS WINDOW LEFT SIDE

Any blacked out buttons are not available at the moment. From left to right the following order buttons are displayed:



#### 2.5.1.1. GO BACK



This button is greyed out if you are already in the Main Game screen. Usually, you would use this button to go back to this main game screen. To exit the game, you'll need to click the System Options button (see below), or the red 'X' button in the far upper right corner of the screen.

## 2.5.1.2. STATISTICS



Brings up the Statistics screen. Which will give you various in-game statistics, including Produce (Production), Losses, Kills, Totals, OOB (Order of Battle), Power, Brief, People, Location, and Supply. See statistics screen paragraph for more info.

## 2.5.1.3. SYSTEM OPTIONS



Brings up the system options window. If PBEM mode is not selected you can also save your scenario in this system options window. See system options window paragraph for more info.

## 2.5.1.4. SET HQ OF LOCATION



This button allows you to set the HQ for the selected location (a town for instance). If you click it you have ten to select a HQ on the map and then press the select button to the right (or press space). To abort click back button to the left (or press ESC).

## 2.5.1.5. SET PRODUCTION OF LOCATION



This button will open the production window. In this window you can specify what the location should be producing. See production window paragraph for more info.

## 2.5.2. ORDER BUTTONS MIDDLE ON FRIENDLY HEX



Any blacked out buttons are not available at the moment. From left to right the following order buttons are displayed:

### 2.5.2.1. MOVE UNIT



Click button to move the selected unit. A lightly shaded area will display on land hexes and blue balls will appear on sea hexes. Indicating which hexes the unit can move to. Click one of these hexes to move the unit to it. Or abort by pressing the back button (or press ESC or SPACE). Red arrows will indicate if enough AP will be left over after moving into the hex to make an attack.

**If moving into enemy territory it is possible your unit is ambushed (surprise combat) by an unseen enemy unit in it.**

## 2.5.2.2. TRANSFER



Click button to transfer subformations from selected unit to another unit (HQ or normal unit, it doesn't matter). Upon clicking the transfer window will open. See transfer window paragraph for more info.

## 2.5.2.3. STRATEGIC TRANSFER



Click button to strategically transfer the selected unit to a different hex. When you click you will be asked to select which HQ will make the strategic transfer possible (unless you got only 1 HQ with transfer capacity points). Select the HQ on the map and then press the select button. You will also have the option to press the select HQ button that will give you a popup to choose a HQ from. Either way: Upon selecting the HQ the strategic transfer window will open. See strategic transfer window paragraph for more info.

## 2.5.2.4. SET UNIT'S HQ



Click button to change the HQ of the selected unit. If you click you will be asked to select the HQ you want to be the new HQ of the unit. Or, click the NONE button to set no top HQ.

## 2.5.2.5. PARADROP / AIRLIFT



If transport aircraft are present in the selected unit this button will be available. If you click you will be asked to select a land unit to take on board. You do this by clicking on it on the map and then pressing the select button (or space). If you select a unit that cannot be paradropped it will be assumed that you are attempting an airlift. If the selected unit can be paradropped the game will ask you if you want to so or airlift the unit instead.

Either way the last step is to choose a destination hex for the operation.

If an airlift is attempted all airfields within range will be selectable.

If a paradrop is attempted all hexes within range will be selectable.

**With this operation it is possible that paratroopers / airmen can be destroyed while still on board their transport airplanes by enemy fighters or flak.**

**Keep in mind that when doing an airlift the range is doubled compared to paradrop, but the aircraft unit will move to the target hex as well!**

## 2.5.2.6. AIR SUPPLY



If transport aircraft are present in the selected unit this order will be available. Click button to air supply. When you do you will be asked to select a target hex for the air supply. When you do so the air supply window will be opened. See the air supply window paragraph for more info.

## 2.5.2.7. LOAD UNIT



If selected unit has naval transport capacity then this order will be available. When you click you will be asked to select a land unit to load aboard. Click on a land unit and press select (or space) to do so.

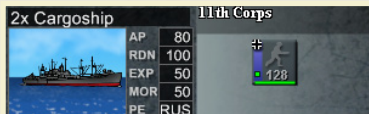
## 2.5.2.8. UNLOAD UNIT



If the selected unit is a naval unit transporting a land unit, and it is in a position where it can unload a land unit (adjacent to land, or in a friendly-controlled port town) this order will be available.

Make sure you also have selected the land unit onboard the naval unit. Just click on it once to do so. It will then be highlighted. Without a highlighted passenger the unload order button will not be available.

When you click this button to unload the land unit you will be prompted to select the hex to unload the unit in. Please click on a highlighted hex and press select button (or space).



## 2.5.2.9. MAKE NEW UNIT



This button will be available whenever you have a friendly land hex selected. Then, click this button and select whether it should be a Formation or a HQ. Once done, you will be asked to select a HQ for the new unit or HQ.

**Keep in mind that usually new units come at a cost in political points**

## 2.5.2.10. DISBAND UNIT



Appears only if you have selected an EMPTY unit. (An empty unit has no subformations inside of it.) Click this button to disband that unit. You will be refunded the Political Points it cost to build the unit in the first place.

## 2.5.2.11. AIR RECON MISSION



Button is available if selected unit has air subformations in it. When you click it all hexes that you could perform an air recon mission on will be highlighted. Click a hex and press the select button (or space) to initiate a recon mission on it.

**Use this operation to get information on enemy positions. This type of operation can be intercepted by enemy fighters.**

## 2.5.2.12. BLOW BRIDGE



Subformation types with blow points are capable of blowing bridges. This action always requires 50 Action Points from the unit. If the selected unit is next to a bridge, has the blow points, and the 50 AP then this order will be available. When you click the button you will be asked to select a bridge. Do so by selecting a highlighted hex and press the select button (or space) to do a blow bridge attempt.

**Example: An engineer unit with 40 engineers has 800 blow points (40 \* 20). It tries to blow a bridge over a major river with 1000 structural points. The code then throws a random number between 1 and 800 vs. a random number between 1 and 1000. If the first random (800) number is higher, then the second random number (1000) the attempt succeeds, otherwise it fails.**

## 2.5.2.13. RAZE LOCATION



If the selected unit has subformation types with blow points, is on a hex with a location in it and has at least 50 Action Points then this order will be available. When clicked the selected unit will attempt to raze the location.

**Some locations can be completely destroyed; some can only be depleted of structural points.**

## 2.5.2.14. BUILD ROAD/BRIDGE



The selected unit must have subformations with Engineer Points and enough AP to move into a hex that a road or bridge can be constructed in or over to make this order button available. When you click it you will be asked to choose a target hex to build a road or bridge towards. Select the target hex and press the select button (or space).

## Build/Repair a Location



The selected unit must have subformations with Engineer Points and at least 50 AP available for this button to be available.

If a location is already present on the hex and it is damaged and it is repairable then clicking this button will be an attempt to repair it.

If no location is present or a location that can be upgraded (and that is not damaged) then clicking on this button will open the build window. See the build window paragraph for more info.

### 2.5.2.15. GIVE UNIT(S) TO ALLY



Button will be available when you have allies and you have a unit selected.

When you have a HQ selected you will also attempt to give all subordinate units to the ally.

When you click the button you will get a pop window asking you to which regime you want to give the unit(s).

### 2.5.2.16. GIVE HEX(ES) TO AN ALLY

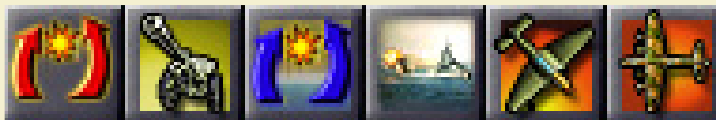


Button will be available if you have allies and you have one of your own hexes selected.

When you click the button you will have to select an ally and input a radius number. All hexes within the specified radius of the selected hex will be given to the selected ally.

**When you give hexes away, any of your units on them will stay your units.**

## 2.5.3. ORDER BUTTONS MIDDLE ON ENEMY HEX



Any blacked out buttons are not available at the moment. From left to right the following order buttons are displayed:

## 2.5.3.1. LAND ATTACK



Button is available if you select an enemy land hex with at least one unit on it.

When you click this button you start the process of attacking that hex (you can still abort)

You now select your own units in neighbouring hexes you want to use to attack the selected hex. Select a unit you want to let participate and press the select button (or space).

You can select multiple units from different hexes and when you are finished selecting you press the attack button.

When you press the attack button the attack will commence.

You can abort the attack preparations at any time by pressing the back button to the left of the screen (or pressing ESC)

You can deselect a unit that has been added to the attack plan by pressing the select (and deselect) button again (or space again).

You can also press the all button to let all units that can do so join in the attack.

Furthermore you can press the None button to clear your preparations completely and start selecting participants from scratch.

See the combat screen paragraph for more info on what happens after you have pressed the attack button.

## 2.5.3.2. ARTILLERY BARRAGE



Works the same as a land attack. But any hex can be selected (also sea hexes) and only your units with artillery subformation types can join in the attack, and only if the target hex is within their artillery range.

## 2.5.3.3. SEA ATTACK



Works the same as a land attack. But only a sea or harbor hex can be selected as a target and only your naval units can join in the attack.

## 2.5.3.4. SHORE BOMBARDMENT



Works the same as a land attack. But only a land hex can be selected and only naval units with artillery subformation types can join in the attack, and only if the target is within their artillery range.



## 2.5.3.5. AIRSTRIKE



Works the same as a land attack. But only air units can be selected to participate in the attack.

**Airstrikes target the troops or aircraft in the hex. But can accidentally still damage the locations and/or any bridges.**

## 2.5.3.6. BOMBING RAID



Works the same as a land attack. But only air units can be selected to participate in the attack.

When you select a target hex with bridge(s) and a location a popup will ask you if you want to target the location or the bridge(s).

**Bombing raids target the structural points of a location or bridge(s).**

## 2.5.4. ORDER BUTTONS MIDDLE ON ALL HEXES



Any blacked out buttons are not available at the moment. From left to right the following order buttons are displayed:

### 2.5.4.1. TURN ON/OFF SUPPLY LAYER



**Pressing this button only changes the graphical representation. When you click this button you get to see how supply flows from selected hq (or hq of selected unit) or hex (if no friendly unit selected). You will see a colored overlay that**

**will detail how supplies are getting out into the field from the source hex (in white). You can improve your supply distribution by building additional HQs, or using Engineers to build roads and/or bridges.**

### 2.5.4.2. HIDE/SHOW UNITS



Toggle to hide or show all units. It can be useful to study the map without it being obstructed by units.

## 2.5.4.3. ZOOM IN MAIN MAP



Click to zoom in.

## 2.5.4.4. ZOOM OUT MAIN MAP



Click to zoom out.

## 2.5.4.5. SPREAD OUT/ STACK



Pressing this button only changes the graphical representation. Only works in fully zoomed in mode. Toggle to spread out multiple units in hex. Toggle again to stack them again. Spreading the units can be very useful in situations with a lot of units close to each other.

## 2.5.5. ORDER BUTTONS RIGHT



### 2.5.5.1. SURRENDER



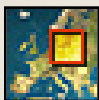
Clicking the Surrender button will surrender your position to the other Regime(s).

### 2.5.5.2. HISTORY



If you have any history available you can access it through clicking this button. When clicked the history screen will be opened. See the history screen paragraph for more info.

## 2.5.5.3. STRATEGIC MAP



Click this button to open the strategic map screen. In this screen you can also engage in diplomacy and send messages. See the strategic map screen paragraph for more info.

## 2.5.5.4. DECISION ROOM



Click this button to open the decision room screen. In this screen you can review messages, play action cards and do research. See the decision room screen paragraph for more info.

## 2.5.5.5. END TURN



Clicking this button will end your turn and return you to the gameloop screen.

## 2.5.6. REGIME WINDOW / TOP WINDOW

CURRENT REGIME	PPL	ROUND	PP	RAW	OIL
Soviet Union	RUS	Jun 22, 1941	60 +60	830 0 +330	27295 0 +17500

In the top of the main game screen you find this window. It shows from left to right:

### 2.5.6.1. CURRENT REGIME

This is the name of the regime that you are currently playing.

### 2.5.6.2. PEOPLE

Here the people are shown that control this regime. Next to it is a question mark button that you can press to get more information on this or other people.

### 2.5.6.3. ROUND

Here the round number or the date is shown. If a date is shown and you hover your mouse pointer over it the game will tell you the actual game round number and what the date will be in the next round.

### 2.5.6.4. PP

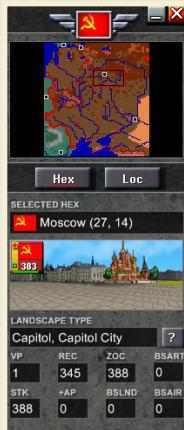
Here the amount of political points you have is shown as well as the predicted production of PP for the next round.

## 2.5.6.5. RESOURCES

Depending on if the scenario you are playing uses resources your resources will be shown here (like oil and raw). For each resource your current stock is shown (in white) and also shown is the predicted consumption by production (in yellow or red) and the predicted growth by production (in green) is shown. The predicted use and production will help you balance your production.

## 2.5.7. HEX WINDOW / RIGHT WINDOW

On the right side of the main game screen you find this window. On top you find the flag of the regime you are currently playing and the minimap. You can click the minimap to move the map focus and you can click the flag to change the colour of your troops. This window has two tabsheets. You can either view the hex info or the location info. If loc tabsheet is selected but no location is present in hex the hex info will be shown anyway. If you are planning an attack then the combat tabsheet will be shown



### 2.5.7.1. HEX TABSHEET

From top to bottom and left to right the following info is shown:

First the name (if any) and hex coordinate of the selected hex is shown. Also a flag is shown signifying the owner of the hex.

Then a graphic of the selected hex is shown. Overdrawn on this graphic are any units present in the hex. You can click on a unit to select it.

Then the landscape type and location type are given. Next to this text box is a question mark button that you can press to get in depth information on the landscape type and location type stats of the hex (or any other landscape types or location types)

The VP box shows the number of victory points the hex gives.

The REC box shows the amount of recon points you have on the hex.

The ZOC box shows the amount of Zone of control (ZOC) points you have on the hex.

The BSART box shows the amount of artillery battlestack points (caused by artillery attack) you already have on the hex.

The STK box shows the amount of stack points present in the hex.

The +AP box shows the number of extra AP you have to pay to move a unit into the hex.

The BSLND box shows the amount of regular battlestack points (caused by land attack) you have on the hex.

The BSAIR box shows the amount of air battlestack points (caused by airstrike or bombing raid) you have on the hex.

## 2.5.7.2. LOC TABSHEET

From top to bottom and left to right the following info is shown:

First the location type of the location is shown.

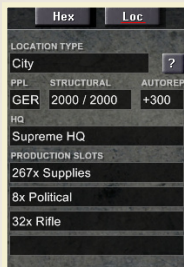
The PPL box shows the people that live in the location.

The STRUCTURAL box shows the current amount of structural points currently has and the maximum amount of structural points the location can have.

The AUTOREP box shows the amount of structural points that gets autorepaired at the start of every turn.

The HQ box shows the HQ the location will attempt to deliver its production too.

The PRODUCTION SLOTS show what the location is currently attempting to produce.



## 2.5.7.3. COMBAT TABSHEET

From top to bottom the following info is shown:

First the currently selected hex coordinate, owner and name is shown

Then a graphic representing the selected hex. Units present are drawn over this graphic. You can click them to view them. (You have to press the select button or press space to add them to the participants of the battle list.)

Then the target hex is shown for the battle you are planning. Coordinate, owner and name are shown.

Then a graphic representing the target hex is shown. On the top row of this graphic the defending units of the hex are shown. On the bottom row of this graphic all units currently selected to join in the attack are shown. You can click on any unit to view it.



## 2.5.8. UNIT WINDOW / BOTTOM WINDOW



On the bottom of the main screen you find this window. It has 3 tabsheets. The first one shows the subformations of the unit, the second the logistics info and the third one remaining info.

### 2.5.8.1. BASE INFO

The AP box shows the action points the Subformation with the least amount of action points has available.

AP	RDN	EXP	MOR	ENT
74	94	50	50	8

The RDN box shows the average readiness of the subformations of the unit.

The EXP box shows the average experience of the subformations of the unit.

The MOR box shows the average morale of the subformations of the unit.

The ENT box shows the average entrenchment of the subformations of the unit.



The silhouette picture in the top left shows the slowest movement type that will be used by the unit to enter a hex.

The flag in the bottom left shows the owner of the unit.

A big version of the counter is shown for illustrational purposes

The name of the unit is shown; if you click it you can change it.

The name of the HQ (if any) is shown. If you click it you will stop viewing this unit and instead view its HQ. The map will also move when necessary if you do so.

The HQP score shows the headquarter power percentage the HQ of this unit has over this unit. Is not shown if a HQ is selected.

The STF score shows the percentage of optimal staff points that the HQ of this unit (or if HQ is selected: itself) is required to have give full HQ bonuses to it (or if HQ is selected: its subordinate units)

SUP.CONS	SUP.STOCK	REQ.IN	SUP.IN
100%	85	117	117

The SUP.CONS box shows the supply consumption percentage.

**If this is less than 100% your unit has run out of the minimal supply it needs to maintain current readiness.**

The SUP.STOCK box shows the absolute amount of supply points the unit has.

The REQ.IN box shows the amount of supply points that the unit had requested with its HQ at start of your turn.

The SUP.IN box shows the actual amount of supply points that the unit received from its HQ at the start of your turn.

If your viewing a HQ instead of a regular unit REQ.IN and SUP.IN will not be shown, but REQ.OUT and SUP.OUT will be shown instead. REQ.OUT shows the amount of supplies that were requested with the HQ at the start of your turn and SUP.OUT shows the amount of supplies the HQ actually send out to its subordinate units at the start of your turn.

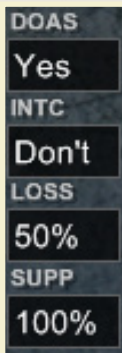
The DOAS box shows if this unit is instructed to do anti supply point damage.

**If you want for example submarines to go undetected you will want to set DOAS to No.**

The INTC box only shows for units with aircraft. It shows the intercept setting for this unit. You can set it to Don't which will cause your aircraft never to attempt to intercept or you can set it to 75, 50 or 25. The numbers denote the minimum readiness you require the unit to have before it is allowed to intercept.

The LOSS box shows the percentage of losses you allow your units to suffer in combat before trying to do an orderly retreat.

The SUPP box allows you to lower the amount of supply a unit will request. 100% is normal supply, 50% is basically supply rationing to the bare minimum.



**At 50% your unit will eventually (when stocks are depleted) no longer be able to replenish readiness score, but will also not lose readiness due to supply shortage.**

### 2.5.8.2. SUBFORMATION TABSHEET

For each Subformation the unit has the following info is shown:

The name of the subformationtype and its quantity.

A graphic illustration showing the subformation type. It's possible for a percentage number with a blue background to be displayed over this graphic, this will denote a defensive bonus or penalty. It's also possible for a percentage number with a red background to be displayed over this graphic, this will denote an offensive bonus or penalty.

The AP box shows the action points of the Subformation. AP box is replaced by an EP box showing the amount of engineer points of the Subformation if any engineer points are available.

The RDN box shows the readiness score of the Subformation.

The EXP box shows the experience score of the Subformation.

The MOR box shows the morale score of the Subformation.

The PE box shows the people that the troops of this Subformation belong too.

### 2.5.8.3. LOGISTICS TABSHEET

In this tabsheet more information is shown for a HQ then a regular unit.

LAND CAP 0	SUPPLY STOCK 2204	REQUEST IN 0	EXCESS SUP 1922	DITCH RESERVE
NAVY CAP 0	ROUNDS LEFT 15.6	SUPPLY SEND 0	REQUEST OUT 576	
RAIL CAP 10000		DESTROYED 0	SUPPLY OUT 576	
		SUPPLY IN 0	RESERVE 0	

The following info is displayed for a HQ:

The LAND CAP box shows the number of land transfer capacity points the HQ has available for use.

The NAVY CAP box shows the number of navy transfer capacity points the HQ has available for use.

The AIR CAP box shows the number of air transfer capacity points the HQ has available for use.

The SUPPLY STOCK box shows the absolute number of supply points present in the unit.

The ROUNDS LEFT box shows the number of rounds that this unit could last on the supply points present if no new supplies would arrive.



The REQUEST IN box shows the amount of supply points that this unit requested with its HQ at the start of the turn.

The SUPPLY SEND box shows the amount of supply points that were actually send by the HQ of the selected unit at the start of the turn.

The DESTROYED box shows the amount of supply points that were send by the HQ of the selected unit but never reached it because they were destroyed in transit.

The SUPPLY IN box shows the amount of supply points that actually arrived at the selected unit at the start of your turn.

The EXCESS SUP box shows the amount of supply points present in the unit that is not in the "backpacks" of the troops of the unit.

**Excess supply will cause a unit to become immobile.**

The REQUESTED OUT box shows for a HQ the total amount of supply its subordinate units requested with it at the start of the turn.

The SUPPLY OUT box shows for a HQ the total amount of supply that the HQ actually send out to its subordinate units at the start of the turn.

The RESERVE box shows the amount of supply that a HQ will try to build up as a reserve.

The RESERVE button will allow you to set the reserve setting for a HQ.

The DITCH button will allow you to disband HQ supply points.

**Ditching supply points is useful if you are in desperate need of making your HQ more mobile.**

#### 2.5.8.4. ANALYSIS TABSHEET

This tabsheet mainly shows info on the movement types and mobilization.

MOVE TYPES			LAND CARRIED	WEIGHT
MOVETYPE	WGT	CARRY	332 / 100	432
Artillery	40	0		
Foot	100	0	NAVY CARRIED	STACK
Rail	100	100	432 / 0	108
Excess Sup	192	0	AIRCARRIER	
			0 / 0	

In the MOVE TYPES table each move type present in the unit is shown together with its cumulative weight and carry scores.

The LAND CARRIED box shows first how many weight points require land carrying in order to land mobilize the unit and second how many carry points are available in this unit for mobilizing this weight.

The NAVY CARRIED box shows first how many weight points require naval carrying in order to naval mobilize the unit and second how many naval carry points are available in the unit for mobilizing this weight.

The AIRCARRIER box shows first the amount of aircraft that need air carrier carry points in order to be allowed to go out into the sea and second the amount of air carrier carry points available.

The WEIGHT box shows the full weight of the whole unit.

The STACK box shows the total stack points of the whole unit.

## 2.5.9. MAP WINDOW

The map window shows the map. I am sure you will be able to spot it. You can use keyboard up, down, left and right keys to scroll it. Also you can move your mouse to the edge of the screen to scroll it.

The sections below briefly explain how to read the counters and locations graphical elements:

### 2.5.9.1. UNIT COUNTER

No matter if you're viewing in regular or zoomed in mode the unit counter display the same info:

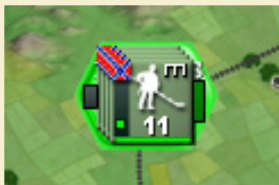
- » The coloured counter itself signifies by its color to which regime (or in some scenarios: people) the unit belongs.
- » The coloured bar on the left side signifies to what HQ a unit belongs (unless the unit is a HQ itself)
- » The little symbol in the top left of the counter is another reminder of to what regime the unit belongs.
- » The little block in the bottom left of the counter shows use the supplies requested versus received of the unit. If the unit did not at all get what it wanted from its higher HQ the color will be red, if it is getting all the supplies it requested the color will be green. In between it will be yellow.
- » The horizontal bar on the bottom of the unit gives you the readiness score of the unit.
- » The number signifies the power points in the unit modified by a lot of stuff. Basically it's an abstract combat value counter that you can use to compare units with roughly.



- » The graphic silhouette, logo or flag is just that: a graphic illustration of the main component of the unit. Keep in mind that HQs always show the flag of their regime.

### 2.5.9.2. LOCATION

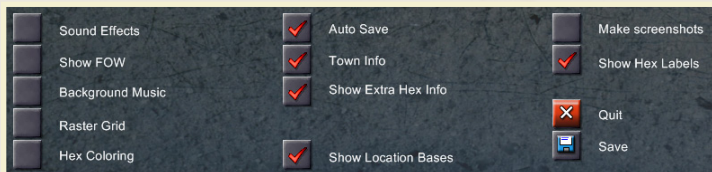
- » The base of a location can be green, red or black. If it is green it means everything is alright. If it is red it means the location is damaged. If it is black it means you still have to assign the location to a HQ.
- » To the left side of a location hex a coloured block can appear. This indicates by color code the HQ that the location is delivering supplies too.
- » To the right side of a location a bar can appear. This bar shows any damage to the location. If it is full and green the location is undamaged.



Keep in mind all the above info can be switched off through the preferences window.

### 2.5.10. PREFERENCES WINDOW

This window shows a number of preferences you can set. The preferences will be remembered and used in all games you play.



#### Sound Effects

Check to enable sounds in the game.

#### Show FOW (fog of war)

Disable this option if you don't want to see a black overlay over hexes that you cannot see due to fog of war.

#### Background Music

Toggle background music on or off

#### Raster Grid

Toggle a map hex on or off

## Hex Coloring

Toggle hex coloring on or off. When checked it applies a highlight of color to all hexes under a player's control.

## Auto Save

Toggle auto save on or off. If checked it will save the game at the end of your turn as autosave.pt2.

## Town Info

Toggle to show location structural points bar and HQ color block on the map.

## Show Extra Hex Info

Toggle to show crates and other special hex layer graphics.

## Show Location Bases

Toggle on or off the light colored background of city and resource hexes.

## Make Screenshots

Toggle automatic screenshots on or off. When checked two screenshots are taken: one at the beginning of your turn and one at the end of your turn. Screenshots are stored in the screenshots folder, usually located in C:\Matrix Games\Advanced Tactics Gold\Screenshots.

## Show Hex Labels

Toggle textual hex labels (city and resource names) on or off.

## Quit

Click to quit the game and return to the Main Menu.

## Save

Click to save the game. This button is not present if you are playing with Anti PBEM Cheat option on.

## 2.5.11. PRODUCTION WINDOW

In this window you can divide the town's production power over four production slots. Click on an empty Production Slot to activate it. This will open up an ItemGroups list, which is essentially a list of unit types that the town can produce.



Once an ItemGroup category is selected, a list of units that belong to that Type will be displayed. Select a unit from that list and you will be prompted to confirm; click “Select” to continue, or the question mark for more info on that unit type.

Once you select a unit and click the Select button, the slot you assigned will fill with that particular unit. A scale of 0-100 will also appear, with 100 set to default. This is the percentage of the location’s production power to be assigned to the current slot.

As you click on additional slots and assign other units to them, you’ll note that new percent scales will appear. Your choices can never exceed 100.

Next to each slot you will see a Prd, Lft and Real value – these indicate the amount that will be produced each turn (Prd), the amount finished in previous turns but never delivered to the HQ (Lft) as well as the predicted actual exact production (Real).

Clicking on the Production View button below the slots will give you an overview of all your currently-held producing locations, as well as the totals they’ll deliver to your different HQs. Changing the production line will destroy any remaining production; however, changing the HQ of a location has no effect on production and you can do this at any time. If you have a lot of producing locations they will be spread over multiple pages. If you click the RES button then the resource expenditure instead of the production orders will be shown. Furthermore if you select No HQ in the HQ list in the top left all locations that are not assigned to a specific HQ will be shown.

Press the back button or ESC to exit the production window.

## 2.5.12. TRANSFER WINDOW

When the transfer window opens you still have to click a unit you want to transfer TO. Keep in mind you can keep switching target units by clicking on other units on the map.



When you have selected a target unit select the subformation type from the list at left. A sliding scale will appear if that subformation type can be transferred to the receiving unit. Adjust the scale as you deem necessary and click the Do Transfer button that appears.

Or, you can select Transfer All. If you choose to Transfer All, note that the sending unit will become empty of subformations. Transfer all is only available if source and target unit are in the same hex.

If you are transferring between two HQ units you can click on the unit right next to the CAP BY text. By clicking it you can switch the HQ that will be paying the land/navy/rail transfer point costs if there are any.

The Basic Cost that is displayed is the cost to transfer 1 weight point from source to target unit.

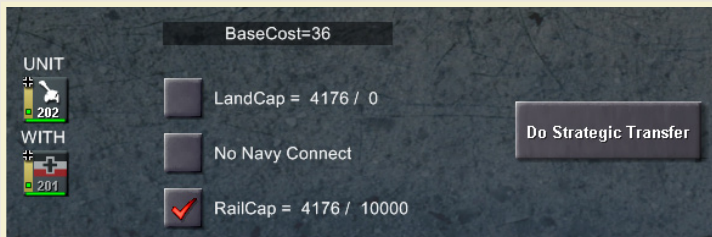
The small print below the Do Transfer button stating Land Carry and Weight is the current land carry and weight stats of the target unit. The second row of small print stating weight again is the weight of 1 individual of the subformation type you are trying to transfer.

If the transfer cannot be made out of own power (the actionpoints of the Subformation) then transfer capacity points of a HQ will be used. You can select which type of transfer capacity points you want to use for the transfer: land, navy or rail.

Press the back button or ESC to exit this window.

## 2.5.13. STRATEGIC TRANSFER WINDOW

When this window opens you still have to select a target hex. Do so by clicking on a highlighted hex on the map. You can keep switching the target hex again by just clicking on the map one more time.



Transfer Capacity Points are always used to conduct a transfer. You can chose if you want to use the HQs land, navy or rail capacity points to pay for the strategic transfer.

By clicking on do strategic transfer button you will execute the strategic transfer of the unit to the selected target hex.

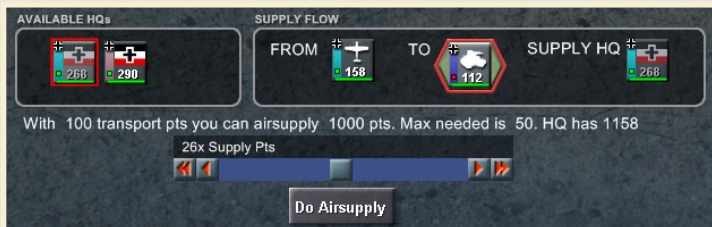
The Base Cost displayed is the transfer point cost to transport 1 point of weight to the selected hex.

**Trucks and cargo ships stationed in the HQ are necessary to facilitate strategic transfers. It is only possible to transfer units entirely consisting of land subformations over land or over sea. Units with air or navy in them cannot be strategically transferred.**

Press the back button or ESC to exit this window.

### 2.5.14. AIR SUPPLY WINDOW

Once the air supply window has opened you can no longer change the target hex for the air supply operation.



Highlighted on the map will be all the hexes that will be able to receive (partial) supplies from your air supply operation on the selected target hex.

You can select the HQ that will be providing the supply points for this operation in the available HQs box to the left.

The second box is showing the supply flow and is only there for illustrational purposes.

The text below the two boxes tells you how many transport points you have in the unit doing the air supply operation, and how much supply that can carry (supply weight could vary from scenario to scenario), the maximum needed supply by the units that are eligible for air supply and the amount of supply actually available in the chosen HQ.

You will have to drag the slider to the amount of supply you actually want to use and then press the Do Airsupply button to execute the air supply!

Press the back button or ESC to exit this window.

### 2.5.15. BUILD WINDOW



In this window you can see all location types that could be constructed on the map (if you conform to all preconditions)

You can select a location type from the location types list.

Once a location type is selected the window will show its name in the SELECTED LOCATION TYPE box and show a graphical representation below it.

Also a question mark button will be available. Click it to get detailed info on the selected location type (or others).

If you conform to all preconditions the Build button will be available as well. If you click it the selected location type will be built.

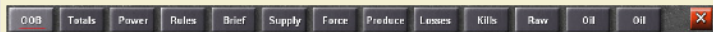
On the right side of this window the LOC PEOPLE box will show you the people that will “live” or “occupy” the new location if you build it.

In the bottom right side of this window there is a list of preconditions you need to conform to in order to build this location type. Shown is a number of cost types, what’s needed and what you have available now as well as the verdict if you conform to the precondition in question (SHORT/OK).

Abbreviations used are PP, which stands for political points, EP, which stands for engineer points and SUP which stands for supply points.

**The Supply points needed can come from any HQ out of the chain of HQs above the unit attempting to build (including the unit itself if it is a HQ)**

## 2.6. STATISTICS SCREEN



For the sake of brevity the statistics screen will be discussed on an overview basis. From left to right buttons are available:

### OOB

The OOB, or Order of Battle, lists each unit under your command as well as the HQs to which they are assigned. Furthermore, you can click on each unit and inspect its current status. Buttons are available to quickly jump back to the map and center on the selected unit.

### Totals

The Totals screen gives you exact numbers (instead of graphs) on the number of kills you’ve inflicted, the number of losses you’ve suffered, the numbers of each subformation type that you’ve produced, the number of kills you’ve inflicted on the current turn, and the number of losses you’ve suffered on the current turn.

### Power

The Power tab details the strength(s) of your armed forces by listing the total number of each subformation type you have.



## Rules

This tab shows all the rulevars and to which setting they are set. This can be useful if you want to check on some specific rule.

## Brief

The Brief is the information that appears at the start of the game. It's presented here again to reread at your leisure.

## Supply

Supply displays a screen that looks like the OOB, above, but instead shows you very detailed supply information on each unit you control. The supply information contains a supply prognosis for the start of your next turn. This can be a valuable tool in production planning.

## Force

A graph showing the total power point size of yours and other players armies.

## Produce

A graph that measures the number of Production Points your Regime controls over the course of each Round.

## Losses

This is a graph that measures the total number of losses you suffer over the course of the game.

## Kills

This is a graph that measures the total number of kills you inflict over the course of the game.

## 3 Extra tabsheets

The last 3 tabsheets can vary on a scenario to scenario basis.

## Back button

The red cross button will close the statistics screen. You can also press ESC.

**In the OOB and supply tab of this screen the Auto Upgrade button is available. This button is very useful. If you click it you will try to upgrade all subformations that can upgrade (for example from Light Tank I to Light Tank II) to do so if the supply points for the upgrade are available. When you have a very high unit count this will save you a lot of manual clicking!**

## 2.7. HISTORY SCREEN

The History screen lets you review the events of the most recent turn. This is especially useful when playing other human players via e-mail, but it is the only way to (re)view what happened during the AI's moves as well.



The slider with the step X from Y text allows you to manually select each step in your history report. Make sure you turn off autoplay when manually checking steps.

There are four buttons on this screen:

- » The Play/Stop button can be used to toggle autoplay on or off. If autoplay is on the history steps will automatically advance pausing only shortly on battle steps. Basically autoplay is like watching a movie.
- » The Back button can be used to return the history slider to step 0.
- » The Next Battle button will fast forward to the first history step from the current history step that contains a battle report.
- » The Next Regime button will fast forward to the first history step that contains a move from a different regime (player) then the step you are currently viewing.

Press the (other!) back button to the extreme left of the screen or press ESC to return to the main game screen.

This screen is also used if you watching the AI moves as they come in; in this variant of the screen the back button to return to exit the history screen is only present if the AI has stopped making its moves.

## 2.8. DECISION ROOM SCREEN

In the Decision Room there are at most 4 tabsheets: cards, active cards, reports, research. Not all will be present in all scenarios.

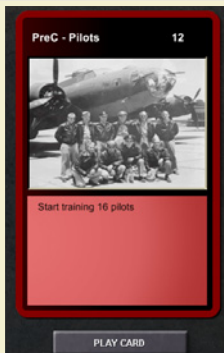


Furthermore the date or round number will be shown and the number of political points that you have available.

In the right top corner of the screen a back button is available to exit this screen. You can also press ESC.

## 2.8.1. CARDS TABSHEET

The cards tabsheet will show you any action cards your regime has available to the right. If you click one it will be shown in a larger format to the right. Below it will be a play card button. The play card button will only be available if you can pay the cost of the actioncard. Most actioncards have a cost in political points.



## 2.8.2. ACTIVE CARDS TABSHEET

Some scenarios might use this functionality. Basically this tabsheet could show cards that have been played before. So far this feature has never been used in any scenarios that we know of.

## 2.8.3. REPORTS TABSHEET

This tabsheet will allow you to review all the messages you have. Click one in the listbox to read it.

## 2.8.4. RESEARCH TABSHEET

The Research screen is divided into three areas:



Known Research, which lists all your currently-known units that you can produce; Not Yet Available, which lists all units you cannot research at this time;

Available Research, which lists all research fields you CAN research at this time.

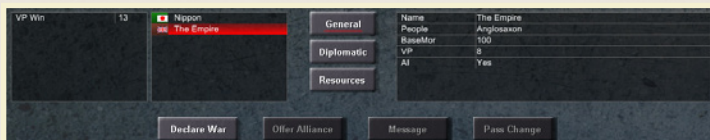
If you click an item from the available research list and you have the political points (or in some scenarios: resource) required to buy it the Buy button will appear and when you click it the research field will be added to your known research list.

If you click an item in your known research list and you have allies that do not yet have this research field a button will appear allowing you to give this research field to a selected ally.

Research that is in the Not Yet available list is usually there because you have not yet researched the prerequisite research fields for it.

## 2.9. STRATEGIC MAP SCREEN

In this screen you can review any public scenario variables in the left most box.



The second box is a listbox in which you can select a regime to view info on. The info shown depends on which tab is selected. You can select the general, diplomatic and resources tab.

The general tab will show general info on the selected regime, like its people, base morale, current VPs in hand and if it is an AI or not. Also this tab will show with version of AT Gold the last turn was played. This version check can be useful in PBEM games to ensure all players play with the latest version of the game.

The diplomatic tab will show all the relations the selected regime enjoys with all other regimes. The following relations are possible: Peace, War, Allied, Alliance offered (but still at peace) and Peace offered (but still at war).

The resources tab will show all your resources again like in the top window of the main screen. But some scenarios might have too many resources to display correctly all resource info on all screen resolutions in the top window so this tab will allow you to see an unlimited number whatever the case.

One or more buttons are available in the bottom of this screen to declare war, offer peace, offer alliance, accept alliance or accept peace. Keep in mind that declaring war might cost PP in some scenarios, if so, a popup will warn you of this cost and you can still decline to continue. Also, keep in mind that some scenarios limit diplomatic interactions and/or don't allow alliances.

A button is available in the bottom of this screen to send a message to another human player. This is a very basic form of in-game "emailing".

A button is available to change the password of the selected regime. This button is only available in games with more than 2 players. Furthermore, you cannot change the password of the next human player (after you end your turn). These precautions ensure this button can not be used to cheat. This is the only way to keep password protected multiplayer games running once somebody disappears of the face of the planet.

## 2.10. COMBAT SCREEN

This screen opens up automatically after you start a battle or have moved into an ambush. Combat will start immediately upon it being opened. Over a number of combat rounds the battle will be fought out. There is nothing you can except watch.



When the battle is over you will be allowed to click the back button in the top left corner to return to the main game screen. You can also press ESC to exit this screen.

In the left corner are two buttons. One to switch the current screen from graphical mode to textual mode and one to go the combat detail screen if you want even more in depth info on the battle.

The combat status box in the top will eventually display the outcome of the battle.

The combat effects box below it might give some info on effects on the hex the battle has been fought on. For example structural damage caused or bridges destroyed in the fighting.

The majority of the screen however is occupied with a big matrix showing all participating units counters and their names. For each unit is shown how many troops are still on the battle field (attackers/defenders row), how many troops have been killed (casualties row) and how many troops have managed to retreat alive. If a unit has panicked or retreated it will be shown next to the unit counter.

You will observe that the winner of land and sea battles is the side that manages to keep troops in the battle field (attackers/defenders row) the longest.

The individuals from each Subformation are shown by their counter logo and next to them is a small green bar. This green bar denotes their current readiness (an important stat in battle calculations). Furthermore, you'll notice that sometimes the counter logos of individuals turn yellow. If they do so it means that particular individual has broken through the enemy lines (also important for battle calculations).

If watching all the combat rounds while they come in is to slow for you, you can press SPACE to immediately see the outcome of the battle.

## 2.11. COMBAT DETAIL SCREEN

Let's be honest: this screen is not for the faint hearted. And that's an understatement!

<p><b>COMBAT ROUNDS</b></p> <p>Round 1 Round 2 Round 3 Round 4</p>	<p><b>INDIVIDUAL LIST</b></p> <p>13) Flak 12) Light Tank 14) Flak 11) Light Tank 1) SMG 3) SMG 4) SMG 5) SMG 8) SMG 2) SMG 6) SMG 7) SMG 9) SMG 10) SMG 15) Truck</p>	<p><b>INDIVIDUAL REPORTS</b></p> <p>State at start of round</p> <p>Flak(13) attacks ==&gt; Rifle(08)</p> <p>Flak(13) attacks ==&gt; Rifle(78)</p> <p>Flak(13) attacks ==&gt; Rifle(90)</p> <p>Flak(13) attacks ==&gt; Rifle(83)</p> <p>State at end of round</p> <p>FLAK(13) ATTACKS ==&gt; RIFLE(08)</p> <p>attack=20 VS defense = 100 After modifications: Attack score=23.18 VS Defensive score=52.5 Result of attack is a MISS.</p> <table style="width: 100%;"> <tr> <td style="width: 50%;"><b>ATTACK SCORE MODS</b></td> <td style="width: 50%;"><b>DEFENDER SCORE MODS</b></td> </tr> <tr> <td>Start Att Score 20</td> <td>Start Def Score 100</td> </tr> <tr> <td>Attack startup -67% 6.8</td> <td>After mods 62.5</td> </tr> <tr> <td>HQ +123%14.7</td> <td></td> </tr> <tr> <td>Experience +50% 22.1</td> <td></td> </tr> <tr> <td>Concoring +5% 23.2</td> <td></td> </tr> <tr> <td>After mods 23.2</td> <td></td> </tr> </table>	<b>ATTACK SCORE MODS</b>	<b>DEFENDER SCORE MODS</b>	Start Att Score 20	Start Def Score 100	Attack startup -67% 6.8	After mods 62.5	HQ +123%14.7		Experience +50% 22.1		Concoring +5% 23.2		After mods 23.2	
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Concoring +5% 23.2																
After mods 23.2																
<p><b>UNITS</b></p> <table style="width: 100%;"> <tr> <td style="width: 50%;"><b>16th Corps</b></td> <td style="width: 50%;"><b>Germany</b></td> </tr> <tr> <td>8th Corps</td> <td>Germany</td> </tr> <tr> <td>74th Army</td> <td>Soviet Union</td> </tr> </table> <p><b>UNIT REPORTS</b></p> <p>State at start of round Orderly retreat test State at end of round</p>	<b>16th Corps</b>	<b>Germany</b>	8th Corps	Germany	74th Army	Soviet Union	<p>Back</p>									
<b>16th Corps</b>	<b>Germany</b>															
8th Corps	Germany															
74th Army	Soviet Union															

There are players who like to know exactly what is going on under the hood of the game engine; players who don't like black boxes. Well for these players this screen is here. Also for scenario designers this screen is useful since it will allow them to check in detail if combat calculations are proceeding as they had them in mind.

I will now briefly discuss all the boxes you find on this window. If you want to know how combat actually works and actually want to understand all the info displayed in this screen consult chapter 4.

If you want to exit this screen and return to the main combat screen press the back button in the bottom or press ESC.

### **2.11.1. COMBAT ROUNDS BOX**

Combat lasts for a number of combat rounds. Here you can select for which combat round you want to see what happened.

### **2.11.2. UNITS BOX**

Multiple units can fight in combat. Here you can select for which unit you want to see what happened in the selected combat round.

### **2.11.3. UNIT REPORTS BOX**

Here all stuff that happened to selected unit on a unit level in the selected combat round is shown. You can select the specific report you want to get info on. When you click on a specific report the report will be shown in the bottom right of this screen under the individual reports box.

Not only reports are added to this box but also start of combat round stats of the unit and end of combat round stats of the unit.

Keep in mind if FOW is active that you will not get complete info on enemy troops.

### **2.11.4. INDIVIDUAL LIST BOX**

In this box all the individuals belonging to the selected unit are shown. In the first column their Subformation type is shown, in the middle column their status at the start of the combat round and in the last column their status at the end of the combat round.

An exclamation mark denotes an individual that has broken through the lines of the enemy.

You can click on any individual in the individual list box to get detailed info on its actions in the selected combat round.

### **2.11.5. INDIVIDUAL REPORTS BOX**

In this box all the reports are shown of the selected individual for the selected combat round. Also the stats of the individual at start of the combat round and at end of the combat round are added as reports.

When you click on a report detailed info will show up below this box.

Keep in mind if FOW is active that you will not get complete info on enemy troops.

## 2.12. ON VARIOUS POPUP WINDOWS

There is a number of popup windows present in the game. These popup windows mostly give statistics of subformation types, peoples, landscape types and location types. For the sake of the tropical rainforest (assuming you have a print version of this manual) and keeping the number of pages of this manual within publisher spec you will have to refer to chapter 4 to figure out what all the stats represent. Putting them here as well would be too much a case of putting doubled info in this manual.

## 2.13. SHORT KEYS

Key	Action
M	Move
T	Transfer
S	Strategic Transfer
H	HQ for Unit
N	New Unit
O	HQ for Location
P	Production for Location
F1	Strategic Screen
F2	Decision Room
F3	Statistics
F4	History
F5	Supply Layer
F6	Show/Hide Units
F7	Small counters in high zoom mode
A	Land Attack
B	Artillery attack
X	Airstrike
L	Load Unit



U	Unload Unit
Space	Select or OK in many screens and orders
ESC	Cancel or exit in many screens and orders
Arrow Keys	Scroll map
+	Zoom In
-	Zoom Out

## 2.14. GENERAL INTERFACE ADVICE

It is highly recommended that you use the short keys; it makes for an easier game experience. SPACE, ESC and M and A should especially be your friend!

In the main screen you can hover the mouse over almost anything and get useful extra info on that item!

## 2.15. EDITOR INTERFACE DOCUMENTATION

Documenting the editor has not been managed. However a lot of the buttons give mouse over info if you hover your mouse on them.

Feel like you're seeing no buttons? Disable the masterfile.

Want tutorials on how to edit and design scenarios go to the Matrix forums or the [www.advancedtactics.org](http://www.advancedtactics.org) website.

# 3. ADVANCED TACTICS: GOLD RULES

It is important to realise that the rules of the game you are playing can vary widely on a scenario to scenario basis. The new base scenarios that come with AT Gold are all using either the AT Gold Rules or the Classic AT Rules. The Classic AT rules are almost identical to the old AT rules and you might want to use the old manual for playing them. A number of new scenarios however have been added and most importantly a new random game algorithm, that use the new Advanced Tactics: Gold rules. The generic.at2 masterfile rules. Or short the [AT Gold Rules](#) are used at the time of writing by the following scenarios:

- » New Random Games Algorithm
- » NEW\_WW2/Russia 41 Gold.at2
- » NEW\_EVENSTEVEN/GermanRussian.at2
- » NEW\_EVENSTEVEN/AngloSaxonChinese.at2
- » NEW\_EVENSTEVEN/JapoAmerican.at2
- » NEW\_EVENSTEVEN/FrenchArab.at2

Keep in mind that in this documentation the specifying of exact statistics and numbers has been avoided as much as possible. This has been done because the game interface is providing you with that data (see the various question mark buttons in the main game screen), and the specific statistics might be suspect to further fine tuning and changes over time. It also makes for an easier read.

What's new compared to old random games?

This paragraph is written to give a quick overview how playing a random game in old Advanced Tactics differs from a new random game in Advanced Tactics: Gold.

### **3.15.1. COMBAT**

#### **Battle Stack**

Battle stack rules are now in effect. This makes it harder to break through well defended enemy hexes. No longer is there the exploit to attack again and again.

#### **AP Penalties**

Long battles now leave AP Penalties. Simulating the hold up related to protracted engagements.

#### **Intercept uncertainty**

You never know for sure if aircraft will intercept or not.

#### **Airfield Attack Bonus**

Aircraft that are not intercepting but attacked on their airfield and fight initial combat rounds with a disadvantage

#### **Concentric Bonus Reduced**

Concentric bonus is not as high anymore as it used to be.

#### **Initial penalty of attacker**

First 2 combat rounds there are initial penalties for all attackers that are not armor.

#### **Fuel**

Air, Navy, Motorized and Mechanized troops use oil for movement and combat. Without the oil they fight at a disadvantage, especially in attack. Oil usage is lower in defense then in attack.

#### **Surprise combat on sea**

Surprise combat can now also occur on the high seas.

#### **Overall**

Defense has become the stronger form. This is a big change from AT Classic which definitely favored the attacker. But armored breakthrough and combined arms are still very much possible, especially in the right terrain and in dynamic front line conditions.

## 3.15.2. ECONOMY

### Hostile Peoples

People not neutrals or your own will only have very limited production available for you. Most noticeably: no supply and subformation type production!

### Raw materials

You need raw materials for everything except bare bones infantry. This means in practice that with limited raw resources on the map your army will be more of an infantry army then before.

### Factories

You can now build factories. Keep in mind however that supply and infantry production are limited to friendly cities.

## 3.15.3. DIPLOMACY

### Cost for declaring war

A PP cost is charged for declaring war.

### Alliances

You can now form alliances and share supply lines, territory, units and research to the degree you want.

### Neutral sea hex sharing

You can now share a sea hex with units from a regime that you are not at war with.

## 3.1. TROOPS AND RESEARCH

### 3.1.1. INFANTRY

Infantry are troops that exist out of men carrying their own light arms by muscle power. In general they are cheap to produce

#### 3.1.1.1. GENERAL INFANTRY

General Infantry is the cheapest of all and has lower offensive value than defensive value.

#### Rifle I,II,III,IV

Yes Sir! Standing ready for your orders! Standard general infantry. Does the job, suffers the losses.

#### SMG I,II,III,IV

Yes Sir! Standing ready for your orders! General infantry equipped with submachine guns. Short range, higher firepower. They attack and defend better in forested and urban terrain and worse in plains, fields and mountains.

### **Militia I,II,III,IV**

Can go straight into the meatgrinder! General infantry that is recruited from dubious age groups and is not as combat worthy as other regular infantry. They're even worse in an offensive role than regular infantry and should only be used in defensive roles.

### **Guerrilla I,II,III,IV**

Like ghosts they move behind the lines! The Guerrilla is a specialized unit. It is the same as rifle infantry, but it moves a bit quicker and has excellent reconnaissance. Also the Guerrilla is able to hide itself; up to a certain extent they will not be visible to enemy reconnaissance, especially if placed in a landscape with high hide factor.

### **Ranger I,II,III,IV**

Elite of the elite! Are expensive to train but when recruited have elite morale to start with and will suffer less casualties in combat.

### **Mercenary I,II,III,IV**

Experienced guns for hire! You can only receive mercenaries if you have a mercenary base. Mercenaries are equal to regular rifle infantry, but they start out with a high experience level.

## **3.1.1.2. SUPPORT INFANTRY**

Support Infantry are more expensive than regular infantry and add punch to your regular infantry troops.

### **Machinegun I,II,III,IV**

Spews a hail of bullets! Machineguns have very high defensive ratings versus infantry.

### **Mortar I,II,III,IV**

Portable and highly efficient killers. Mortars are light artillery that can only be used from close up. Mortars add offensive punch against enemy infantry. Mortars are expensive but stay behind the frontline in combat and should thus suffer fewer casualties.

### **Bazooka I,II,III,IV**

Hollow charge weapons can be lethal to tanks from a close distance. Bazookas have good ratings against enemy armor.

## **3.1.1.3. SPECIALIST INFANTRY**

These specialists should not be used in direct combat role but for their own specific purposes.

### **Staff I,II,III,IV**

Control and command! Without staff a HQ is almost useless. Always make sure you have enough staff in your HQs to direct all the troops in the units that are subordinate to the HQs.

Do not use in a direct combat role as they fight rather weakly. They are the only subformation types that provide staff points.

### **Engineer**

Roads, bridges, fortifications... these guys build them all! These are not combat engineers but construction and demolition specialists. Use them for engineering tasks behind the frontline. It's the only subformation type that provides EP points.

## **3.1.2. GUNS**

Since infantry is mainly defensive and can be very well entrenched guns are needed to break the spirit and entrenchment of the defenders before sending in the troops.

### **3.1.2.1. ARTILLERY**

Infantry support is nice, but it is artillery that brings real firepower.

#### **(Regular) Artillery I,II,III,IV**

Blast your opponent to pieces from a safe distance. Has a range of 2 hexes and can be used in artillery attacks.

#### **Heavy Artillery I,II,III,IV**

Artillery guns on train carriages. Heavy and expensive. Has a range of 3 hexes and does a better job in doing structural damage than regular artillery.

### **3.1.2.2. OTHER GUNS & TACTICAL ROCKETS**

#### **Flak I,II,III,IV**

Umbrella versus air attack! Has an AA range of 1 hex and should be used to support airfields, industries, towns or formations under air attack.

#### **Infantry Gun I,II,III,IV**

Light field artillery to fight in the frontline. Very much like a mortar. However it has larger range and also has from level II and higher range 1 for artillery attacks.

#### **Anti Tank Gun I,II,III,IV**

Position and entrench! Use this in defensive role against armor.

#### **Katushya I,II,III,IV**

Howling rockets raining down! Katushya's are tactical rockets that when used can be compared to a very heavy artillery strike. However katushya's can only be used once.

## **3.1.3. ARMOR**

To avoid a "sitzkrieg" you'll need to use armor to combine offensive power with speed.

### **Armored Car**

A tin can on wheels. Only effective against infantry.

### **Light Tank I,II,III,IV**

Cheap and armored. Best used against infantry and armored cars.

### **Medium Tank I,II,III,IV**

Strong tank. Best used against a combination of lighter tanks and infantry.

### **Assault Gun I,II,III,IV**

A tank without a turret. Compromise between cost and effectiveness. Best used in AT role in defense.

### **Heavy Tank I,II,III,IV**

Expensive but strong. Should only be used against enemy tank concentrations.

### **Super Heavy Tank I,II,III,IV**

This monster tank should be used against other tanks only. Questions could be raised about its cost effectiveness.

### **Tank Destroyer I,II,III,IV**

In offensive or in defense... this tank is an expert in destroying other tanks.

## **3.1.4. TROOPCARRIER/TRANSPORT**

A number of subformation types enable you to motorize your units and provide transfer capacity points.

### **Truck**

Slurps oil but excellent mobilizer of troops. Provides land transfer capacity points in HQs and can motorize units as well.

### **Halftrack I,II,III,IV**

Armored transport for elite infantry. Same as truck, but provides less transfer capacity points. It does however increase protection for its infantry passengers from hostile infantry, artillery and armor fire.

### **Train**

Coal trains and railroads bind your empire together. Provides rail cap transfer points and can also directly "motorize" units to travel over rail. Keep in mind that trains do not use oil and are the strategic transport type of choice.

## **Horse**

The good old trusted horse does not need fuel to go forward... Can be useful to get artillery up to foot speed if you lack the resources to properly motorize. Or if the landscape is too tough for motorized transport.

### **3.1.5. AIRCRAFT & STRATEGIC ROCKETS**

Aircraft are usually a big investment but once you manage to claim air superiority it will pay off.

#### **Fighter I,II,III,IV**

Master of the sky! Use the fighter to attain and keep air superiority.

#### **Divebomber I,II,III,IV**

Death from above! Screaming engines, precision bombing! Use the divebomber to attack enemy artillery and armor concentrations.

#### **Levelbomber I,II,III,IV**

Mass produced bomb carrier. Standard, somewhat versatile and cheap bomber. Use the levelbomber versus parked enemy aircraft, artillery, mobile (but not armor) and infantry targets.

#### **Strategic Bomber I,II,III,IV**

Destroy the enemy's industrial base and win the war. Use the strategic bomber to reduce the anti-structural points of enemy production centers or fortifications.

#### **Torpedo Bomber I,II,III,IV**

The ultimate weapon against enemy fleets. Use the torpedo bomber against naval targets. Takes only half the space of regular aircraft on carrier.

#### **Carrier Fighter I,II,III,IV**

Small and sturdy. Use it to stock your aircraft carriers with. Takes only half the space of a regular fighter.

#### **V-Weapon I,II,III**

Unstoppable terror from above. A strategic rocket. It should be used to cause structural damage on a target of choice.

#### **Kamikazes**

Pilots of the divine wind fly a fighter stacked full of explosives in a final mission for victory. Gives even a single fighter attack a shot to sink a capital ship. Keep in mind you always lose your aircraft in the attack.

### 3.1.6. NAVY

Ships provide you with a way to cross the seas between continents.

#### **Cargoship**

The naval beast of burden. Provides a HQ with Naval Transfer capacity points. And when placed in a unit it allows that unit to load and unload passenger units. The cargoship is essential to any amphibious operation.

#### **Destroyer I,II,III,IV**

Equipped with sonar and depth charges as well as a good main gun. Use to destroy cargoships and submarines. It's the master in submarine destruction. No fleet should go without it.

#### **Submarine I,II,III,IV**

The silent killer. Use to destroy cargoships and scout. Its stealth will protect it very often.

#### **Cruiser I,II,III,IV**

Strong ship with high AA gun count. Use it to beef up your fleets anti-air defenses and attack enemy destroyers and cargoships. It has some shore bombardment power.

#### **Battleship I,II,III,IV**

Master of the sea. Use it to destroy any enemy surface vessels.

#### **Aircraft Carrier I,II,III,IV**

A mobile airfield on the high seas. Use it to carry torpedo bombers out to the seas. A fully stocked aircraft carrier will be able to beat strong enemy fleets from a distance.

## 3.2. LANDSCAPES

### 3.2.1. CLIMATES

#### **Arctic**

Arctic climate is characterized by long winters and low city count. Though capitals are sometimes placed in this region, probably for strategic reasons of internal security.

#### **Temperate**

Shorter winters than in the Arctic zone.

#### **Sub-Tropical**

No snow anymore at all. Just 2 months of mud season and rain. The temperate and sub-tropical zone are the places where you'll find most towns.



## Tropical

Characterized by lower city count and the absence of any sort of mud or snow season. In the tropics you will also find a denser form of forest: Jungle. Agriculture in the tropical zone are rice paddies or wadies. This landscape is equal to swamp. The combination of Jungle and wadies make the tropics hard going for any mechanized operation.

## Desert

You'll also find deserts in either sub-tropical or tropical parts of the world. Deserts are characterized by absence of forests and swamps and towns. Though a capital might show up now and then in the desert zone. Deserts are ideal country for panzer operations.

## 3.2.2. SEASONS

### Clear

Regular summer landscapes.

### Mud

Due to rain and melting snow, operations are impaired. Mud gives mechanized (wheel & track) higher move costs. Rain and heavy clouds and fog make air movement impossible. Also mud hexes cost much more AP for the supply system, rail however keeps functioning unaffected, as do (sub)urban hexes. However for countryside and wilderness the mud and rain have quite some impact on maneuverability and the delivery of supplies. Mud is usually a pause in military operations.

### Snow

Snow gives all troops increased auto-entrench. Also the extreme conditions that affect the troop outside of (sub)urban hexes cause 5% drop in readiness after supply consumption. This may not seem much but will require double the amount of supplies the next turn (if unit is set at 100% supply request).

### Calendar

	Arctic	Temperate	Sub-Tropic	Tropical + Desert
January	Snow	Snow	Mud	Clear
February	Snow	Snow	Mud	Clear
March	Snow	Mud	Clear	Clear
April	Mud	Clear	Clear	Clear
May	Clear	Clear	Clear	Clear
June	Clear	Clear	Clear	Clear

	Arctic	Temperate	Sub-Tropic	Tropical + Desert
<b>July</b>	Clear	Clear	Clear	Clear
<b>August</b>	Clear	Clear	Clear	Clear
<b>September</b>	Clear	Clear	Clear	Clear
<b>October</b>	Clear	Clear	Clear	Clear
<b>November</b>	Mud	Clear	Clear	Clear
<b>December</b>	Snow	Mud	Clear	Clear

### 3.2.3. TERRAIN

#### Plains

Reasonable movement for motorized units. Low entrenchment options for infantry. Good terrain to attack on.

#### Fields

Reduce speed slightly and give a little extra entrenchment.

#### Forest

Hard to traverse for motorized units. Good entrenchment. Forests give attacking armor, artillery and aircraft a considerable penalty.

#### Swamp

Impossible to enter for motorized units. Low entrenchment. Acts as plains when frozen. But movement for motorized units is still prohibited to avoid them getting stuck there when winter ends. Gives attacking armor a very considerable penalty in offense and defense. (If road through swamp armor can attack.)

#### Low Mountains

Hard to move into for all troops. Excellent entrenchment. Low mountains give attacking armor, artillery and aircraft a considerable penalty.

#### High Mountains

You cannot build roads through high mountains. Motorized units cannot move into them. They provide the best natural entrenchment available. Gives attacking artillery and aircraft a high penalty.

## **Urban**

Urban terrain is immune from the negative effect of mud season on movement costs and also immune to the negative effect of readiness loss in the winter season. Urban is easy to move through, but has high entrenchment. Gives attacking armor, artillery and aircraft a considerable penalty.

## **Suburban**

The same as urban, but with lower entrenchment.

## **Desert**

There are desert variants of a number of the above mentioned terrains. The desert variations, except for urban and suburban, have considerably lower entrenchment scores. This is due to lack of cover the arid climate causes.

### **3.2.4. RIVERS**

There are major and minor rivers. They give negative combat modifiers to an attacker when attacking over a river hex border into another hex. The penalties are most heavy on tanks. Penalties do always apply, but they are lighter with minor rivers and also lighter if a bridge is still intact over the river. A river without a bridge will also cause heavy penalties on movement since a river crossing is never an easy feat.

### **3.2.5. ROADS**

There are railroads on the map and railroads can also be constructed with engineer units at a cost in raw materials. Railroads will make supply flow very far at very little AP cost. Also railroads will enable you to use trains in HQs to (strategically) transfer without having to spend oil. Railroads also are considered to have a normal good road next to them and thus they provide quick lanes of movement to motorized units.

### **3.2.6. FORTIFICATIONS**

Fortifications impose extra penalties on artillery and armor attack (but not to air!). Fortresses impose even higher penalties on such attack. The fact that these modifiers come on top of landscape combat modifiers means that a fortress placed on for example a mountain hex is very well protected from most forms of attack.

### **3.2.7. BRIDGES**

Bridges can be constructed by engineers at a cost in raw materials.

## **3.3. LOCATION TYPES**

For all location types the rule is that they can not be repaired by engineers. Repair is automatic for all location types.

### 3.3.1. TOWNS

Towns are your core assets and usually, at least in the random games, they always are on VP hexes. Towns, unlike the specialized factories, can construct anything you wish, even up to a level some raw materials and oil.

#### **City**

Is a production site, an airbase and a port. Its structural points can be reduced to zero, but it can never be destroyed.

#### **Capitol**

Just like a regular city, but has a higher number of VP points, at least in the random games. Also its production is much higher than a regular town. Your capitol is therefore very valuable.

#### **Town**

Is like a city, but has no production power. At the time of writing they are only used in the Russia 41 Gold scenario.

### 3.3.2. RESOURCES

At start of the game Level I resources will be present on the map. These will be upgradeable by engineers at a cost in raw materials, Political points and Engineer points to level II and later to level III resource sites. Level II upgrades are smart to make since they will greatly increase the output. Level III upgrades should only be made if you really need the extra resource production since the upgrade is quite expensive.

#### **Raw Level I,II,III**

Automatically produces raw materials for your regime. They can suffer full structural damage, but they cannot be destroyed.

#### **Oil Level I,II,III**

Automatically produces oil for your regime. They can suffer full structural damage, but they cannot be destroyed.

### 3.3.3. FACTORIES

Can be constructed by engineers for a cost in raw materials, Political points and Engineer points. Factories can only be constructed if they are at least 3 hexes away from the closest other factory. This rule is in effect to put a cap on the number of factories a player can build. Factories when conquered will switch from people at the end of a turn.

#### **Aircraft Factory**

Can produce all types of aircraft. It can be destroyed. It also acts as an airfield.

### **Tank Factory**

Can produce all types of tanks. It can be destroyed.

### **Gun Factory**

Can produce all types of guns. It can be destroyed.

### **Shipyards**

Can produce all types of ships and submarines. It can be destroyed. It also acts as a port.

## **3.3.4. FORTIFICATIONS**

Can be constructed by engineers for a cost in raw materials, Political points and Engineer points. They can be built on all landscapes except high mountains, swamp, urban and suburban. Fortifications provide higher auto-entrenchment, max entrenchment and combat modifiers for the hex. The bonuses the fortifications give come on top of the bonuses the landscape of the hex already gives.

### **Fortification**

The normal type of fortification. It can be destroyed.

### **Fortress**

The superior and more costly form of fortification. It can be destroyed.

### **Cheap Fortification**

Only available when you have researched fortification theory. It's much cheaper to build than the regular fortification but slightly less sturdy and durable. It can be destroyed.

### **Super Fortress**

Only available with fortification theory. It's more expensive in supply points to build than the regular fortress but is more sturdy and durable. It can be destroyed.

## **3.3.5. MAKESHIFT**

Can be constructed by engineers for a cost in raw materials, Political points and Engineer points.

### **Airfield**

Allows your aircraft to operate from the hex in question. It can be destroyed.

### **Port**

Allows ships to dock and receive supplies. It can be destroyed.

### 3.3.6. MISCELLANEOUS

These location types only are placed on the map in rare cases. Like in the random games when you open a crate you can find such a location type.

#### **Mercenary Base**

Provides a steady stream of mercenaries to the HQ controlling it. It can be destroyed.

#### **Research Laboratory**

Provides a steady stream of political points to the regime controlling it. It can be destroyed.

## 3.4. PEOPLES

In the AT Gold rules there are 7 different kind of peoples. Cities are populated by a certain people and regimes are controlled by a certain people. Only if the people living in a city are of the same people as the people of your regime will you have full production options.

The people differ from each other in names. So German regimes have German-like names and German cities have German names. But they also differ in the fact that each people have a special research field. This gives each people a minor, but unique option to use.

### 3.4.1. ETHNOGRAPHY

#### **Germans**

Only people that can research V-weapons and build super-heavy tanks when heavy tank research is completed.

#### **Anglo-Saxon**

Only people that can build Rangers.

#### **Russian**

Only people that can research Katushya's.

#### **French**

Only people that can build cheap fortifications and super fortresses.

#### **Arab**

Only people that can build Guerrilla's.

#### **Chinese**

Only people that can build Militia.

#### **Japanese**

The Japanese have 60% basemorale instead of 50%. Its also the only people that can build Kamikaze's.

## **African**

These people only appear when a crate contains a hostile city. All hostile cities encountered will belong to the same African regime.

## **Neutrals**

This people is what the resource sites are set too (oil and raw). They are the only people that work efficiently for all peoples.

### **3.4.2. PRODUCTION LIMITATIONS**

Factories when conquered will switch to your people after you end your turn, and will thus be usable the next turn. Resource sites produce for everybody but cities do not. Conquering a city with different people in it than your regime has will give you VP, but only limited production use. However these hostile people cities still provide a use. You can use them to build political points and synthetic oil and scrap metals at half the normal efficiency. This will free up production capacity used for those tasks in your friendly cities.

## **4. ENGINE RULES**

How the AT engine works can be explained in several ways. Only the combination of these types of documentation will give a full picture of how the engine works and how data and rules interact.

### **4.1. GAME PIECES**

Game pieces are things like units and regimes, but also more data-like structures as landscape types and subformation types.

#### **4.1.1. UNIT**

A unit starts as an empty box but can be filled with Subformation. Units have the following properties:

##### **Transfer Capacity Points**

HQ units keep track of transfer capacity points for land, sea and rail.

##### **Supply Points**

Supply points are kept track of on a unit level. Keep in mind if there is more supply points than troops that auto-carry it or transport-carry it the unit will move at speed of supply.

##### **Standing Order: Intercept Readiness Stop**

An air unit can have a setting at which readiness level and lower it will no longer intercept.

### **Standing Order: Retreat Percentage**

A unit can have a setting specifying at which percentage of losses (forced retreats and kills) it will start an orderly retreat.

### **Standing Order: Supply Request Percentage**

A unit can have a setting specifying the percentage of the supply it ideally likes to receive next turn. Basically it will allow you to get a unit to go on sustenance and no longer gain/recover readiness, but not lose anymore either due to complete lack of supply.

### **Standing Order: Do Anti Supply (AS)**

A unit can have a setting specifying if it will or will not use its Anti Supply points. Disabling it can be a smart move to hide the presence of your units, since anti supply kills will give the enemy your presence away (or very close to it).

### **Supply Consumption Percentage**

In the start of your turn each unit consumes supply. See Readiness Increase. If not minimum supply was present to keep readiness at least on same level, this statistic will be set somewhere below 100%. It gives hefty penalties in combat.

### **Color**

A HQ can have its color bar set.

### **Reserve Supply Setting**

A HQ can have its reserve supply setting defined.

## **4.1.2. SUBFORMATION**

Subformations only exist inside units. For each unique combination of: Subformationtype, People and MoveType there is a separate subformation present in a unit. Subformations have the following properties:

### **Action Points**

Referred to as AP often. Action points are necessary for movement and combat. The unit displays them in the game interface but basically you are just looking there at averages or lowest subformation scores of that stat. You can see the unit as the fleet and the subformations as the ships.

### **Subformation Type**

The type of troops. See Subformation Type.

### **Readiness**

Readiness affects the number of action points available and the combat strength.



## **Experience**

Experience affects the combat strength.

## **People**

The people that this subformation is made of. See People.

## **Entrenchment**

Entrenchment affects the combat strength in defense.

## **Morale**

Morale affects the percentage of casualties that can be taken before there is a chance the unit panics.

## **Engineer Points**

Engineer points are used for constructing building and infrastructure and blowing or repairing locations and bridges.

## **Offensive Modifier**

A subformation can have a positive or negative modifier for offensive operations. This can be set by events.

## **Defensive Modifier**

A subformation can have a positive or negative modifier for defensive operations. This can be set by events.

## **MoveType Overrule**

There can be a movetype overrule on a subformation. Sounds used for movement type overrules can be specified in the [Groupnames](#).

## **4.1.3. MAP**

At the moment there is only one map. All hexes are on this map. A map has the following properties:

### **Width & Height**

Determining the size of the map. You should not make maps too large. Advice is to stay below around 150x150.

### **Maploop**

Map loop can be on or off. If maploop is on the width of the map must be an uneven number like 1, 3, 5, etc. So that it can loop nicely. With maploop the hexes at X=0 connect with the hexes at X=Width.

#### 4.1.4. HEX

The map is populated with hexes. Each hex has the following properties:

##### **Landscape Type**

A hex has a Landscape Type and sprite# from that LT which determines a lot of movement and combat effects for it.

##### **Roads**

A hex can have one and only one Road Type specified for each direction (0=N, 1=NE, 2=SE, 3=S, 4=SW, 5=NW).

##### **Bridges**

A hex can have a Bridge specified for each direction.

##### **Location**

A hex can have one and only one Location specified on it. For example a town or a factory.

##### **Special Graphics**

A hex can have a special graphic on it. This has no effects other than showing an extra graphic on it. Special graphics work the same as Landscape Types and basically it is an extra Landscape Type + Sprite assignment, but purely for artistic purposes.

##### **Area Slots**

Each hex has 10 area slots. (slot 0 - slot 9). Each slot can have an integer value, negative or positive. It's a neat way to store hidden data.

##### **Last Seen Status**

If playing with Shroud on then each regime remembers the Landscape Type and Sprite and owner. So when there is no recon anymore on the hex the player still sees what was last known about the hex when recon points were still on the hex.

##### **Owner**

The Regime currently owning the hex.

##### **Victory Points**

Or VP. They can be present on a hex. They are the same for each regime playing. And can be used in combination with a victory condition specified in the Scenario Settings.

##### **AIVP**

Artificial Intelligence Victory Points. They can be specified differently for each regime playing. You can set these AIVP through events.

### **AP Penalty**

Is remembered on a regime to regime basis. AP Penalties can be caused by combat or by a hex starting in enemy hands. AP Penalties caused by combat carry over between allies so as to avoid leapfrogging.

### **Battlestack**

Stack points committed in battles where the hex was not taken stay in effect and are remembered on a regime to regime basis. They are remembered separately for land attacks, artillery attacks and air attacks. These battlestacks carry over between allies so as to avoid leapfrogging.

### **Original Owner**

If rulevar 840 is active then at start of game the original owners are set equal to the current owners. Upon conquest of a hex with an original owner that's not you but an ally of yours, then that hex will automatically revert to ownership of the original owner.

## **4.1.5. LOCATION**

One location can be present on a hex maximum. Locations have the following properties:

### **Name**

The name can be changed by the player at the moment.

### **Location Type**

The type of location dictates a lot of effect. See Location Type.

### **People**

What sort of people live or work in the location? It can be important for production options.

### **HQ**

A location can be assigned to a HQ. Exception here is for Location Types that do not require a HQ to be set.

### **Structural Points**

These can be damaged in combat and dictate the efficiency of production. Also they give penalties to aircraft in airfield or ships in port if not at full level.

### **Production Lines**

Each location has four production lines. For each remaining production, can be stored (which can be caused by delivery to HQ problems).

## 4.1.6. REGIME

Usually each player plays 1 regime, but there are also a lot of scenarios where a player is supposed to play multiple regimes.

### 4.1.6.1. PROPERTIES

#### **Base Morale**

This determines together with People base morale the maximum natural morale growth level of troops under this regime.

#### **Political Points**

Often referred to as PP. Political Points can be used to buy new units, research and to play action cards with.

#### **IsAI**

True or false. Can be changed through event

#### **DipBlock**

If dipblock is in place then the regime in question cannot be declared war on, made peace with or allied with by other regimes (through event it's still possible though).

#### **Sleeping**

If a regime is sleeping then it will not get a turn. It will be skipped in the Game Loop Screen.

#### **People**

The people who we can see controlling this regime. People in units and locations can react differently to different people owning them.

#### **Regimeslots**

Each regime has 499 slots that can be set to any value through events and production. They can be named too, but the naming is universal (for each regime the same).

#### **Research Fields**

Each regime has either true or false setting for each Research Field in existence.

#### **Diplomacy**

Each regime has either status 0 (war), 1(peace) or 2(alliance) with each other regime. It should be set at status 1 with itself optimally.

#### 4.1.6.2. PRESENTATIONAL PROPERTIES

##### Colors

The color for the counter can be set and the color for the text and logo on the counter can be set.

##### HQ Symbol

Which symbol is used for HQs

##### HQ Symbol Override

If `override=false` then the HQ Symbol is rendered in the color specified for the regime. If `override=true` it is rendered as it is.

##### National Icon

Can be chosen and is used in the corner of the unit counters. Set it to a transparent graphic if you don't want it shown.

##### Extra Graphic

You can specify an extra graphic ID#. -1=none. If you do it will determine how Subformation Types are shown that are owned by this regime. Keep in mind that People also has an extra graphic ID# that overrides this one.

##### Mirror

If you activate mirror, all subformationtype logos will be shown in reverse.

##### Name

Can be changed through an event.

##### UnitName + Counter

Used as default for new units.

##### HQName + Counter

Used as default name for new HQs.

#### 4.1.7. ACTION CARD

Instances of action card can be held by regimes. Only 1 instance of each card can be held by a single regime.

##### 4.1.7.1. PROPERTIES

##### PP Cost

The cost for a player to play the card. 0 = free. -1 = unplayable and will be displayed as "N/A".

## **Execute Event**

The event that will be called when the card is played.

### **Tempvar0, Tempvar 1**

The values you give here will be used to set Tempvar0 and Tempvar1 in the event that is executed. It is a way to pass information from the card to the event, so that 1 event can cater to multiple cards.

### **Areaslot, Areavalue**

Set Areaslot > -1 to make the player chose a hex before the card execute event is called. Only hexes with specified areaslot set to areavalue will be selectable. The selected hex X,Y will be given to the event in Tempvar2 , Tempvar3.

### **SelectUnit**

If set to true any unit can be selected that has been tagged as selectable by the Pre-Execute Event. It is passed to the Execute Event as Tempvar5.

### **Pre-Execute Event**

This event is before a popup screen is presented to the player in which he/she can choose.

## **4.1.7.2. PRESENTATIONAL PROPERTIES**

### **Colorscheme**

0 = red, 1 = green, 2 = dark blue, 3 = yellow, 4 = light blue

### **Event Picture #**

See Event Pictures to see how to load event pictures. You can reference them here. This picture will be shown on the card.

## **4.1.7.3. NOTES ON USE BY AI**

When you are scripting the use of an action card by the AI through ExecPlayCard... the script for the AI can set the target hex by using ExecAreaXY. When you want to script the unit selected use ExecSetUnitSelected.

## **4.1.8. BRIDGE**

There is only 1 bridge type. You can set its graphics and the base EP cost to build it. The EP cost can be modified by RiverType that is being crossed with the bridge. Structural points of a bridge are defined in rulevar 7.

## **4.1.9. SUBFORMATION TYPE**

This must be the largest data structure of them all. It allows you to define troop types and equipment, collectively known as Subformation types or SFTypes.

#### 4.1.9.1. PROPERTIES

##### **Move Type**

Move type names are defined in groupnames. You can assign a value of 0-99 here. The move type the type has dictates the AP used for Landscape Type, Road Types and River Type in movement and such.

##### **Supply Carry**

The amount of supply each individual of this type carries with itself at no extra movement cost. Ideally this will be filled to the maximum after supply consumption. So if a unit has for example 20 supply carry combined and will consume 10 supply and has 10 supply still in store it will request 20 supply.

##### **Supply Consumption**

Half the supply consumption / requirement rate is needed as upkeep for a unit at rdn100 (readiness). Full supply consumption is used to get a unit from rdn90 to rdn100. See Readiness Increase.

##### **Capacity**

Transfer capacity for land or navy transfers. Depends on theater of this type if it represents land or navy transfers.

##### **SFType Group**

Somewhere else in the game it could also be known (or used to be known) as unitgroup, but it's the same thing. You can assign a value of 0-99 here. RiverType give modifiers based on the unitgroup. There is also an exec that can set global modifiers for unitgroups through events.

##### **Theater**

0=land, 1=navy, 2=air

##### **Weight**

Is important to determine if type can be carried by other type and in transfer cost calculations, as well as loading on transport ships and parachopping.

##### **CarryCap**

The carry capacity is not to be confused with Transfer Capacity. It determines how many other individuals of other type it can carry to for example mobilize a unit. Example: truck has carry 20 and infantry weight 1, truck can thus mobilize 20 infantry.

##### **Upgrades, Too, Cost XP**

A type that has an upgrade too type X specified can be upgraded by the player at the cost of a number of supply points equal to the production point value specified in cost. You can also set minimum XP that a subformation must have in order to be eligible for upgrade.

### **MoveRedux**

A quick and dirty stat to allow the type to travel at lower cost than its movement type would dictate.

### **Recon Points**

Recon Points determine how much recon units with these troops have on neighboring hexes.

### **Hide Points**

Hide Points determine how well enemy recon points can be fooled.

### **ZOC Points**

ZOC points are Zone of control points.

### **CanDoParadrop\**

CanDoParadrop determines if subformationtype can be used in paradrops or not.

### **EP**

The engineer points grow each round with this amount.

### **Staff Points, CombatMod, MoraleMod**

A HQ needs 1 staff point for each power point in control. The mods at 0.0 give no bonus and at 1.0 a 100% bonus if the staff is at full experience level. See combat calculations for more info.

### **Blow bridge points**

Used for all demolition operations.

### **Anti-Supply points, Range, Sea anti supply points**

Separate anti supply points are used for supply on sea and land hexes. The points are exerted in an AP range specified.

### **Rail Cap**

Transfer capacity for rail transfers.

### **ConsiderCarry**

If set to false this type will never be carried by another type.

### **AirCarrierCap**

AirCarrier Capacity points are needed for a ship to be able to take the seas with aircraft in it.

### **Action Point Mod**

Quick and dirty way to give unit structurally less or more AP than it would normally have.



#### 4.1.9.2. COMBAT PROPERTIES

##### **Initiative**

Separate score used for offense and defensive role.

##### **Attacks**

Number of attacks per combat round.

##### **Max Attacked**

Maximum number of times this type can be attacked per combat round.

##### **Stack Points**

Stack Points determine the stack value the troops have on the hex they reside in.

##### **Rear Area**

Same as the term “backbencher”.

##### **Artillery Range**

0 means this type is not artillery.

##### **Favorite Target Tries**

Score of 1 means it is basically picking a random target.

##### **AA Range**

0 means no AA range.

##### **Kill%**

What's the chance a hit scored by this type is a kill.

##### **Retreat%**

What's the chance it is a retreat hit.

##### **Pinned%**

Not present in editor. But the chance on pinned hit is  $100\% - (\text{kill}\% + \text{retreat}\%)$

##### **Artillery Mod SType**

If another SType is specified here its landscape type mod table will be used to determine effect of artillery barrage. This can be useful for example for battleship which does not suffer attack modifier if directly attacking port, but needs to get an attack modifier using shore bombardment. The kill and retreat % of the referenced SType will also be used when doing artillery attack. That's all that's used from the other SType: (1) Landscape Mod, (2) Kill% + (3) Retreat%.

### **KillsRegVar**

If an individual of this type is killed a specific regimevar of the regime that killed it is increased by +1. An example use is to register if the single presence of 1 President SFType has been killed or for counting deaths of civilians to increase zombie troops.

### **OnAttackSetSlot**

Every time an individual does an attack the specified slot is increased by +1. Could be used to, for example, reflect the cumulative effect of combat on the map.

### **FirstRoundPenaltyMod**

If set to 1 the effect of the rulevars giving attacker in land attacks some initial combat round penalties is as it should be. If set lower, the effect will be diminished. For example you can set armor to 0 and infantry to 1 as to favor armor in offense and make infantry a bleeder in the first rounds. See rulevar 316 and 317.

### **Anti-Structural Points**

Anti-Structural Points are usually referred to as AS. They are points each regime can have on a hex. They can cause damage to enemy supply and transfers moving through the hex.

### **Entrench power**

The gain in entrenchment points this type can maximum make every round.

### **Power points**

These are used to display the value on the counters, and also in numerous other calculations. Usually it is best to keep power points close to the relative value of the type or the production point cost.

### **RdnLossPerAttack**

Every attack it does (multiple per combat round possible) it results in the loss of X absolute readiness points.

### **Auto Destroy**

This can be set separately for offensive and defensive use. You don't want rockets to detonate if under attack for example, or mines to detonate in offensive.

### **Kill to Retreat%**

Upon an individual of this type suffering a kill hit in combat there is an x% chance that this is mutated to a forced retreat hit. Warning: excess use can make this type very elusive.

## **4.1.9.3. COMBAT DETAIL STATS**

Versus each possible SFType group a target can belong to the following stats are defined:

### **Favorite Score**

The higher the score the more likely it is to be a target of this SType.

### **Power**

How many attack points has the type in offense.

### **PowerDef**

Attack points in defense.

### **ArtPower**

Attack points if doing artillery attack or shore bombardment.

### **Art Favorite Score**

How favorite is this target if doing artillery strike.

### **Hitpoints**

How many hit points in offense.

### **Hitpoints Def**

How many hit points in defense.

#### **4.1.9.4. COMBAT LANDSCAPE MODS**

For each possible landscapetype the type might be fighting in there is a modifier. The modifier can be different for offensive and defensive combat.

#### **4.1.9.5. AI ROLE SCORES**

Here scores can be given for the AT (Gold) AI to know what sort of type it is.

#### **4.1.9.6. PREVENT RULES**

For each rule you define the case were STypeGroup X (PreventHitOn) is attacked by enemy STypeGroup Y (PreventFrom). For each rule you can set the chance that the prevent works. If the prevent works this type will replace the type you are preventing the hit on. The number of prevents this type can do per combat round is defined in MaxPrvPointsGiven. Each prevent costs the number of points specified, and the type that is receiving the prevent must have this number of MaxPrevPointsUsed available. The priority is used if multiple types compete on protecting a certain other type from receiving a hit, highest priority will to the preventing.

This rule mechanism allows the scenario creator a plethora of intricate dependencies reflecting certain combat doctrines. For example you could model small unit tactics advances in early WW2 were eventually infantry was assigned to close tank support to try to prevent bazooka or AT gun tank fire hitting the tanks.

#### 4.1.9.7. FUEL STATS

Allows you to set possible fuel use for movement, attack and defense and combat modifiers for if out of fuel for movement, attack and defense. A peculiarity in the engine needs mentioning here. -1 as well as 0 for FuelType Use is considered as “None” or no fuel use at all.

#### 4.1.9.8. PRESENTATIONAL PROPERTIES

##### **Move Wav**

Wav file played when the player moves this type

##### **Battle Wav**

Wav file played when this type is doing battle.

##### **Counter Symbol**

Graphic used on the counter.

##### **Artistic Graphics**

Used as illustration in main screen and detail view.

##### **Overrule symbol**

If overrule symbol is set to true, the counter symbol will not be colored to the regime specifications but keep its original colors.

##### **SymbolGroup, SymbolWeight**

Determined to check which graphic should be used in a unit with multiple subformationtypes. Used is the counter symbol of one of the SFTypes in the SymbolGroup with the highest weight, then the specific SType in this symbolgroup with the highest symbolweight.

By playing with these settings you can make the logo appear on units which help the player the most. Like giving trucks a high score, since players will want to be able to spot mobilized units at a glance.

##### **Extra SType graphics list**

A regime can be set to an extra graphic, so can a people. If either is this table will be looked to. If the extra graphic# searched for is defined in this table as ExtraCode is present then the counter symbol and artistic graphic and name defined in this list will be used.

This enables you as done in Classic.at2 AT rules to make 1 SType appear different in Allied, German and Soviet hands.

#### 4.1.10. LOCATION TYPE

Each location on the map belongs to a location type. Location Types have the following properties:

## Graphics

The specified `sprite#` of the specified `landscape type#` will be used to change the hex too when the location type is constructed. This can be set to -1 and no landscape of the hex will be changed upon construction or placement.

If an extra graphic has been specified this will be overdrawn over the hex graphics. An extra graphic is a NATO graphic #.

## Ground Types

Each landscape type belongs to a ground type. Here you can specify on which ground types this location type can be constructed.

## ProdPoints

If 0 no production is possible.

## IsPort,IsAirfield

To allow naval and air units to move in and out.

## Structural Points

Structural points determine how much damage the locationtype can take.

## On Destruct LT, Sprite

Here you can specify to what landscape type and sprite the hex should change if the locationtype is destroyed due to razing or damage. You can use this to place for example ruins on the map after a city has been destroyed. -1 means it cannot be destroyed. -2 means it can but that the landscape type will not be morphed.

## Auto Recover Points

The amount of structural damage automatically healed every round.

## LocType Group

The `group#`, used in minimum distances below. LocType groups are fully hidden from the player's interface, no need naming them.

## Buildable

Can it be built by engineers?

## EP

The engineer points it cost to fully repair this location type or to build it. Keep in mind that rulevar 902 can disable repairing of locations by engineers.

## Invincible

Structural points of such a location can suffer no damages.

### **Supply Cost in Prod Points**

Only used if your attempting to build this location type. It specifies the amount of supply expressed in production cost points needed to build it.

### **Political Point Cost**

Same as above. Only this specifies the PP needed to build this location type. Giving PP cost is a good way to put a limit on the otherwise limitless growth of locations.

### **Z-Order**

Is used inside the production algorithm in the gameloop. The Higher the Z-order the later in the order of locations the location will calculate its production. This can be useful to ensure that some production takes place earlier or later then other production.

### **Slot,SlotValue**

If higher than -1 then it means the specified areaslot must have a specified value in order to allow the locationtype to be constructed here.

### **LandscapeType Use**

This is quite important. If a landscape type, sprite# is specified here it means that this landscape type can be used for calculations in the hex concerning entrenchment and combat modifiers. The auto entrench, max entrench and combat modifiers for each SFTYPE for this landscapetype specified here is added on top of the existing landscape of the hex. So for example auto entrench for light forest = 50, auto entrench for fortification = 50 then auto entrench for the hex =100.

The purpose of this is to enable you to create fortification location types that don't overrule the landscape of the hex, but that still modify the defense characteristics of the hex.

### **SetPeopleToSlotX**

If >-1 and a new location is built of this type its people are set to the value in the areaslot 0-9 specified here.

### **NoHQ**

If this is set to true the locationtype cannot be assigned a HQ. Useful, for example, to fortifications or mines.

### **AutoProd**

Is set to something... it means that the player cannot specify production and that production is automatically set to a certain itemtype. Useful if LT in question can only produce 1 thing and you want to take some management from the player.

### **UpgradeFrom**

If >-1 it means that this locationtype can only be built by transforming the specified locationtype.

## **People Groups**

Each people belong to a people group. The people of the regime you are playing must be in this list in order for you to be able to produce here or to even build the location type.

## **Item Groups**

Each item belongs to an item group. Here is specified which items can be built here.

## **Minimum Distances**

You can specify minimum distances from other locationtype groups that need to be confirmed to in order to allow a new location to be built on a specific hex. A minimum distance of 1 means next to each other, 2 that 1 hex must be in between.

## **Research**

Research fields might be required in order to construct a new location of this type.

## **VarType,Qty**

Resources (regimevars) might be required to construct a new location of this type.

## **AI Autobuild**

With the AT Gold AI if you enable AI Free Build the AI will be allowed to build this locationtype anywhere without engineers. All loctypes with this active will be put in list and assigned the priority. If you also use an event the event must give the priority modifier in the X slot of SetCardXY(x,y).

A negative priority will never be considered for construction by the AI.

Also an event can be specified that is called after the location has been build. This can be used to do some housekeeping in the AI scripting and for example prevent the AI to keep building.

## **4.1.11. PEOPLE**

Subformations, Regimes and locations all have a people set.

### **4.1.11.1. PROPERTIES**

#### **PeopleGroup**

ItemTypes and LocationTypes use the peplegroup setting to limit production.

#### **RegimeCol**

When specified, this people always uses the colors of specified regime in unit counters that are mainly filled with subformations of this people.

#### **ExtraGraphics**

Can cause a SFtype to be drawn and named differently. See SF Types.

## **Color**

If you don't want to create a separate regime just to color this people different use a custom color. When specified, this people always uses the colors of specified regime in unit counters that are mainly filled with subformations of this people.

### **4.1.11.2. PEOPLEGROUP MODIFIERS**

Specifies a number of modifiers based upon to which peoplegroup the people of the regime that owns this unit belongs too or fights against.

#### **BMr**

Base morale. Is the highest morale subformations can raise too without battlefield victories. It can be modified by regime base morale.

#### **BFr**

Fights For modifier. In some case for example a people might fight less well if fighting for a certain regime.

#### **BVS**

Fights Versus Modifier. In some case special hatred or fear might cause an individual in combat to fight at modified strength depending on the people its opponent belongs too.

#### **PMd, PM2, PM3, PM4**

4 production modifiers that can be set. 0=no production. 0.5=half production. 2=double production. The item type in question specifies which production mod it uses of the people living in the location where it is produced (or not). This can be used to for example make it possible to forbid the production of regular infantry in conquered towns, but to allow the production of collaborators.

### **4.1.12. RESEARCH FIELDS**

A research field can be known by a regime. It can be needed in order to allow the construction of certain locationtypes or itemtypes. Research Fields have the following properties:

#### **SFTypeNr Sprite**

A research field is represented in AT Gold as an action card. The picture used by the specified SFTypeNr will be put on the card. It will keep in mind possible extra graphic setting of the regime to display the correct picture in the extra graphics list of the SFType.

#### **PreReq, PreReq2**

Up to 2 prerequisite research fields can be specified that must be known before this field can be researched.



## **Blocks**

If it is already researched it will block visibility of another known research field in the GUI. This allows you to for example let Infantry III block Infantry II research and so make things more readable.

## **TechLevel**

In the new random games algorithm, a stone-age game is started with no initial research fields present. If you start a random game without stone-age all research fields with tech level 1 will be given to all regimes.

In the old random game algorithm you can select the use level 1 tech option or not to the same effect.

## **CostType**

If -1 then the cost of the research field is specified in political points. If >-1 it is specified in regime var # specified (resource).

## **Research Cost**

The cost in PP or in resource specified can be set for each people group differently. The peoplegroup used is the group where the people of the regime attempting research belong too.

## **4.1.13. RIVER TYPE**

A river type has the following properties:

### **BridgeCost Mod**

Used to modify the cost of bridging such a river type. The base cost is specified in bridge.

### **Sprites**

You can use 6 sprites for each direction one or 64 sprites (just as with the landscape x64 borders).

### **Move over river penalties**

If no bridge is present over the river the following AP penalties will be added for any move type attempting to cross it.

### **Attack over river penalties**

If no bridge is present these penalties are brought to bear on the individual attacking over the river as long as it has not broken through. This value is NOT a modifier but the amount that the attackers hit points are diminished... so 0.4 means -40% and 0.8 means -80%. If a bridge is present the penalties are lowered with rulevar 5.

## 4.1.14. ROAD TYPE

Each hex can have a different roadtype in each of 6 directions. But only 1 roadtype per direction. A Road Type has the following properties:

### **Sprites**

Can be set to 6 sprites or x64 sprites like with landscape type borders.

### **MoveCost**

RoadType movecost overrules the landscape type movecost for land theater SFTypes.

### **EPCost**

The cost of constructing this roadtype for an engineer from one hex to an adjoining hex.

### **Thickness**

The thickness with which the roadtype is drawn on the mini or strategic map.

## 4.2. ADVANCED DATA STRUCTURES

### 4.2.1. EVENTS

Events allow you to script all sort of stuff for scenarios. Also action cards, random games and hexes can make use of events. As can you use events to script the AI to some extent, especially on the subject of playing action cards.

From reinforcements, to map changes, to rule changes, almost anything you can think off. This paragraph could be a book on itself. There are over a 100 checks and almost 200 execs, most are self-explanatory, and some more difficult ones have descriptions in the editor.

Since documenting the actual engine is a priority and not documenting the editing options this will be it for now.

### 4.2.2. NATO PICTURES

NATO pictures cannot be referred to in the editor; they must be specified in the systemgraphics directory in the natocounters directory. Any pictures present there named 1.png, 2.png ... 999.png will be automatically loaded.

If you do not want to overwrite the existing default natocounters then make your scenario use a different systemgraphics directory and make a natocounters directory in there.

NATO pictures can be used by locationtypes as a way to not change the landscape when building locations but still being able to draw a graphic over it to indicate the presence of a location.

NATO pictures will get more uses in future versions of Advanced Tactics. For now this is it.

### 4.2.3. EVENT PICTURES

Very easy. These can be loaded in your scenario and then used by actioncards and messages to be displayed. They can differ on a scenario to scenario basis.

### 4.2.4. RULEVARS

There are very many rulevars.

I created a special directory here where for each a page can be created, but for now I don't have the time to do so.

Please use the listing in the editor with the descriptions there to make head from tales.

Keep in mind a rulevar value must always be a number, but can be a decimal like 0.1 or -9.44

### 4.2.5. SCENARIO SETTINGS

There are a number of general scenario settings.

#### **LoadPass,EditPass**

You can set passwords to prevent loading or editing by others.

#### **Master**

The masterfile is overloaded over the current scenario everytime the current scenario is loaded. See masterfile paragraph for more information.

#### **ResCostMod**

Used to change the costs of all research with 1 variable.

#### **ResProdRelMod**

Used upon starting game. If 0 or -1 it is not used. Otherwise it specifies the number of production points on the map at which amount the research cost are perfect. If less product points on the map then the research cost will be put lower and if more production points on the map then the research cost will be put higher.

This variable can thus keep the research costs balanced in respect to the size of the scenario.

#### **MapLoop**

With maploop set to true units can move from the right side of the map to the left side and vice-versa.

#### **NoPlayChoice**

Activate this to not allow the player to toggle any regime to AI or human. Keep in mind that the same effect can be caused by putting all regimes to sleep.

## NoAIAdvice

Activate this to block the player from toggling regimes to AI players. You should activate this as a scenario designer if the AI cannot cope properly with your scenario.

## Loadable

If a scenario is set to loadable it means that saved games from the scenario can be imported in the editor again. However keep in mind that game round always resets to 0 if you load a saved game in the scenario.

## Variants

Up to 12 variants can be defined. Variants are presented at the scenario setup screen and allow the player to customize a scenario. A variant is basically a game variable that can be toggled by the player in setup to 0 or 1 value. It can be read by scenario events after scenario start or immediately if you bind an event to the switch of a variant.

## 4.2.6. GROUPNAMES

Can be specified for a number of things:

0-99

Names for each movetype

100-199

Names for each landscapetype group

200-299

Names for each peoplegroup

300-399

Names for each itemgroup

400-499

Names for each SFType group

500-599

Names for each loctype group (not used in display to player)

700-702

Extra statistic name

800-899

Names for event-groups

900-999

Wav files for overrides for movement types.

### **4.2.7. GAMESLOTS**

There are slots for game variables numbered 0-499. You can access them in the editor or use events to set their values. A game variable is a whole number integer either negative or positive. You can also name each variable, the player can see their name and value if the scenario designer has chosen to make them viewable (can also be made hidden).

### **4.2.8. REGIMESLOTS**

Are like gameslots (aka Game variables). Only they are kept on a regime level. Each regime has 0-499 slots in which you can input a value in the editor or later through events. Each regimeslot also has a name like the gameslots, but the name of each regimeslot is the same for each regime.

### **4.2.9. STRINGLISTS**

This is a new data format that has been added in the change from AT to AT Gold. It allows the scenario designer to create tabular spread sheet like tables with rows and columns with unique ID numbers.

They can be imported or exported to text files.

Events can look up or change values in these stringlists by referencing their unique ID numbers.

Also the new random games algorithm makes use of a few predefined tabular designs to implement city and country names and spread resources on the map. A number of rulevars used in the new random game algorithm must point to a valid stringlist ID number.

### **4.2.10. DIRECTORIES**

There are 3 directories that are important and that can be set either in the start-up scripts file or in the scenario file.

\* System Graphics Directory (must be directory under APP\_DIR/graphics)

\* Sound Directory (must be directory under APP\_DIR/)

\* Scenario Directory (must be directory under APP\_DIR/) (saved games directory is always the same)

If no directory is specified in the scenario (empty string) the directories specified in the start-up scripts will be used.

This is mostly useful for modders or third parties working with the engine which want to create a complete own look and sound without overwriting the default graphics and sounds.

## 4.2.11. SYSTEMGRAPHICS

The systemgraphics are graphics in the “graphics/systemgraphics” directory. Basically, they are the images that make the GUI for the game.

### 4.2.11.1. LOADING MOMENT

1. At start-up of the game right after the game has read the start-up modfile. If the start-up modfile specifies an alternate systemgraphics directory the game will attempt to load the graphics from there. However if a file is not available in the specified alternate directory it will look in “graphics/systemgraphics” anyway. This means that you can just make an alternate systemgraphics directory where you just replace 1 or 2 systemgraphics. Anyhow... the main menu window is thus already in the style specified by the startup modfile.
2. When you load a new scenario or saved game the scenarios systemgraphics directory (if any specified) is used to replace the systemgraphics.
3. When you exit the scenario setup window or quit back to main menu from a running game the graphics are reloaded from the systemgraphics directory specified in the start-up modfile used on start-up of the game.
4. When an event loads a scenario.
5. When a masterfile is loaded.

### 4.2.11.2. DETAILS

You can just replace 1 or 2 systemgraphics when making an alternate systemgraphics directory. You do not have to create copies of everything

In combination with a custom start-up file the use of alternate directories for graphics and sounds can have a very powerful effect and really present your graphics style and scenarios as a different or stand-alone game.

Will allow you to for example immediately have the right initial systemgraphics loaded due to the use of alternate systemgraphics file, but then change it again and again based on which regime is playing.

## 4.2.12. SOUND DIRECTORY

Sounds are not stored in memory and loaded and discarded when required. They are looked for in the sound directory specified in the start-up modfile used. A scenario can specify its own sound directory; the sounds are looked up there then. If a scenario has not specified its sound directory (blank string) the sound directory specified in the startup modfile is used.

## 4.2.13. SCENARIO DIRECTORY

Can be specified in the start-up modfile used. Basically it has little use. The ‘Load Scenario’ button uses its own path anyway for start browse location. But in the editor when saving it can be useful.

## 4.2.14. STARTUP SCRIPTS

The standard start-up script looked for by AT is the file named "defaultmod.txt", however you can add other such start-up files in the mod/ directory. If other startup files are present the player will be allowed which one to use to start-up the game.

### 4.2.14.1. EXAMPLE SCRIPT

Advanced Tactics: Gold

atgoldscenarios/generic.at2

0

modgraphics

atgoldscenarios

atgoldsound

-

ssg.ogg

nuke.wav

6

1,6,150,600,Load Scenario,3,atgoldscenarios\

1,6,-135,600,Load Saved Game,4,savedgames\

1,6,-425,600,New Random Game,13,generic.at2

1,6,-425,660,Old Random Game,11,generic.ptmaster

1,6,-135,660,Editor,12,generic.ptmaster

1,6,150,660,Quit,5,

### 4.2.14.2. EXAMPLE SCRIPT EXPLAINED

-Line 1 : Name of Mod

-Line 2 : Scenario file that is used to load initial graphics

-Line 3 : You have to specify a 0 here.

-Line 4 : Directory to look for to overwrite systemgraphics/ files from (not all have to be replaced)

-Line 5 : Directory to use when player selects 'load scenario' in main menu or wants to save a scenario in the editor.

-Line 6 : Directory to use to play sounds

-Line 7 : -

-Line 8 : the startup soundtrack

-Line 9 : the startup sound effect. IS NOT USED AT MOMENT.

-Line 10 : the number of buttons on the main menu

-Each remaining line: A button with the following data: Active, Size, X, Y, Text, Function, Data

#### **4.2.14.3. BUTTON DATA**

-Active = 0=no greyed out , 1=yes active

-Size = 1-8 or 18

-X,Y = both are relative to the center of the window

-Function = 5=quit, 6=open website (data), 11=old random (Data=master), 13=new random (data=master), 12=editor, 2= load specified scenario (data), 3 = load scenario from directory (data), 4= load saved game from directory (data), 14=credits

#### **4.2.15. MASTERFILE**

A scenario can have a masterfile specified. If it has it will be loaded every time the scenario is loaded. This way you can keep a number of scenarios keeping to the same rules while only having to update the masterfile.

The masterfile is just the filename, not its path. It is first looked for in the same directory as the scenario, and if it is not found there it is looked for in the "scenarios directory" as specified by the startup script.

#### **4.2.16. OVERWRITTEN DATA STRUCTURES**

By loading a masterfile the following is overwritten:

\* Bridge

\* RoadTypes

\* RiverTypes

\* LocTypes

\* SFTypes

\* People

\* ItemTypes

\* LandscapeTypes

\* Research



\* Stringlists (on slot basis are they overwritten, not to be confused with ID basis)

\* Variants

\* Rulevars

\* Following settings: UseAI, SystemGfxDir, ScenarioDir, SoundDir, Rulesetname, Website

For all overwritten datastructures goes that only the slots defined in the masterfile are overwritten in the loading file. This means for example if a scenario has 20 landscape types and the master has only 10 that only the first 10 are overwritten.

#### **4.2.16.1. CONDITIONAL IMPORT**

\* Tempstrings are only imported is they are not empty ("")

\* Events are overwritten but not when the masterfile has an event without commands in a slot where there currently is an event with commands.

\* Actioncards are overwritten but not when the masterfile has a card without executeevent in a slot where there currently is an event with executeevent specified.

\* Eventpictures are overwritten but not when the slot has a non-empty string in it and the masterfile has "empty.bmp" in it.

\* Gameslots and Regimeslot names are and their show settings are overwritten but not when the slot has a non-empty string in it and the masterfile has the name "Empty"

#### **4.2.16.2. PREDEF UNIT IMPORT**

\* Predef units are imported. If the same predef# (ID tag for units) is present in the loading scenario as well as the masterfile then that unit is overwritten with the info from the masterfile, if it is not new units are created to make place for the predef units in the masterfile.

### **4.3. GAME FLOW**

#### **4.3.1. GAME LOOP SCREEN OVERVIEW**

The Game Loop Screen is the start point of any game and continues into the Main Screen that enables the player to give orders to game pieces.

The Game loop screen is the first thing that you will see when you start a new game or end the turn of a regime that you are playing. The Game loop executes a number of steps and at the end of executing all steps for a non-sleeping regime not played by the AI the player can start playing his turn in the Main Screen

##### **4.3.1.1. STEPS**

The game loop screen does the following in the order given below.

#### **4.3.1.2. START OF GAME**

This only happens the first time the Game Loop screen is opened. It does the following:

- \* Set original owners of hexes

And for every regime:

- \* Reset AP/Stack penalties
- \* Set initial peek
- \* Set Recon and ZOC for all its units. See Recon and ZOC
- \* Clear History

#### **4.3.1.3. END OF TURN**

If somebody just ended its regime turn.

- \* Reset recon and ZOC values of that regime. See Recon and ZOC
- \* Clear History of that regime
- \* Reset AP/Stack penalties. See AP Penalties
- \* Execute any “Close Turn” scripted events

#### **4.3.1.4. TURN INCREASE**

The next regime gets the active turn.

##### **Round increase**

If game is just started a new round is started. Also a new round is started if full cycle of turn increases through the number of regimes is completed.

- \* Redim stats
- \* Check for winner
- \* Execute any “Round” scripted events

#### **4.3.1.5. SLEEP TEST**

If regime is sleeping skip the turn for the regime, do not execute any further gameloop steps and back to the top of this list again.

#### **4.3.1.6. SETUP OF TURN**

- \* Reset AP penalties for enemy hexes
- \* Set AS penalties. See AS Penalties
- \* Execute any “Early Turn” scripted events

- \* Production See Production
- \* Set Land, Navy and Rail Cap for HQs
- \* Supply System See Supply System
- \* Set units ready See Readiness Increase
- \* Do entrench See Entrenchment Increase
- \* Do morale growth See Morale Increase
- \* Do auto recover of locations
- \* Do experience growth See Experience Increase
- \* Do auto conquer neutral hexes and rulevar 79

#### **4.3.1.7. STARTUP OF TURN CONTINUED**

- \* Set Recon and ZOC
- \* Execute "Late Turn" scripted events
- \* Set Extra Stat
- \* Initial ZOC Conquest check
- \* If scenario is a campaign room then now exit Game Loop Screen and go to Campaign Screen
- \* Play Sound (startturn.wav, defeat.wav, victory.wav )
- \* Execute any "Open Turn" scripted events. If PBEM or passwords used then is only executed after correctly logging in.

### **4.3.2. GAME LOOP SCREEN PROCESSING RULES**

#### **4.3.2.1. RECON AND ZOC**

Units exert both. Values they exert on hexes is checked after movement, combat and at start of turn.

##### **Recon**

A unit's Recon value on its own and neighboring hexes is equal to its Recon Points.

The recon values are cumulative, so more troops means more recon.

You can not see a unit, see a unit but have no further knowledge or miss a unit completely.

Rulevar 8 determines free recon points for owned hex.

Rulevar 11, 12, 13 and 14 determine how much of a units recon points is effective 1,2,3 and 4 hexes away. (0.5 = half)

If you have more than rulevar 55 recon points on a hex you'll get minimal recon info on units with hide=0.

If rulevar 328 is active then Allies will share recon.

### **Hide**

The lowest hide score in a unit that is tested for spotting is used. The engine subtracts that from the recon score.

### **ZOC**

ZOC is short for zone of control. It simulates the fact that elements of units also can operate outside the hex where they are located. Each unit has ZOC points proportional to its size.

If you have more than rulevar 40 times the ZOC points on an enemy hex than the enemy, and the enemy has no units in said hex, the hex will become yours.

Rulevar 21,22,23 and 24 determine how much of a unit's ZOC points is effective 1,2,3 and 4 hexes away. (0.5 = half). ZOC points are always effective on the hex the unit resides in.

There is a minimal ZOC points necessary of rulevar 9 to capture an enemy hex and of rulevar 10 to capture a neutral hex using ZOC.

ZOC points can cause AP penalties for entering them if rulevar 323 is on. See AP Penalties for more info on that.

If rulevar 901 is on you cannot capture neutral locations using ZOC points.

## **4.3.2.2. AP PENALTIES**

### **Enemy Hex**

Moving into a hex that was occupied by the enemy at the start of turn costs you rulevar 323 extra AP.

### **ZOC**

Moving into a hex adjacent to an enemy unit costs 323 extra AP. If doing so while crossing a river, it costs double that amount. ZOC points of units you do not see do not give extra movement cost. This is done to not give their presence away.

### **Battle Delay**

After a battle has been won a battle delay penalty may be incurred for any units trying to move into or through the newly opened hex. This penalty takes place if a battle took more AP to win than it took the units that participated in the battle to move into the hex. Battle delay points simulate the delaying effects of an effective defence. Rulevar 325

## **4.3.2.3. AS PENALTIES**

AS Means Anti-Supply.

## **Anti-Supply Points**

Anti-supply is in the game to reward and reflect the effects of a player having naval and aerial superiority over the seas. It means the player that does not have this superiority will suffer significant losses (or even almost total losses) in anything that has to be transferred over water. Supply travelling over water is susceptible to anti-supply damage. Points that are destroyed by anti-supply will be reported. Anti-supply is a specially-created concept to model the effect of not having superiority of naval force while needing to transport supply across it. Enemy ships and aircraft can exert anti-supply points, causing you losses over everything you transfer.

Subformations have separate scores for anti-supply versus land and sea hexes. Regular use is intended for use versus sea only.

### **AS on Land**

Aircraft anti-land supply points will only cause losses to supply on land, not to transfers and strategic transfers on land. However this can be switched on with rulevar 309

### **Calculation of Anti-Supply**

All enemy subformations able to exert anti-supply will do so. Navy subformations will exert their anti-supply points unless the player has set standing order of the unit they belong to, to "no AS".

Air subformations need to have "intercept" enabled to exert AS points. And they will only exert AS on hexes that cannot be intercepted by one that hex owners air units at start of the turn. Changing air formations' standing orders to intercept in a turn will only help for preventing AS on your hexes on the next turn.

If you destroy enemy naval units or air units, this will remove their anti supply points immediately from play. The amount of anti-supply points enemy units have available depends on their Readiness.

A HQ that receives production of air units has its intercept standing order always put to never because otherwise producing one aircraft a round could prevent enemy aerial anti-supply points.

### **Anti-Supply Effect**

You can lose a percentage of supply points or transfer transporting subformations at HQ (cargo ships) as well as the transfers themselves due to anti-supply points. Damage is calculated by adding all the anti-supply points on all the hexes in the trajectory from source to target. These are added up to a max of 9,000 points. The square root is then taken and the result used as the percent of damage suffered.

## **Harbor Blockade**

You can use your naval forces to effectively blockade enemy ports. To blockade a port, put your fleet in front of the enemy harbor you want to blockade. All hexes next to the harbor and your fleet will then get its normal anti-supply points multiplied by rulevar 303.

### **4.3.2.4. PRODUCTION**

In the production phase all locations attempt to deliver their production to their HQs.

If rulevar 312 is active then production can only arrive in a HQ in the same hex.

If rulevar 513 is active the Set Production and Set Production HQ orders will be removed from game.

#### **No HQ Needed**

RegimeVar (resources) production is always delivered directly to the Regime that owns the producing location. Political points too, but only if the locationtype is set to "NO HQ".

#### **Regular Production**

AP cost from location to HQ is calculated with movement type specified in rulevar 99. Max action points the HQ can be away is rulevar 3. Delivery penalties are given if more AP then specified in rulevar 51 (75% delivered), rulevar 52 (50% delivered) and rulevar 53 (25% delivered) are used.

Flows to the HQ of the location. And can be damaged by AS Penalties in transit.

#### **Order**

Location Types with lowest Z-Order produce first.

#### **Regimevar cost**

If there are any RegimeVar (resources) costs for producing these are used up upon completion. Partial production does not cost resources yet.

#### **Left production**

Production that could not be delivered due to distance or other logistical errors is saved up and could be delivered next turn together with the newer production. However note that production not produced due to lack of resources is not saved up!

### **4.3.2.5. SUPPLY SYSTEM**

Supply flows from highest HQs to lower HQs and to normal units.

The AP cost between receiving unit/HQ and sending HQ are calculated using the movement type in rulevar 99. If the distance from the original source to the target unit is more then rulevar 51 AP only 25% of supplies requested can be delivered. If more then rulevar 52 only 50% will arrive, if more then rulevar 53 only 75% will arrive, if more then rulevar 3 0% will arrive.

## Ports

You need to have a port hex in control in order for supply to flow unhampered over seas to land again. Without a port it costs rulevar 82 action points to go a shore. Going from shore to sea without a port is completely impossible. A damaged port will cause part of the rulevar 82 penalty to still be in effect.

## Supply Requests

Any unit will always try to have its maximum amount of supplies in store. To accomplish this a unit will request the amount of supplies it is missing + what it will need to spend to keep or restore readiness.

## Supply Delivery

HQs will attempt to deliver all the supplies requested. But if there is less present then there is requested, deliveries will be less then requests. While being delivered supplies can be lost too enemy anti-supply.

## Passenger Units

Units that are passengers with other units (see load and unload orders) will keep consuming supply. For this they will use the supply of the unit that they are onboard with, there own supply will be considered packed in crates (or something) and will be unreachable until they have been unloaded again.

## Naval units out on the seas

Units on sea hexes are not supplied. To resupply they must start their turn in a port hex.

### 4.3.2.6. READINESS INCREASE & SUPPLY CONSUMPTION

After supplies have been delivered over the supply network all units consume supply in order to keep or raise readiness. Troops consume 50% their supply requirements to not lose readiness. Max readiness loss if no supply to consume is a percentage of rulevar 61 and also their supply consume setting is set to the percentage of this basic upkeep need that was provided. No supply at all will the result in a Supply Consume stat for the unit of 0, making it very vulnerable in combat.

Troops that started this phase with lower then 100 readiness will consume an additional 50% of their supply requirements to gain the first 10 points of readiness. Troops consume yet another 50% of their supply requirements to gain the maximum of rulevar 59 readiness points.

Action points is set to  $(0.5 * \text{Readiness}) + (0.5 * \text{Supply Consume})$  with a max of 100 points and a minimum for navies of rulevar 44.

Engineer points growth is modified by  $(\text{AP}/100)$ . And maximized on rulevar 42 the maximum EP growth per round for the unit.

Units that are freshly created for ship delivery in the production phase will have all their AP set to 0 AP.

#### **4.3.2.7. ENTRENCHMENT INCREASE**

Subformations get the entrenchment growth that their statistic says. Maximized for the maximum entrenchment of the landscape type.

The maximum entrenchment of the landscape type can be extended by a location in the hex with PictureLT specified. The maximum entrenchment specified in that landscape for the location will be added to the maximum of the landscape of the hex. So for example for a fortification (max entr: 100) in a low mountain hex (max entr: 200) the max entrenchment for the subformation would be 300.

#### **4.3.2.8. MORALE INCREASE**

Morale will recover automatically, going up by rulevar 65 ( $0.15 = 15\%$ ) of its Base Morale per turn. But this is assuming the subformations Readiness is at 100; the lower the Readiness, the slower the Morale will recover.

The recovery is increased by 141 for having full staff within HQ power range. The recovery is further increased by the experience of the staff and the StaffMoraleMod of the staff subformations.

Morale can never increase beyond the base morale of the people in question (except through combat or events, but not through this phase).

#### **4.3.2.9. EXPERIENCE INCREASE**

This phase could well be seen as training of the troops.

Training occurs automatically at the start of every turn. Through training, a unit can get rulevar 64 Experience Points a turn, up to a total of ( $\text{rulevar } 63 * 0.5$ ) experience points.

Training, however, only goes so far to improve a unit, so a unit will suffer diminishing returns; after it gains ( $\text{rulevar } 63 * 0.5$ ) through initial training, it will only gain ( $\text{rulevar } 64 * 0.5$ ) experience points a turn up to ( $\text{rulevar } 63 * 0.8750$ ) XP points, and then ( $\text{rulevar } 63 * 0.25$ ) XP points a turn up to rulevar 64 experience points.

This automatic experience growth is modified by the staffs experience in the unit's HQ (50 Exp causes 50% increase in training) and possibly negatively if the HQ Power the HQ has on the unit is below 100%.

If you want to get more than rulevar 64 Experience Points you'll have to earn it through combat.

Maximum experience a subformation can reach is rulevar 81.



### 4.3.3. MAIN GAME SCREEN

This is the first screen you see after you entered your turn in the game loop screen and clicked through any reports or messages there. It is the screen in which you can inspect the map and units and give a number of orders. In some cases subwindows or other screens are opened, but that doesn't matter much from the flow perspective in studying the rules.

Basically the player can:

- \* Execute an order. See orders
- \* End the turn of the regime. And return to the Game Loop Screen

## 4.4. COMBAT CALCULATIONS

Combat Calculations is a part of the engine that can be initiated by either an order or an event. It handles all combat of all types.

It's a very complicated set of calculations that solves combat. You might want to read this paragraph while studying a combat detail report screen in action.

### 4.4.1. SETUP

#### 4.4.1.1. INDIVIDUALS

When a unit of for example 40x Infantry goes into combat for the calculations 40 so called individuals go into the battle. Each one keeps its own stats in combat and only at the end of the combat calculations the (surviving) individuals are merged back in their units and the stats averaged out.

#### 4.4.1.2. INTERCEPTORS

In case the combat is an airstrike, bombing run, air recon, paradrop, airlift or air supply the defending regime can have air units intercepting. If they can try to intercept depends on their intercept setting which must be set higher than the average readiness of the unit. Allied air units will also try to intercept if the same is true.

In the rare case that combat is initiated because an air recon mission has been executed above a sea hex without any hostile vessels in it the regime (and it allies) with the most intercept units in range will attempt to do the intercept.

Backbench aircraft will never join in intercepts unless their own airfield is the target.

#### **Max Intercept Range**

The maximum intercept range is the lowest readiness in the unit seen as Action Points modified by rulevar 547. If the unit can then reach the hex it is in intercept range.

## **Uncertainty of Intercept**

An intercept, even if within intercept range and with right readiness and standing order, is never certain. However the closer to the airfield where the interceptors are stationed the airstrike is taking place the bigger the chance an intercept will take place. Rulevar 837 can disable this or set the % chance of intercept to fail at edge of radius of unit. Rulevar 838 can set the % of intercept to fail at theoretical 0 distance. The % to fail somewhere in between 0 range and ultimate range is somewhere in between rulevar 837 en 838.

## **Fuel**

If not enough fuel is present to support at least 2 rounds of combat then the intercept will not commence.

### **4.4.1.3. ANTI-AIRCRAFT SUPPORT FROM OUTSIDE HEX**

Allied and own units outside the combat hex that have subformations with AA range will join the defending side.

## **4.4.2. COMBAT LOOP**

The loop basically plays rounds until either the attacker has retreated, been killed or is victorious. Combat round starts at 0 before going into the first Combat Round. The following things happen in the following order:

### **4.4.2.1. CHECK SEA ATTACK BREAKOFF**

If no defending ships left the battle is ended.

### **4.4.2.2. ADD ROUND**

Combat round +1

### **4.4.2.3. THROW INITIATIVE**

If first round only. Every individual gets a random initiative between 0 and its initiative score.

### **4.4.2.4. SORT ON INITIATIVE**

The individuals with highest initiative will come first in every subround.

### **4.4.2.5. CHECK CAPITULATION**

Only defenders have a chance to capitulate and only if they are retreating or have retreated. If an individual's morale is lower than rulevar 37 and readiness is lower than rulevar 301 then there is a chance it capitulates. This chance it does not capitulates is  $((RDN/\text{rulevar } 301) * 100)$ . There is only 1 time this check can be performed.

Attackers capitulate when combat round 30 has been reached. This happens in rare occasions in amphibious assaults, paradrops or rebel combat.

#### **4.4.2.6. SET CONCENTRIC BONUS**

Every round it is again calculated because units might have retreated in the first combat rounds and that might severely reduce the bonus given by concentric attack. This was a gamey exploit in AT, but now thus no longer in AT Gold. The rulevars 132, 133, 134, 135, 136, 137, 138, 139 determine the actual concentric bonus that attackers are given based upon the number of sides of attack. The concentric bonus is halved if units from multiple HQs are involved.

#### **4.4.2.7. DETERMINE STACKING**

Every combat round stacking is determined again. So what might start as an over stacked attack might quickly, due to casualties become an attack without penalties. Only participating individuals count towards the stacking calculations. The maximum stacking without penalties depends on the type of attack.

##### **Land Stacking**

For the attacker the max stacking is dependent on the number of sides you are attacking the hex with. Its either rulevar 30 or sides of attack \* rulevar 31. The highest is used. The defender always uses rulevar 30.

##### **Air stacking**

If rulevar 833 is active then air can exceed its own max stacking in attack.

##### **Artillery stacking**

If rulevar 834 is active then artillery can exceed its own max stacking in attack.

##### **Battlestack**

Keep in mind that if rulevar 859 is active that battlestack for land, air and artillery is remembered and values from previous battles in the hex can be added in the current battle.

#### **4.4.2.8. DO STEPS**

The actual combat for this round. See next paragraph.

#### **4.4.2.9. CHECK AUTO DESTROY**

If an individual with autodestroy property has done at least 1 attack it is destroyed now. Also attacking individuals with autodestroy and anti-structural points are now immediately destroyed.

#### **4.4.2.10. CHECK OUT OF AP**

Depending on the type of combat the following happens.

1. If individual was attacker and transport aircraft for paradrop and its combat round 5 it retreats. Percentage of paradroppers is killed for each killed transport aircraft; remainder is now dropped in combat.

2. If individual was attacker and part of air recon, airlift or air supply mission and its combat round 2 it retreats.
3. If individual is attacker that has been ambushed in surprise combat and its combat round 2 it retreats.
4. If individual does not have enough AP left to pay for the next combat round (10AP) it retreats.

#### **4.4.2.11. CHECK BREAKTHROUGH**

If individual is not hit for 2 combat rounds and made successful attack it will breakthrough. Also if the individual attacker has not even been targeted in the last 2 combat rounds it will breakthrough. There is a chance the breakthrough fails if the attack is over stacked. If defender has no non-backbench individuals left the breakthrough always succeeds.

Aircraft have easier breakthrough rules and they break through if they have not been attacked in the current combat round.

#### **4.4.2.12. CHECK SAFE RETREAT**

If an individual started retreated in combat round X it will have safely retreated in combat round X+2. In effect, suffering 2 combat rounds of possible enemy fire without being able to return fire.

#### **4.4.2.13. CHECK PANIC RETREAT**

If % of troops remaining of a unit drops below the morale of a unit then there is a chance it will panic.

Units that have no avenue of retreat have their morale doubled for this calculation.

No panic retreats are possible in artillery attack or shore bombardment.

Defender cannot panic if under air attack.

If a unit can panic the chance it does in this combat round is rulevar 70. If the unit panics then all individuals' morale is immediately reduced with rulevar 172.

#### **4.4.2.14. CHECK ORDERLY RETREAT**

If % of casualties that a unit drops sustains goes above the retreat standing order of a unit then it will orderly redraw.

Units that have no avenue of retreat will never orderly redraw.

No retreats are possible in artillery attack or shore bombardment.

Defender cannot retreat if under air attack.

#### **4.4.2.15. CHECK VICTORY**

Here it is checked if the battle has ended.

First, the number of individuals still in combat are counted on both sides. Defending AA from other hexes does not count for this purpose.

#### **Continue attack even no defenders left?**

If no defenders left and still attackers left and it is a bombing run the attack continues until the attackers run out of action points. The same happens when it is an artillery attack or shore bombardment and a location is under attack. If rulevar 341 is active and the attack is an airstrike the same happens again.

#### **End of battle?**

1. If no attacking individuals left and still defending individuals left the defender has held.
2. If no defending individuals left and still attacking individuals left the attacker has won.
3. If no individuals left on either side it is a standoff.

#### **Structural damage effects at end of battle**

If end of battle structural damage is given to location and bridges. This can cause in their destruction. And in case of destruction of airfield or port in loss of all aircraft and ships there.

#### **Aircraft experience**

If end of battle aircraft that participated in bombing mission get XP. Aircraft that participated in air recon mission get XP and aircraft that carried paratroopers, did airlift or air supply get XP. This is XP earned for the nature of the mission not for any combat done with other individuals while performing it.

#### **Air supply dispersal**

If end of battle, the air supply is dispersed. Supply can have been lost due to destroyed transport aircraft.

#### **Airlift delivery**

If unit was airlifted it is now unloaded. If transport aircraft were lost it can result in damages or complete destruction of the unit carried.

#### **Attacker takes port/airfield**

If attacker takes the hex and there were any aircraft or ships stationed in the hex these are destroyed. They are presumed surprised and scuttled at last moment. A standoff combat result will also result in the destruction of all air/naval assets.

#### **Card execution**

If the hex resulted in the hex switching owner and the hex had a card/event on it. It will now be executed.

## Retreats

Unless no retreat is possible, surviving elements of the losing side retreat. Attackers back to where they came from, as well will interceptors. Only defending units that were stationed in the lost hex will retreat to a different hex. The hex they will choose to retreat too will be the one in the opposite direction of the angle of attack. So if a unit is attacked from the north it will retreat to the south.

A unit can never retreat into a hex that it could not move into with 100 AP.

### 4.4.3. DO STEPS

This is called every combat round. In this phase all individuals will keep doing 1 attack each in order of their initiative sorting. Each cycle through all individuals is called a subround. We keep doing subround until no individual has attacks left.

#### Scroll through all

As explained above we cycle through all individuals and then test for each one if it can attack. It can if it has made less attacks this combat round than its statistics allow. Furthermore it must not be in the process of retreating.

A special rule is that air recon individuals do not initiate attacks.

Another special rule is that defending artillery target of an artillery attack or shore bombardment can do counter battery fire if rulevar 142 is active.

#### Find target

Then (semi)randomly an opponent of the enemy side is chosen. Semi random because the randomness depends on the number of tries the individual's statistics allow. If it has only 1 try in finding its favorite target it is purely random. But if it has more tries it will pick the target it likes the most. What an individual likes the most and how many tries it gets varies per scenario. Keep in mind that the favorite (what it likes most to attack) scores can vary between regular and artillery/shore bombardment attack. You can only attack an enemy backbench individual if the attacking individual has either accomplished a breakthrough or if it has artillery range. Furthermore artillery capable land theater individuals cannot fire on enemy individuals that have broken through. Unless defending individual is retreating, in that case backbench property does not help. Aircraft are not bothered by non-air units with backbench setting. Anti aircraft land and naval units can hit all aircraft, independent of backbench property too.

Attacking backbench aircraft can only attack enemy backbench aircraft (those are supposed to be on the ground), while the fighters are intercepting. This enables us to give bombers high score against other bombers. Since backbench aircraft will never join in intercepts.

You cannot target an individual that has been forced to retreat by a combat result.

## **Find preventer**

It is possible the target individual is of a type that another individual from that same side wants to defend. This happens if prevent rules are active. See Subformation Types for more info on these statistics. What's important for us now is that the target can be switched. Instead of attacking the infantry man we may now be attacking the preventing individual, for example a halftrack.

## **Attack**

The actual attack is now done. See paragraph on attack below.

## **Counter attack**

If counter attacks are not disabled with rulevar 807 and if possible the target of the attack will no counter attack its attacker.

Non-air individuals will not counter attack air individuals.

If artillery attack or shore bombardment is ongoing counter attack is not possible.

If the attacker or the defender is already more often attacked then its max attacked score counter attack is not possible.

If the defender is in the process of retreating counter attack is not possible.

## **Anti-structural points**

An attacking individual (whether or not it did an attack on another individual) or a defending individual (that did an attack on another individual) will do structural damage every combat round. The structural damage is modified for the readiness of the individual. Furthermore aircraft not doing a Bombing run will have their damage modified with rulevar 128. If the individual was attacked in this combat round it will do less structural damage based on the number of times it was attacked.

## **4.4.4. ATTACK**

An actual attack from one individual on another takes place either as a regular attack or as a counter attack. Counter attacks are in AT gold and classic rules lighter in effect. But this does not have to be so in other scenarios.

### **4.4.4.1. DETERMINE IF HIT SCORED**

Basically it is very simple the attack points for the attacker are calculated and the hit points for the defender. When this is done both numbers are randomized, score a value between 0 and their number and if attacker scores higher, a hit is scored, otherwise not. There is a plethora of modifiers on both scores. See modifiers paragraph below.

#### **4.4.4.2. HIT SCORED**

If a hit is scored based on the statistics of the individual attacking it is determined if it is a retreat hit, kill hit or pinned hit. If the SFTYPE attacking is doing an artillery attack and it is using another SFTypes ArtMods then it will also use that SFTYPE kill and retreat %s.

##### **Experience Modifier**

The experience modifier is defending individual's powerpoints / attacking individual's power points. The modifier is minimum rulevar 317 and maximum rulevar 318.

A kill hit gives the individual scoring it rulevar119 modified with experience modifier experience.

A retreat hit gives the individual scoring it rulevar 120 modified with experience modifier experience. The target goes into immediate retreating mode and loses rulevar 122 percentage readiness, rulevar 126 percentage entrenchment and rulevar 124 percentage morale.

A pinned hit gives the individual scoring it rulevar121 modified with experience modifier experience. The target goes into immediate retreating mode and loses rulevar 123 percentage readiness, rulevar 127 percentage entrenchment and rulevar 125 percentage morale.

##### **Lose rdn per attack**

If the attacking individual has this rule and it is not counter attacking it will not lose some absolute number of readiness points.

#### **4.4.5. MODIFIERS**

Keep in mind when attacker is written below, the individual attacking is meant. It could belong to the defending or the attacking side in the battle.

##### **4.4.5.1. FUEL ATT**

The attacker can get penalties on their scores if out of fuel. Fuel is used in the first attack of a combat round. No fuel is used if the target is being more often attacked then its max attacked score.

##### **4.4.5.2. GLOBAL COMBAT MODIFIER ATT**

The attacker can get a global combat modifier for its SFTYPEGroup

##### **4.4.5.3. ATTACK STARTUP ATT**

SFTypes can have limited effectiveness in the first 2 combat round when they belong to the attacking side of the battle. These modifiers are set in rulevar 316 and 317 and can be modified themselves by the SFTYPE in question, making for example some (partially) immune to this effect. Counter attacking defenders get the same attack startup penalty since they fight on the attacker's terms. Counterattacking attackers do not get the penalty since they fight on the defenders terms.



#### **4.4.5.4. COUNTERATTACK MODIFIER ATT**

If this attack is a counterattack and the individual belongs to the regime attacking the hex and its land vs land attack then the counterattack modifier is rulevar 101, else rulevar 103. If the attacking individual belongs to the side defending the hex and its land vs land then the modifier is rulevar 102 or else rulevar 104.

#### **4.4.5.5. AA FROM DISTANCE ATT**

The attack value is modified with rulevar 105.

#### **4.4.5.6. MAX ATTACKED ATT**

The attack score gets modified if its target has been already been attacked more than the maximum number of times. Attacking it double the amount of max attacked results in a modifier of 0.5. Triple 0.33, etc. The effect of this modifier can be maximized by rulevar 300.

#### **4.4.5.7. LANDSCAPE ATT**

The landscape can modify the attack score. Keep in mind that defenders of the hex get different modifiers then attackers.

#### **4.4.5.8. STAFF & HQ ATT**

Staff with 0 XP give a rulevar 140 bonus to their troops. Each additional XP point gives an extra percentage point bonus based on the settings of the Sftype the staff belongs too. The staff bonus is modified for the HQ Power range the unit in question is in. If it is out of range (or partially so) it will not get full bonus.

#### **4.4.5.9. READINESS ATT + HP**

The effect of the readiness modifier on the attack value can be adjusted by the rulevar 106 for the attacking side and rulevar 107 for the defending side. The effect on the hit points of the target is rulevar 116.

#### **4.4.5.10. SPECIAL ATT**

Subformations can have special offensive or defensive penalties or bonuses assigned to them. (In AT Gold Edition they are drawn over the pictures of your subformation in either blue or red)

#### **4.4.5.11. SUPPLY CONSUMPTION ATT + HP**

The effect of this modifier can be adjusted by the rulevar 130. The effect on the hit points of the target is rulevar 130.

#### **4.4.5.12. FOR PEOPLE ATT**

You can get a bonus/penalty for the people of the attacking individual.

=Against people ATT== you can get a bonus/penalty for the people of the target.

#### **4.4.5.13. EXPERIENCE ATT + HP**

Value of attack score and hit points is modified for experience. Each XP point is a % point raise.

#### **4.4.5.14. CONCENTRIC BONUS ATT**

Value of attack score is modified by the number of sides from which you attack the hex.

#### **4.4.5.15. SURPRISE COMBAT ATT**

If attacker is part of the defense force of the hex it gets the rulevar 108 modifier.

#### **4.4.5.16. VERSUS PARADROPPER ATT**

If target is part of the paradrop force being dropped it gets attacker the rulevar 109 modifier.

#### **4.4.5.17. VERSUS AMPHIBIOUS LANDING ATT**

If target is part of the amphibious invasion force being dropped it gets the attacker the rulevar 110 modifier.

#### **4.4.5.18. IS REBEL ATT**

If attacker is part of a Rebel attack on the hex it gets the rulevar 111 modifier.

#### **4.4.5.19. ORDERLY RETREATING TARGET ATT**

If attacker is attacking a target that is retreating. Rulevar 113 when target was defender of the hex. Rulevar 112 if target was attacking the hex.

#### **4.4.5.20. PANICKING RETREATING TARGET ATT**

If attacker is attacking a target that is panicking retreating. Rulevar 115 when target was defender of the hex. Rulevar 114 if target was attacking the hex.

#### **4.4.5.21. ENTRENCHMENT HP**

The target gets a % point bonus for each entrenchment point.

#### **4.4.5.22. RIVER HP**

Rivers can give the defenders an increase in Hit points. However if a bridge is still present the increase is modified by rulevar 5. Furthermore the attacking individual must belong to a unit attacking from such a side that it does cross a river.

#### **4.4.5.23. OVERSTACKING ATT + HP**

If you over stack your troops will be more vulnerable and fight less effectively. You can over stack in defense as well as in attack. Over stacking makes attacks and defense stronger, at the cost of higher casualty rates. Penalties due to over stacking are only imposed when a land troop type is attacked (and notably not when air attacks air), and the penalty is exponential rather than linear.

In air attacks over stacking your air means that the aircraft will have less HP defending against flak attacks (ground, air) and less Attack points when attacking land targets themselves. However air to air is not affected at all (because the air fights are considered to take place in wider region also).

#### 4.4.5.24. AIRFIELD ATTACK HP

When the airstrike is targeting an airfield the aircraft stationed there will fight with a penalty. Air units that are attacked on their airfield hexes fight with a penalty on their hit points in the first combat rounds. Penalty depends on rulevar 835 and rulevar 836.

## 4.5. ORDERS

Orders can be given to units, locations, hexes and in general.

### 4.5.1. UNIT ORDERS

#### 4.5.1.1. MOVE ORDER

Each Subformation Type has a movement type. This movement type has move costs for each landscape, each road type and each river type. These can differ per scenario of course.

#### Rules

Moving a subformation from one hex to a neighboring hex is subject to the following rules:

If not enough fuel available the move cost will be multiplied by X.

If unit is HQ it cannot move into sea.

You cannot move from one harbor into another harbor with naval subformations (to prevent canal building with ports).

You cannot move into a hex that's owned by a regime that's at peace.

You cannot move into a hex that already has 16 units inside it.

A modifier can be applied based on the move type that's used (it can be set by an Exec through scripting).

A modifier can be applied based on the MoveRedux stat of the subformation type.

If rulevar 100 is off then trying to do an air mission (recon, bomb, para, airstrike) in to a shrouded (but possibly seen before) hex is not allowed. If the rulevar 100 is on then you can only do air recon mission in never before seen shrouded hex, and all the other missions into a currently shrouded, but previously seen hex.

Non air movement is allowed to enter shroud only if we have previously established that the hex is sea. So basically ships can travel easily through seas even if shroud is re-established on part of route.

A road between two hexes overrules the landscape move cost for the movement type by the road movement cost for the movement type.

If a rivertype is between the two hexes and no bridge is present then the move penalty for the movement type for the river type is added to the movement costs.

Any AP Penalties are added to the move cost.

Any ZOC penalties are added to the move cost. See Recon and ZOC.

Navy can only move in to a land hex if a location with port functionality is present in the target hex.

If power points in unit are lower than rulevar 307 the unit cannot move into the hex.

You cannot enter a hex where there are visible enemy units (unseen enemy units causes surprise combat).

If successful combat has been done on hex and it has been conquered, participating units in that combat can get free entry into the hex = 0 AP.

Air subformations that are moved or transferred get half movement cost (since they don't have to return to base)

Any excess supply weight (in HQs) has to be carried or otherwise will travel using movement type specified in rulevar 41.

If an air subformation is moving or transferring it must end its move in a hex with a location with airfield.

If rulevar 814 is active the actual AP costs are set to 0.

If attempting to make a paradrop its only possible if the landscapetype of the target hex supports paradrops.

If rulevar 526 is active then you can share sea hexes with other regimes that you are not at war with.

### **Carrying**

Some subformations are able to carry other subformations and thus will be able to make the unit move faster than its slowest ship, since the slowest ship is loaded onboard another ship for movement cost calculations.

However, no subformation can carry another subformation of which individual weight is larger than individual Carry Points. This rule is there to for example make it possible to prevent a tank to be carried by a truck. Also it's not possible for other subformations to carry another subformation which total weight is larger the total carry points available by the carrying subformations.

Also, land theater subformations can carry no naval or air subformations, nor can air subformations carry other air subformations or naval subformations. And for naval subformations carrying air subformations, there is a limitation based on Aircraft Carrier Points.

### **Implications of Move**

If a location is conquered its HQ and production are set to nothing.

An event can be executed if the hex had one specified.

Battle can be initiated if enemy units are present in the hex. This is standard on land hexes but can also be initiated on sea when rulevar 326 is active.

Readiness can be lost if the SFTYPE has that setting.

Entrench is set to the minimum entrench the new hex gives.

If rulevar 843 has an event # specified it is now executed.

### **Implications of moving into damaged locations**

Air and naval units moving into a damaged location will suffer readiness losses equal to the damage percentage the location has.

#### **4.5.1.2. TRANSFER**

The transfer always is handled 1 subformation type at a time.

Transfer can be done on “own movement” or by using the transfer capacity points (land/navy/rail) of the sending or receiving HQ. If no HQ is involved in a transfer from one unit to another only “own movement” is possible.

“Own movement” transfer is basically identical to normal movement except for the fact that it’s impossible to travel through enemy controlled hexes or beyond the AP range of the subformation being transferred.

Supplies can be transferred from HQs as well but only to other HQs and naval units.

Maximum range you can transfer to is based on movement type rulevar start for land capacity points, rulevar 1 for naval capacity points and rulevar 2 for rail capacity points. The maximum AP distance travelled over the map by specified landscape type is rulevar 78.

Rulevar 509 can be used to disable rail transfer.

Rulevar 519 can be used to disable transfers all together.

The weight of supply for cost calculations is stored in rulevar 33,

### **Fuel needs**

Using capacity points can require fuel.

If rulevar 851 is active it costs this rulevar 852x the specified resource per 1000 CAP points used.

If rulevar 853 is active it costs this rulevar 854x the specified resource per 1000 CAP points used.

If rulevar 855 is active it costs this rulevar 856x the specified resource per 1000 CAP points used.

### **Anti Supply Damage**

Transfers are subject to anti-supply damage if they are not done on “own power”. This will cause losses to the transferred subformation but also to the subformations providing the transfer capacity points in the HQ that is facilitating the transfer.

### **Aircraft Carrier limitation**

You cannot transfer more aircraft to a unit in a hex without airbase then its carrier points allow.

### **Effects from transfer**

The entrenchment level of transferred troops is put back to the minimum.

Supply consume, offensive mods, defensive mods, readiness, morale is averaged out if troops transferred already exists in target unit. For example if you are transferring light tanks to the target unit and it already has light tanks then the mentioned stats will be averaged out.

Supply storage is taken along. But not excess supply of course.

Readiness is modified by rulevar 49 if troops are transferred to a unit with the same HQ and modified by rulevar 50 if troops are transferred to a unit with another or no HQ.

If staff is transferred it always loses some experience based on rulevar 36 OR if non-staff troops are transferred to a unit with a different HQ then the staff of that HQ loses some experience based on rulevar 36.

The event specified in rulevar 843 is called.

AP and EP are kept if the transfer is in own hex.

EP is lost if transferred outside own hex.

AP is lost if not transferred on own power and partially lost if transferred on own power.

#### **4.5.1.3. STRATEGIC TRANSFER**

Can be disabled completely by rulevar 520.

Otherwise strategic transfer works more or less the same as a regular transfer. See the section on Transfer (5.5.1.2). Only now a whole unit is transferred from one hex to another instead of subformation from one unit to another.

Excess supply has to be paid for in transfer costs too.

You cannot strategically transfer units with air or navy subformations in them.

You cannot strategically transfer units from a hex that has AP penalties on it. (A just conquered enemy hex for example.)

Also you cannot strategically transfer a unit that has already made an attack this turn.

### **Triangulated costs**

However the cost of the transfer in transfer capacity points is calculated slightly different. Where the cost in a regular transfer is based on the quickest move path between source and target unit in strategic transfer it is triangulated. The cost is the distance from the HQ that provides the transfer capacity to the source hex + the distance from the source to the destination hex.

### **Effects**

Dropping a unit in a hex can cause a hex that has an event set to be executed.

The event specified in rulevar 843 is called.

#### **4.5.1.4. SET HQ**

This order can be disabled by activating rulevar 521.

If rulevar 814 is active no effects are caused by changing HQ. If not the following negative effects occur:

When leadership changes, units get confused. The readiness of the unit who's HQ is changed is multiplied with rulevar 48 (0.5 = means rdn will be halved). If unit had no HQ before the assignment took place there will be no readiness penalty.

When troops under command change, staff loses experience. Staff in the new HQ lose up to rulevar 36 part of their experience. (0.33 = lose up to a third). If no new HQ is set, but the unit is set to no HQ, no staff penalties occur of course.

#### **4.5.1.5. PARADROP AND AIRLIFT**

The difference is that with paradrop the air units need to return to their base and with airlift the air unit will land in the target hex and thus be able to double their range.

However airlifts can only be executed by flying towards a friendly airbase, paradrops can be executed on any hex.

Only non-HQs can be paradropped or airlifted.

Units to be paradropped/airlifted must have at least 50 AP left and be in the same hex as the transporting aircraft.

The transporting aircraft must have as many carry points as the unit has weight.

Unit needs at least rulevar 307 power points in order to be able to capture an enemy hex.

If using paradrop the landscape of the target hex must allow paradrops.

#### **4.5.1.6. AIR SUPPLY**

Use this operation to get supplies to friendly formations that are isolated from supply. This type of operation can be intercepted by enemy fighters within range of the hex you want to focus air supply operations on. This kind of intercept only lasts for 2 combat rounds.

You don't resupply a single unit using this order, but you resupply everything within rulevar 858 Action Points' worth of rulevar 857 movement type range of the target hex (although the further from this target hex you go, the less supply is available).

#### **4.5.1.7. LOAD**

Rulevar 507 can disable the load and unload order.

A naval unit can load a land unit. That is a unit without air or navy subformations.

Only non-HQ units can load other units.

A passenger unit counts as a subformation, a unit already carrying 8 subformations cannot load a passenger.

A unit cannot load an empty unit.

If the unit that is loading is in port the unit that is going to be loaded has to be in port too. If the unit that is loading is in sea hex it can load a unit from a neighboring land hex.

The total weight to be loaded unit may not exceed the carry points of the loadings unit naval subformations.

#### **After effects**

The event specified in rulevar 843 is called.

All subformations of the loaded unit will lose all their Action Points (AP). (This will prohibit unloading in the same round.)

#### **4.5.1.8. UNLOAD**

This order can be disabled for use by rulevar 507.

Only a unit with passengers onboard can unload.

Only a passenger unit with more than 0 AP can be unloaded unless you are attempting to unload while the cargo ship is in a port.

You can unload a unit in the harbor hex the naval unit is present in or if the naval unit is at sea at any neighboring land hex with a landscape type that support amphibious landings.

If you're attempting to take enemy territory the unit needs at least rulevar 307 power points.



There may not be more than 15 units already gathered in the target hex if the target hex is friendly.

#### **After effects**

If enemy units are present combat can be initiated.

The script in rulevar 843 will be called.

#### **4.5.1.9. AIR RECON**

Any air unit on an airfield support location can execute an air recon mission.

The target hex must be within movement range.

Combat will be initiated for 2 rounds to allow any enemy flak or aircraft to intercept. The amount of recon given on the hex (and surrounding hexes) will depend on the amount of opposition encountered. More about this in the Combat section (5.4).

You cannot fly over land hexes owned by regimes you are at peace with.

#### **4.5.1.10. BLOW BRIDGE**

Rulvar 505 can disable this order for use.

Any unit with a subformation type in it with “blow points” can try to demolish a bridge.

Such a unit also needs at least 50 AP.

#### **Blow Attempt**

Units score a random number between 0 and their total “blow points”. Each subformation contributes its blow points to the unit’s total, but subformations with engineer points saved up increase their original blow points by 100% for each saved up round of engineer points.

A bridge over a minor river has a random defense number between 0 and its structural points setting. The structural points of the bridge are set in rulevar 7 and are modified by the bridge cost modifier of the rivertype that it is crossing.

If the detonation points in a blow bridge attempt are higher than the defense points of the bridge, then the attempt was successful and the bridge is blown.

#### **After effects**

Unit will lose 50 AP.

Also all Engineer points (EP) are reset to 0.

#### **4.5.1.11. BLOW LOCATION**

Rulvar 506 can disable this order for use.

Any unit with a subformation type in it with “blow points” can try to demolish a location. But the location type must not be set to “Invincible”.

Such a unit also needs at least 50 AP.

### **Demolish Attempt**

Units score a random number between 0 and their total “blow points”. Each subformation contributes its blow points to the unit’s total, but subformations with engineer points saved up increase their original blow points by 100% for each saved up round of engineer points. The points thus calculated constitute the damage the demolish attempt causes.

### **After effects**

Unit will lose 50 AP.

Also all Engineer points (EP) are reset to 0.

The location suffers the damage and when it reaches 0 structural points it might be removed and the hex landscape might be adjusted based on the locationtype settings.

### **4.5.1.12. BUILD BRIDGE, BUILD ROAD**

Rulevar 503 can disable this order for use.

Depending on if a river is crossed or not, a bridge might be built as well as a road.

The hex you are building into must be friendly.

If rulevar 320 is active bridge building is only allowed if a road is already crossing the river.

It’s only allowed to build if the landscapetype being built into support building of roads/bridges.

Unit must have enough EP to construct road/bridge.

The EP Cost for the bridge is specified in the bridge data structure. And it will be modified for by the BridgeModifierCosts of the Rivertype it is going to be crossing.

The EP cost of building a road is specified in the road type indicated by rulevar 32. And is modified for the landscape type road cost modifier.

The building of a bridge costs rulevar 822x the resource specified in rulevar 825.

The building of a road costs rulevar 823x the resource specified in rulevar 825.

Unit must have enough AP to move to the neighboring hex that the road/bridge is constructed into, based on the movement cost before the road/bridge was build.

### **Effects**

The EP are subtracted from the engineers in the unit.

The resources, if any, used are subtracted from the regime.

Normal movement costs are subtracted.

A scripted event of the target hex if present will be executed

Any event in rulevar 843 will be executed.

#### **4.5.1.13. BUILD**

Rulevar 504 can disable this option.

This order will enable a unit in a hex to do different things.

Build a new location if none is present in hex.

Upgrade a location to another location type if location is present in hex and it has full structural points. A location must have full structural points in order to be considered for upgrading.

Repair a location that doesn't have full structural points.

#### **Build Location**

If a specific location can be built on a specific hex depends on the locationtype and the amount of engineer points available in the unit executing the build location order as well as possible supply requirements that need to be stored in the direct HQ of the unit executing the build (unless its HQ itself in which case it must have the supplies).

Also the regime must possess the PP and Resources that might be required for building the locationtype in question.

Other limitations for building depend on the locationtype you want to build:

- » It must be buildable.
- » If an areaslot value is required the hex must have that exact areaslot value.
- » It must be buildable by the peoplegroup of the people of the regime attempting to build it.
- » If is port too it must be next to sea to be built.
- » Researchfields might be necessary to build it.
- » It might need to be at least minimum distance from other locations.  
For example, minimum distance 2 does not allow building 2 hexes next to each other, but does allow with 1 in between.
- » It must be buildable on the groundtype of the landscapetype of the hex.
- » There must not be another location present (in that case upgrading might be an option though).
- » The supply needed may be present in any HQ in the chain of command of the engineer unit. HQs may be present overseas. The HQs must be within rulevar 53 however. Also keep note that this supply point usage is not subject to AS damage.

## **Repair Location**

If the location is repairable it can be repaired by units with engineer points. The amount of repairs is equal to the EP points available versus the EP cost of the location type. So if unit has 100EP and the location is at 1000 structural points of 2000 and the location type costs 400EP to build the repair will cause 500 structural points to be added.

### **4.5.1.14. UPGRADE LOCATION**

Some location types can only be built as an upgrade of an existing location type that must already be present in the hex and must be at full structural points (undamaged). All the rules specified in build location are also enforced for upgrade location.

### **4.5.1.15. GIVE UNIT**

Rulevar 528 can disable this option. This order is only available if you have any allies. Basically it allows you to give units to an ally. When you give a HQ you also give all subordinate units.

#### **Effects**

The HQ links will be broken and the new owner must embed them in his own OOB in order for them to receive supply.

Furthermore the unit will not receive supply or get its AP raised in the first round under its new owner.

### **4.5.1.16. DISBAND UNIT**

Rulevar 518 can disable this option. If a unit is empty and contains no subformations it can be disbanded.

#### **Effects**

This will cause the unit to be removed and the regime to receive rulevar 46 PP in case of a normal unit and rulevar 47 PP in case of a HQ being disbanded.

Furthermore if a HQ is disbanded any of its subordinate units will receive a readiness penalty specified in rulevar 48, which is the same penalty they would have gotten if they had severed the link with the HQ themselves or been assigned a different HQ.

### **4.5.1.17. UPGRADE SUBFORMATION**

This order enables you to upgrade part or all of a single subformation of a unit to be upgraded to a different subformation. (There is also a mass upgrade option available in the OOB/Supply statistics screen in AT Gold.)

To do such an upgrade the subformation must comply with the following:

- » Have enough supply in a selected higher HQ to pay for the supply consumption cost of the upgrade. May be overseas HQ, but max 2 HQs up

the chain of command. Must be within ruler's 53 AP range of hex where upgrading is taking place. This supply usage is not subject to AS damage.

- » Have enough XP that might be required for the upgrade .

#### **4.5.1.18. DISBAND SUBFORMATION**

Rulevar 518 can disable this option.

### **4.5.2. LOCATION ORDERS**

#### **4.5.2.1. SET PRODUCTION**

Some locations can be set to produce itemtypes. If a location can be set to produce anything depends on if the location is owned by the current player and the locationtype of the location has production points and if there are itemtypes that conform to the following:

- » Not have RegimeSpecific set to -2 (no regimes can produce the itemtype). And do have RegimeSpecific is -1 (all regimes can produce the itemtype) or RegimeSpecific equals the owner of the hex.
- » The prodmod the owners people has on the peoplegroup of the people of the location must be >0. Notice that itemtypes can use prodmod1, prodmod2, prodmod3 or prodmod4. This is done to allow some owners to produce special or limited number of itemtypes in locations with some people.
- » The locationtype must be able to build the itemtypegroup class that the itemtype belongs to.
- » If the itemtype leads to production of a subformation(type) then the peoplegroup of the people in the location must be in the list of valid peoplegroups for that subformationtype.
- » Navy units can only be produced if a sea hex is neighboring the location.
- » The itemtype must be buildable by the peoplegroup of the people in the location. itemtypes have list of valid peoplegroups.
- » The locationtype the location belongs too must support the peoplegroup of the people the regime belongs to.
- » Specific researchfields might be necessary.
- » Specific gameslot or regimeslot minimum values might be necessary. These are not the same fields as the production costs and these fields are just there to allow some custom rules.
- » The itemtype must not be blocked by another itemtype that is producible here.

#### **Effects**

Changing production causes a loss of all left and unfinished production in the production slot you made the change.

#### **4.5.2.2. SET PRODUCTION HQ**

Causes the location to try to deliver the production to a different HQ next production phase in the gameloop. If you want to set the HQ of a location to none, this can be useful in preventing location with autoproduction to deliver their goods.

#### **4.5.3. FRIENDLY HEX ORDERS**

##### **4.5.3.1. ADD UNIT**

Rulevar 512 can block this order.

The order enables you to add an empty unit on a friendly hex.

The cost for this is rulevar 46 PP for a normal unit and rulevar 47 PP for a HQ.

##### **4.5.3.2. GIVE HEX**

If you have an ally you can select it and then specify the range of the hexes to be given from the selected hex. For example range 1 will give the selected hex and all neighbors to the specified ally.

##### **Effects**

Any locations in the given hexes will have their HQ set to none.

#### **4.5.4. ENEMY HEX ORDERS**

##### **4.5.4.1. LAND ATTACK**

After selecting a target hex and participants in the attack a land attack is started.

Only units that have the AP to move into the hex are allowed to join in the attack.

Max 16 units can join in an attack.

##### **4.5.4.2. ARTILLERY ATTACK**

After selecting a target hex and participants in the attack an artillery attack is started.

Only units with artillery subformations that have the required range to reach the target and that have at least 10 AP to do 1 combat round are allowed to join in the attack.

Max 16 units can join in an attack.

##### **4.5.4.3. AIRSTRIKE**

After selecting a target hex and participants in the attack an airstrike is started.

Only units with air subformations that have the required AP to reach the target are allowed to join in the attack.

Max 16 units can join in an attack.

#### **4.5.4.4. BOMBING RUN**

After selecting a target hex and participants in the attack a bombing run is started.

Only units with aircraft subformations that have the required AP to reach the target are allowed to join in the attack.

Max 16 units can join in an attack.

#### **4.5.4.5. SEA ATTACK**

After selecting a target hex and participants in the attack a sea attack is started.

Only units with can move into the target hex can join in the attack.

Max 16 units can join in an attack.

#### **4.5.4.6. SHORE BOMBARDMENT**

After selecting a land target hex and participants in the attack a land attack is started.

Only units with naval artillery subformations that have the required range to reach the target and that have at least 10 AP to do 1 combat round are allowed to join in the attack.

Max 16 units can join in an attack.

### **4.5.5. GENERAL (REGIME) ORDERS**

#### **4.5.5.1. SURRENDER**

Upon surrender there are 3 options.

1. You are the only human player. An AI player will be declared the victor.
2. There is 1 other human player. He will be declared the victor. Your regime will be put to sleep.
3. There are 2 or more other human players. No victor will be declared due to your action. Your regime will be dissolved and all territory it occupied made neutral.

#### **Effects**

After surrendering and pressing next turn you'll never get back into your regime.

You can see all statistics after a winner has been declared and thus if only 1 or less human opponents remain after your surrender.

#### **4.5.5.2. DECLARE WAR**

You can declare war on any regime that does not have DipBlock set on it.

Declaring war can cost rulevar 818 PP to do.

You can declare war on any regime you are either at peace with or allied with.

## **Effects**

You will also automatically declare war on all allies of the regime you're declaring war on.

Combat may be initiated in a myriad of hexes where now hostile units share the same hex. Also ZOC conquest will be immediately executed taking into account the new situation.

### **4.5.5.3. OFFER PEACE**

Basically this order just extends a hand to a regime you are at war with. It's up to the other to accept or decline. It's also possible to retract the standing offer at any time in your turn.

### **4.5.5.4. OFFER ALLIANCE**

Basically this order just extends a hand to a regime you are at peace with. You cannot give this offer to a regime you are at war with; you'll first have to make peace. It's up to the other to accept or decline. It's also possible to retract the standing offer at any time in your turn.

### **4.5.5.5. ACCEPT ALLIANCE**

Causes you to be allied with the regime that offered you the alliance.

### **4.5.5.6. ACCEPT PEACE**

Causes you to end hostilities and get a peaceful relation again with the regime that offered you the peace deal.

### **4.5.5.7. SEND MESSAGE**

This is not strictly a game order, but it is an order nonetheless. You can send messages to other players using it. It might be more convenient to immediately type something to another player when playing PBEM then to hold the thought or switch to your email program.

### **4.5.5.8. PLAY ACTION CARD**

Rulevar 502 can disable use of action cards completely.

Each regime can have a number of action cards. Action cards can require a certain number of PP the regime must have in order to play the card.

## **Further Input**

Some cards require the player to select a unit or a hex before they are executed.

## **Effects**

Depends on the scripting of the scenario.

### **4.5.5.9. BUY RESEARCH**

Rulevar 501 can disable research completely.



When you buy a research field and pay its price in either PP or in Resource (regimeslots) points you directly acquire it.

Research fields can be limited to certain peoples and can have different costs in PP/Resource for different peoplegroups of the people of the regime buying the research.

Research fields can also have pre-requisite researchfields that must first be researched before it can be researched.

#### **4.5.5.10. GIVE RESEARCH**

You can share if you chose so to share research with your allies. Also you will be informed of the research fields your allies have.

Researchfields that cost -1PP cannot be given away. Neither can researchfields that require a researchfield that costs -1PP.

#### **4.5.5.11. CHANGE PASSWORD**

If you're playing a game with passwords on and one of the players has dropped out of the game while more than 1 human player remains it will stall the game. Especially in large multiplayer games this is a danger.

The solution for this deadlock is to use the change password order.

The change password can be used on any regime except the next human regime directly after the current player. This is done to prevent the use of change password to be used for peaking and cheating.

This however does mean that if the game stalls, 2 players have to replay their turns. However in a long game this price might be acceptable. If you don't, you might want to consider playing without passwords.

So for example we have a game with

Regime A Regime B Regime C Regime D

and they all do turns and send each other the turn.

Then regime D suddenly doesn't send anymore. This means regime B will have to replay his last received turn and in this turn change the password of regime D to get entry to it again.

## **4.6. TOPICAL**

### **4.6.1. ALLIANCES**

#### **Declaring War**

When declaring war, war is also declared on all allies of the regime in question and you will be charged 20 PPs for each one.

## **Allying**

You cannot ally with a regime that is at war with one of your allies. Neither can you ally with a regime while you are at war with one of its allies.

## **Complex Alliance-relations**

This situation should normally not occur, but it can be constructed in the editor. Rulevar 342 allows a regime to fight against ally if caught in a land battle between two of its allies. Standard in AT Gold rules the ally of both will stay out of combat. When caught in between ally and a neutral it always fights with its ally however.

## **Intercept**

An ally in the same hex (or in intercept range) now only supports the defenders if it is at war with the attacker. Otherwise it stays neutral.

## **4.6.2. STAFF**

SF Types with staff points should be used in HQs where they can provide command and control over troops in the form of combat and morale bonuses to regular units. Keep in mind that the bonuses only apply to non-HQ units under direct command of the HQ and not to the HQ unit itself or any subordinate HQs.

### **4.6.2.1. HQ POWER**

The unit eligible for staff bonus effects should also be within range of the HQ. Rulevar 73 and 74 determine the maximum distance a unit can be to receive full effects and partial effects.

### **4.6.2.2. STAFF%**

The staff percentage is depends on the total staff points the HQ has available versus the total power points of land theater units in non-HQ units under command.

### **4.6.2.3. STAFF IS LAND ONLY**

Naval and air theater units don't count towards the need for staff points in HQs. They don't receive staff morale and combat bonuses.

### **4.6.2.4. BASIC STAFF BONUS**

Regardless of the actual capabilities of your staff subformations in the HQ, if you have 100% staff or more you get full base bonus for combat specified in rulevar 140 and for morale improvements in rulevar 141. Lower staff% waters these basic staff bonuses down accordingly to the staff%.

### **4.6.2.5. SPECIFIC STAFF BONUS**

Then there is a combat bonus based on the staffs subformation types combat bonus stat \* experience level of the staff.

And a morale bonus in the morale improvements phase based on the staff's subformation types morale bonus stat \* experience level of the staff.

### **4.6.3. ANTI SUPPLY**

Some subformationtypes exert anti supply points. Subformation types have a stat for range they exert anti-supply in. Also they have separate anti supply stats for sea and land hexes.

The amount of AS points that can be exerted is modified by the readiness of a subformation.

#### **Effects of Anti-Supply points on a hex**

In the supply phase supply can be destroyed by moving through a hex with enemy AS points on it. Damage is calculated by adding all the anti-supply points on all the hexes in the trajectory from source to target. These are added up to a max of 9,000 points. The square root is then taken and the result used as the percent of damage suffered. Yes this means that 100% losses can never be attained by anti supply.

When using strategic and normal transfers the carried units/subformations as well as the subformations providing transfer capacity points can be destroyed.

This always is the case for sea hexes, but only for land hexes if rulevar 309 is active.

#### **Land and navy causing AS**

These points cannot be stopped, except by destroying the unit causing them. This will immediately remove the AS points.

#### **Air causing AS**

Air only causes AS points on hexes that could not possibly be intercepted by enemy air formations. If the causing aircraft can be destroyed in air missions then the points will be removed.

#### **HQ receiving production**

A HQ receiving air subformations from production lines always has its intercept % set to NO INTERCEPT. This is to avoid gamey tricks.

#### **Harbor Blockade Rule**

Rulevar 303 can be used to set a multiplier on AS points on hexes next to a port.

### **4.6.4. FUEL EXPLOIT PREVENTION RULES**

The enemy could be tricked in to intercepting with large amounts of aircraft that way spending a lot of fuel just to maybe catch 1 recon plane. To counter such gamey techniques the following rules are in place:

No intercepts are attempted if not enough fuel to sustain combat for at least 2 rounds.

Interceptor does not pay fuel costs to move to hex

Interceptor does not pay fuel if doing an attack on a target that has already been attacked above its max-attack stat.

## 4.6.5. ARTIFICIAL INTELLIGENCE

### On the AI

For the sake of transparency this will be a very frank chapter.

#### The AI of AT Gold

In game development it is not always possible to do everything you want in the time frame allotted. This was also the case for the making of AT Gold version. AI development is very time intensive. You might debate that last statement, but it is the case for VR Designs.

I couldn't put in an extra 6 months of development in the AI of AT Gold. That has to be reserved for a follow up.

#### Basically same AI as in AT

However there is nothing truly wrong with the AI. Just give it more bonuses (play the AI+ or AI++) to get more challenge. The AT AI isn't genius, but it isn't horrible either. It basically your average wargame AI with some improvements added.

#### Improvements

I did add improvements, mainly in the form of some production overruling scripting options, used in the generic.at2 file as well for you to check out. These have a good effect and also allow scenario designers more options. Also I put time into optimizing the AI code. The speeding up of the AI (up to 100x). This will be very useful in larger scenarios. Watching the results of the AI as they come in is also an extra improvement.

Production choices (especially those overruled by scripts) now take into account the AI role score (higher is better chance of getting used)

#### AI Advantages in AT Gold rules scenarios

If you play in the new random games or any other AT Gold rules scenario the AI will have a number of advantages. These have been put in to augment existing AT AI weaknesses and provide more challenging game play and also to let the AI not be burdened by new rules introduced in AT Gold.

- » AI gets a little base resource and fuel income and a little bonus on top of each location [scripted in generic.at2]
- » AI gets option to produce supply in enemy towns at 200% of the normal cost [scripted in generic.at2]
- » AI gets 10% combat and 25% movement bonus [scripted in generic.at2]
- » AI gets free transfers [rulevar for this enabled in generic.at2]

- » AI gets free construction of units and HQs [rulevar for this enabled in generic.at2]
- » AI will get a very limited number of free factories / resource upgrades over time, but the number increases for AI+ and AI++ [scripted in generic.at2]
- » AI gets fewer penalties for supply path entering land without port. [rulevar in generic.at2]
- » AI gets fewer penalties for supply crossing river without bridge. [rulevar in generic.at2]

As you can see it is possible for a modder or scenario designer to disable all these advantages. But this is not recommended since the AI needs a little help to be competitive.

### **Advantages for AI in Classic scenarios**

These advantages were already in place in old AT.

- » AI gets free transfers [rulevar for this enabled in classic.at2]
- » AI gets less penalty for supply path entering land without port.

### **Play by Email (PBEM)**

If you don't like playing against an AI that has some advantages there is always PBEM. A lot of players think this is where the engine really shines anyways, and there are quite a few scenario's that do not have AI capability and should be played PBEM anyway. If you never played PBEM you do not want to hear this. But... Give PBEM a try before you judge. Really.

### **What the AI does not do**

The AI does not use a number of AT features. Mainly:

- » AI does not use paratroopers
- » AI does not use transport aircraft
- » AI does not use air carriers
- » AI does not use strategic air missions
- » AI does not construct fortifications, airfields and ports [unless a scenario would script this]

### **AI Block**

In all the scenarios shipped with AT Gold I enabled the AIBlock option on a scenario if I felt the AI is not able to deal with it. I advise scenario designers to do the same so as to notify the player in advance and not disappoint the player.

## 4.7. SOME LAST WORDS

### 4.7.1. FUTURE PLANS

AT is an ongoing project that started with People's Tactics and that with a lot of user feedback, fine-tuning and rule changes is becoming better and better.

However while certain features raced ahead it does feel now that the AI is something which should be addressed seriously next. It is becoming the part which is starting to show its age a bit.

In Decisive Campaigns (another game by VR Designs) there now is a new AI active that does not cheat at all. I am pretty happy with it. It does an amazing job without getting any advantages. I would like to give the AT games the same sort of AI in the future, but then one that also can deal with random maps, naval ops, production and OOB creation and maintenance.

This AI should also be more scriptable by scenario designers.

The plan is to work on this in the next AT installment (AT2? AT Platinum? Title not decided yet). Some game play and feature limitations however might be necessary to make it possible to construct such an AI. This will also take some time.... 2012 maybe? Who knows... the future is not ours to see.

### 4.7.2. EDITOR PUBLIC BETA STATE

You might be wondering why I made the editor public beta?

The reason is that although it's pretty stable there is so much a scenario designer can do that I am not 99.9% sure everything is bug free. For this reason I chose the term "public beta" to keep a scenario designer aware that there is a small chance the game might crash if he does something I never tried or expected.

Basically, it's a warning and reminder to make frequent saves. If possible number your saves so you can always revert to an earlier savefile.

### 4.7.3. EDITOR DELETING DATA STRUCTURES WARNING

Keep in mind that quite a lot of references in data structures of AT Gold are absolute. So for example if you have an event refer to landscape type #13 and you later delete landscape type #12 that will mean that landscape type #13 drops one slot into landscape type #12. The event will now refer to what used to be landscape type #14 before you did the delete. Keep this in mind while designing scenarios! My advice is actually to not delete data structures, but if you don't need them any more just call them something like "N/A" or so.

If you do delete stuff make sure you check up if other datastructures are now not pointing to nothing or to the wrong item.

Mostly the references will be updated automatically outside events, but still, you should check.

#### **4.7.4. BIG, NORMAL AND SMALL GRAPHICS**

In AT Gold 2 zoom modes have been added. This means that all hex based graphics, system graphics as well as scenario dependent graphics, now not only exist in regular 64×48 mode but also in 32×24 and 128×96.

If you're loading an older scenario these different sized graphics will be created on the fly. On some computer this may take some time. This ensures that the older scenario packs, including their graphics, stay fully compatible with AT Gold.

#### **4.7.5. LOG FILES**

There is a number of log files that can be generated you might find interesting.

Pressing 'DEL'-key while being in game will give you the amount of memory used currently by the GUI and all graphics loaded. It also creates 2 log files. One with all missing systemgraphics and one with a list of all graphics actually loaded.

In the editor in the settings tab you can click on "Export Text Logfiles" to export a dozen or so interesting text files for a modder. Including lists text messages in events and action card picture use. Very useful for debugging your scenario.

#### **4.7.6. MAX SCENARIO SIZE RECOMMENDATIONS**

The AT Gold engine is not limited in any way, however you should not make scenarios that eat too much RAM. It can cause all sort of memory problems.

Basically you are safe when map:

Stays below 20,000 hexes

Does not use more than 10 regimes if on 10-20,000+ hex map.

Does not use more than 250 subformationtypes and/or itemtypes (especially not if using a lot of regimes).

It doesn't mean the game will run into issues if you make a scenario bigger than that but above this I am not sure things will always go smoothly, especially if you go very far above the maximum recommended scenario specs.

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