



STEAM AND IRON CAMPAIGN Players Manual

Player's manual for Steam and Iron campaign. © 2012, 2013 NWS & Fredrik Wallin

INTRODUCTION

The Campaign Simulator puts you in command of a theatre in WW1 for a period from a number of months up to several years. You plan the operations of the fleet under your command, select objectives and decide on what ships to employ out of the available forces, and how to organize and employ them. You will then command them in SAI scenarios and hopefully bring them safely back to port having executed your orders.

GENERAL

The campaign takes place in campaign turns. The length of a campaign turn can be set when starting the campaign to 1, 2 or 4 weeks. Longer turns will generally lead to larger operations. Thus, if you want to play out the small raids and minelaying operations that make up the majority of naval operations, select weekly turns. If you want to concentrate on the big battles, go for longer campaign turns. Note that even long turns with large forces may well end without contact between the forces. After all, of all the naval operations in WW1, only a few led to major battles.

You can change the turn length when loading a saved campaign.

Each turn, you will get the opportunity to plan operations and compose the forces with which to carry them out. You do not have to conduct an operation, and can stay in port, for example to save operations points (see below). However, even if you stay in port, it is entirely possible that the enemy will conduct their own operation, and that you will have to react to it by sending out ships from port (*see Emergency activation below*).

Each turn you also have the opportunity to train ships or send them to dockyard for refit or upgrades.

When you are finished with your operational planning, press 'Turn' to start the scenario.

Note that campaign scenarios cannot be ended before all your ships are back in port or sunk, or the scenario time limit is up. When a campaign scenario is finished, you have the opportunity to study the results and track charts. When you are finished, just close the main scenario window. You will then get notice of any reinforcements, and then be sent back to the campaign planning screen.

Occasionally, the enemy might be running an operation while you have no ships at sea. You will then be given the opportunity to concede the scenario, in which case the opponent will be given the point value of his objective + 500 points. If you elect to pass on a scenario when the enemy does something and you have no ships activated, the whole operation is abstracted and there will be no losses or engagements. You can choose to play out the scenario and wait until something is sighted, by submarines or something else, and then emergency activate. The advantage of playing out a scenario, even if you don't emergency activate or see anything, is that the enemy will be subject to attrition by submarines and mines and such, so if you have the patience, it is the more rewarding and realistic course.

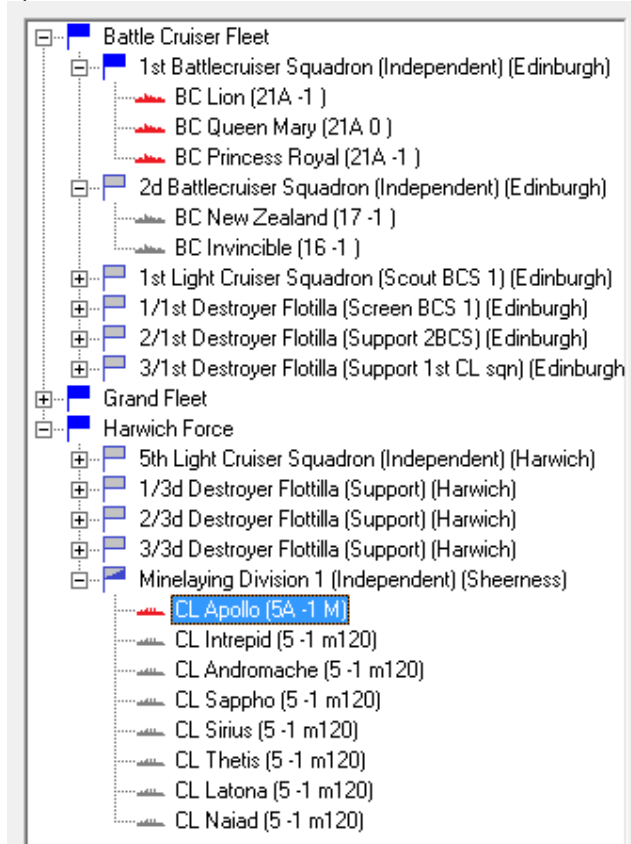
There will be friendly forces under AI control which mostly consist of merchant shipping or local patrol forces. You have no influence over these, but they will report sightings. Of course you will want to protect your own merchant shipping and prevent the enemy from sinking them.

FORCES

Your forces, divisions and ships will be shown in the Forces tab. Divisions have their role and base indicated after their name.

After each ship there are some numbers. They show the activation cost, the crew quality and the mine capacity of the ship. For activated ships there will be an 'A' after the activation cost. If mines have been loaded, the mine value will be replaced by an 'M'.

In the picture below you can see the mine capacity of the old light cruisers of the Apollo-class. CL Apollo has been activated and loaded with mines.



You can activate ships in the force display by selecting a ship or a division and pressing the activate button, or by right clicking on the ship or division.

OPERATIONS POINTS (OPs)

The number of ships you can activate is governed by the number of Operations points (OP) that you have. These simulate fuel and other resources needed to support the fleet. Each ship costs a number of OP to activate, the cost being roughly dependent on the displacement of the activated ship.

You receive a number of OP each turn. OPs can be saved and used in subsequent campaign turns. However, saved OP are subject to depletion each turn. The depletion rate is based on the number of operational ships; if you have hoarded more OP than you can conceivably need, the depletion rate will increase.

Operation Points are also spent on activating submarines or training ships.

EMERGENCY ACTIVATION

Ships not activated at start can be emergency activated later during the scenario. Emergency activation represents reaction to enemy operations or a friendly force getting into trouble. Emergency

activation costs half the normal number of OPs. Emergency activated ships will require about three hours to raise steam.

Ships cannot be emergency activated until a significant force of enemy ships (not land targets) has been sighted.

High value units(*see below*) cannot be used for emergency activation.

BASING

All divisions must be assigned to a base. Each base has a base capacity. You may exceed base capacity, but ships at overcrowded bases will suffer from lack of maintenance and there will be an OP penalty. Big ships (BB, BC and CA) must be based at bases with a capacity of more than 30 and CL require a base with capacity of at least 20.

You can rebase a division during the planning phase by right clicking on it in the Force tree and selecting Rebase. Rebasing carries a small OP cost and may carry some risk of operational losses depending on the distances involved.

Some bases are far off or hard to reach due to enemy activity. The only way to rebase ships there is to steam there during a scenario. You must be within 150 nm of a new base when the campaign scenario ends for the ships to end the scenario at that base.

When ships are activated normally, they will start at the start point of the base where they are based. Normally, the start point is some ways off the base to cut down on approach movements that would be boring after a couple of scenarios. Note that in some campaigns, a force might have to be split between different bases due to capacity constraints. This means that the force must combine while at sea.

On emergency activation, ships will start at the port they are based in and have to raise steam before they can leave.

When preempting an enemy operation, the ships in the force will have had time to assemble and will start at the force alternate point, usually some ways out at sea.

Ships can return to any friendly base that has the capacity to take ships of that size. After the scenario, you will get an opportunity to let them transfer back to their original base. If the home base is not nearby, there will be some risk of operational losses during the transfer.

ORGANIZATION

You are free to reassign ships to other divisions. However, ships can only be reassigned to divisions with similar ship types (generally the same type except that B can be placed in BB divisions and CA can be placed in BC divisions).

You can also reassign divisions to other forces. Note that they are not automatically rebased; you will probably also want to rebase them.

Every reassignment will slightly lower the training level of the division, which will affect admin rating. Frequent reassignments will eventually lead to poorly coordinated forces. Reassigning a ship to a division at another port will carry a small OP cost.

ASW REQUIREMENTS

In some campaigns one side has to hold back a number of destroyers for ASW duties or risk losing Victory Points. The number of DDs required for ASW duties varies over time and any changes will be shown in the turn report along with reinforcements etc. To satisfy the requirement, simply leave a number of destroyers uncommitted (neither active nor training). The numbers are shown at the bottom of the campaign screen. If you end the turn with insufficient destroyers on ASW duties you will get a warning.

OBJECTIVES

When you plan an operation, you will be able to select from a list of objectives. Usually, there is no requirement to select an objective (but see compulsory objectives below). You can select one or more objectives. Some turns there might be several objectives available, and some turns there might be none. If no objectives are available, you can still activate ships and perform a sweep. You can also always plan a minelaying mission of your own.

You will earn the point value of the objective in victory points for each selected objective that is completed. You will lose half of the point value if a selected objective is not completed.

Some objectives are compulsory. This means that higher command has given you a mission that must be carried out to support the general war effort. Compulsory objectives are selected by default, and cannot be unselected. If you fail a mandatory objective, you will be penalized by losing the full objective point value.

In addition to the objectives given to you by higher command, you can also define one minelaying objective of your own each turn. Just click on the "Add minefield objective" button and click on the map where you want to lay the minefield. Player defined objectives will not earn any points, but allows you to engage in some offensive mine warfare and lay minefields where you expect enemy forces to move.

MINEFIELDS

There are two kinds of minefields in the campaign. Fixed minefields that are defined in the campaign and represent larger minefields laid and maintained by mine warfare forces not represented in the campaign, and player laid minefields. Fixed minefields will change over time as defined in the campaign, mainly increasing the longer the war progresses.

Player laid minefields are created by completing minelaying objectives, those given to you by higher command or those you have defined yourself. Player laid minefields will deteriorate over time, disappearing completely after about ten weeks.

There will also be some mine warfare automatically conducted by local minesweeping forces, both detection, sweeping and laying of mines. Enemy laid minefields can be detected, with the chance of detection is larger the closer to a friendly base the minefield is located. A detected minefield will be marked on the map and avoided by friendly ships. It will be swept and removed one week after detection. Some small minefields will also be automatically laid.

MINELAYING

For a minelaying objective you need to load a ship capable of minelaying with mines. Load mines by right clicking on the ship and select Load Mines.

Different nations used different philosophy for minelaying. Germany, Russia and Italy had most cruisers and destroyers equipped to lay mines, while Great Britain relied on specialized ships, often older warships or fast merchant ships converted to minelayers.

Ships in the campaign are rated for the number of mines they can carry. Ships capable of laying mines are denoted by an "m" followed by a number in the campaign OOB. The number is the number of mines the ship can load.

There is a small OP cost for loading mines on a ship (to put a damper on excessive mining). The cost is proportional to the number of mines the ship can carry.

If you have no ships capable of carrying mines left, you can always create a division with two auxiliary minelayers by clicking on the "Buy minelaying division" button. This will cost you 10000 VP. This is so that a side should always be capable of carrying out some minelaying even if all regular minelaying ships are sunk.

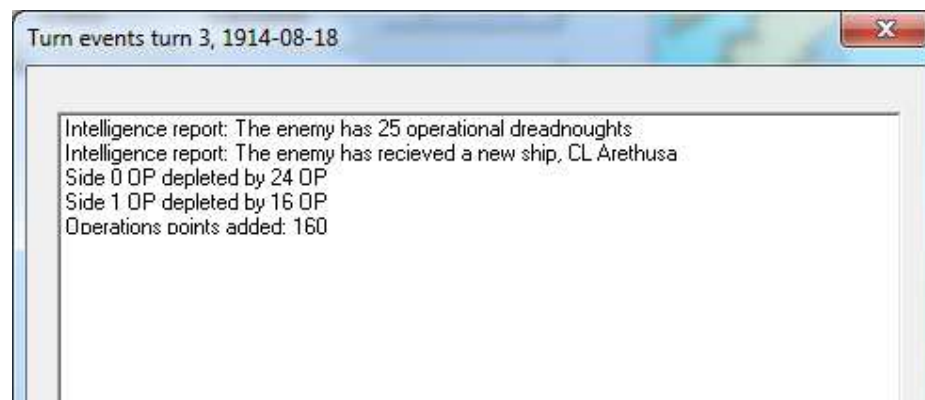
INTELLIGENCE

Each side has an intelligence rating, reflecting their ability to predict enemy operations. This mostly reflects radio intelligence, where the British and Russians have a decided advantage in WW1, but also to a lesser extent other intelligence sources. The quality of intelligence in WW1 will improve later in the war. In the Russo-Japanese war, Japan has a marked intelligence advantage.

If a side is conducting an operation and the enemy passes his intelligence roll, the enemy fleet will be given the chance to start at sea, ready to intercept the operation, as happened at Dogger Bank, Jutland and the battle of Östergarn (Death of an Albatross scenario). This can of course be a considerable advantage. To start at sea, press the Preempt button (which will only be enabled when your intelligence has detected an enemy operation).

There will also be other bits of intelligence about the enemy reported in the turn report each turn, like information about ships in repair or newly commissioned enemy ships.

Note that just as in real life, intelligence reports can sometimes be vague or even misleading.



REPAIR

When ships are damaged, they will need to be repaired. This might take a number of weekly turns. Each side has a limited repair capacity, determining how many large ships (BB, BC, B, CA) that can be repaired at the same time. In addition, the same number of CL and DD can be repaired for free.

In the repair list, you can move ships up and down, or click the top button to move a ship to the top of the repair queue. Only the large ships in the top of the repair list up to the repair capacity will be repaired. In addition, the first CL and the first DD up to the repair capacity will also be repaired for free. You can rearrange the order in the repair queue every turn if you want.

REFIT

Ships need to be refitted after a time of service. Each ship will require a refit every 12 months. Refit is similar to repair, and will take up repair capacity. Refitting a ship will take 3 weeks for large ships and 2 weeks for small ships. There is no requirement to send ships for refit, but ships that are overdue for refit will run a higher risk of breakdowns, both to machinery and weapons.

Sometimes a ship will develop unexpected mechanical trouble and need an immediate refit. The chance of this happening is larger when a ship nears its time of refit, so it might be safest to send important ships for refit in good time.

Newly commissioned ships will normally not require refit for a year, but occasionally a newly commissioned ship might have mechanical problems that need to be rectified. Thus, new ships will sometimes require an immediate refit.

If you feel that it is too much work to check which ships to send to refit, your staff is happy to help you. Click the "Fleet Engineer" button and you will get a list of ships that your Fleet Engineer thinks

should go to refit. Uncheck any ships you don't want to send to refit right now and click OK to send checked ships to refit.

UPGRADES

Sometimes you will be notified in the turn events that an upgrade is available for a ship class. When a ship of a class for which an upgrade is available is sent for repair or refit, the upgrade will be performed as well.

TRAINING

You must train your formations regularly to have them at top efficiency. Each turn, you can send divisions or ships to training. A division that is in training will be unable for activation or emergency activation that turn. There is a limit to how many ships can be sent to training at the same time. Training will cost OP at a rate of one quarter the cost of activating the ship.

Ships will see their training level fall after a time, so regular training exercises are recommended. Ships out of training will get poor crew quality and the division will get an admin penalty, affecting order transmission, maneuvering etc. The crew quality seen in the campaign screen is a best estimate of crew proficiency; actual values during a scenario will vary slightly. This is intentional, as commanders could not be sure beforehand what the actual proficiency of their crews was or which ships would perform best.

There is a risk that ships sent for training will suffer a mishap, such as hitting a mine, being torpedoed or colliding with friendly ships.

Similar to refit, your Chief of Staff can help you by suggesting which ships and/or divisions to send to training. Click the "Chief of Staff" button and you will get a list of ships that needs training. Uncheck any ships you don't want to send train right now and click OK to send checked ships to training.

WEATHER

After you have selected your objectives and composed your force, you will get a weather report. You can elect either to continue with the operation (Press OK) or to postpone the operation hoping for better weather (Press Retry). A postponement is automatically two days. You can postpone an operation no more than twice, after that, the game will advance to the next campaign turn, and any mandatory objectives will count as failed.

Weather will tend to be worse during the autumn and winter months (October to March).

EXITING AND ENTERING PORT DURING DARKNESS

There is a risk of grounding or collision when entering port at night, dependent on nightfighting and crew quality values of the ships involved. Generally, this risk is very slight, the only force that should give consideration to avoiding night entries and exits is the somewhat accident prone Russian fleet in the Russo-Japanese war campaign.

ENDING A CAMPAIGN SCENARIO

A campaign scenario will end when you have returned to base with all of your ships. You do not need to return ships to the starting base, any friendly base will do. Ships can be transferred to their home base after the scenario. The scenario will also end when the time limit is up.

At the end of a scenario, all ships that have not returned to base must be within 500 nm of a friendly base and have enough fuel to reach a friendly port at 15 knots, otherwise the player will get a VP penalty of $\frac{1}{4}$ of the VP value if the ships had been sunk. (This is to prevent silly stunts like taking the High Seas Fleet out into the middle of the Atlantic.)

Ships ending the scenario more than 100 nm from a friendly port risk operational losses as described below, as well as increased wear and tear from extended periods at sea (time to next refit will be reduced).

At the end of a campaign scenario, one side might get VP:s for all surviving merchant ships. This is to compensate a side with numerous merchant ships for the added vulnerability, and also put pressure on the opposing side to sink merchants. The exact amount per ship varies with the campaign. The AI will get the full amount of points, player will get half points on easy, quartered points on normal and 0 points on hard.

OPERATIONAL LOSSES

In any operation, as well as in training, there is a risk that ships involved will suffer a mishap, such as hitting a mine, being torpedoed or running onto a rock or colliding with friendly ships.

LOSSES

Ships sunk in a scenario will of course be lost for the remainder of the campaign. Damaged ships will be sent to repair.

However, any TR sunk will be automatically replaced (but they will still generate VPs for being lost). In addition, land targets will always be automatically repaired and replaced between campaign turns.

Enemy Losses

Under the enemy losses tab, you will see a summary of enemy ships sunk and an assessment of damage level for damaged enemy ships. You will not know how long it will take for the enemy to repair ships and put them back in service, although the occasional intelligence report might give clues.

Campaign status

If you click the status button, you will get a summary of all ships sunk so far in the campaign, your own or enemy, and the cause of the sinking. There is also an opportunity to show a loss map with all the sunken ships in the campaign marked on the map.

CHANGES TO BASES ETC. OVER TIME

Minefields, bases and search areas as well as the available objectives will all change over time in the campaign. This reflects the fortunes of war on land and other factors, and is not affected by success or failure on the part of the player in the campaign. For example, in the Baltic campaign, control of bases along the Baltic coast will gradually go from Russian to German as the German Army advances. This naturally changes the objectives; there is obviously no need for the German Navy to bombard ports already in German hands.

In most campaigns minefields will be relatively scarce at the beginning of the campaign, but become more and more common during the course of the war.

HIGH VALUE NAVAL UNITS

In some campaigns there are high value units available. These can be called upon if the player wants, but their use will confer some risks and costs. High value units will cost 1.5 times the usual OP cost. Losses or damage to them will incur twice the normal VP penalty.

This is to simulate **situations** like in the Baltic, where the Germans could call on reinforcements from the High Seas Fleet when needed, but where it would not be appreciated if the local commander lost precious modern ships in a subsidiary theatre. Similarly the Russian dreadnoughts in the Baltic were under severe restrictions as to when they could be risked, so they have also been treated as high value units.

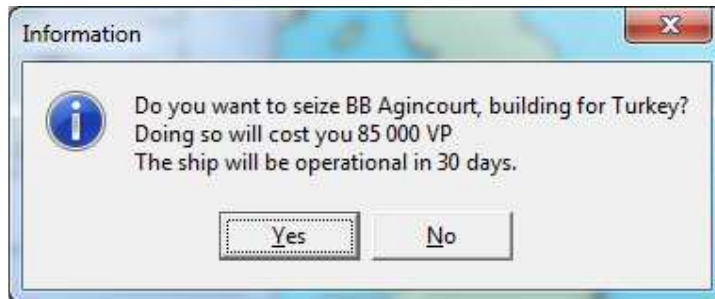
High value units cannot be reassigned or rebased. Ships in high value forces cannot be emergency activated, and you do not need to train or refit them. Ships in a high value division in a normal force (for example the *Gangut* class BBs in the Baltic campaign) do need to be trained and refitted, and can be emergency activated.

REINFORCEMENTS

Ships will arrive as reinforcements during the campaign. Newly built ships will have a low crew quality, and require training (simulating a working up period) before being fully effective. Sometimes, ships will be withdrawn to other theatres.

Reinforcements to high value forces will be marked with a *.

Some reinforcements or withdrawals are conditional. In those cases you will have the opportunity to either get a ship for a cost in victory points, or keep a ship that should have been withdrawn. For example, at the start of the North Sea Campaign the British have the opportunity to seize two dreadnoughts building in Britain for Turkey.



The cost of conditional reinforcements is based on the ship point value and the time the ship will be available as a result of the player electing to pay for the reinforcement. Ships like the Agincourt, acquired at the start of the campaign, will have a higher cost, as the player will have the use of them for the entire campaign, while a ship that enters service in 1916 will have a lower cost.

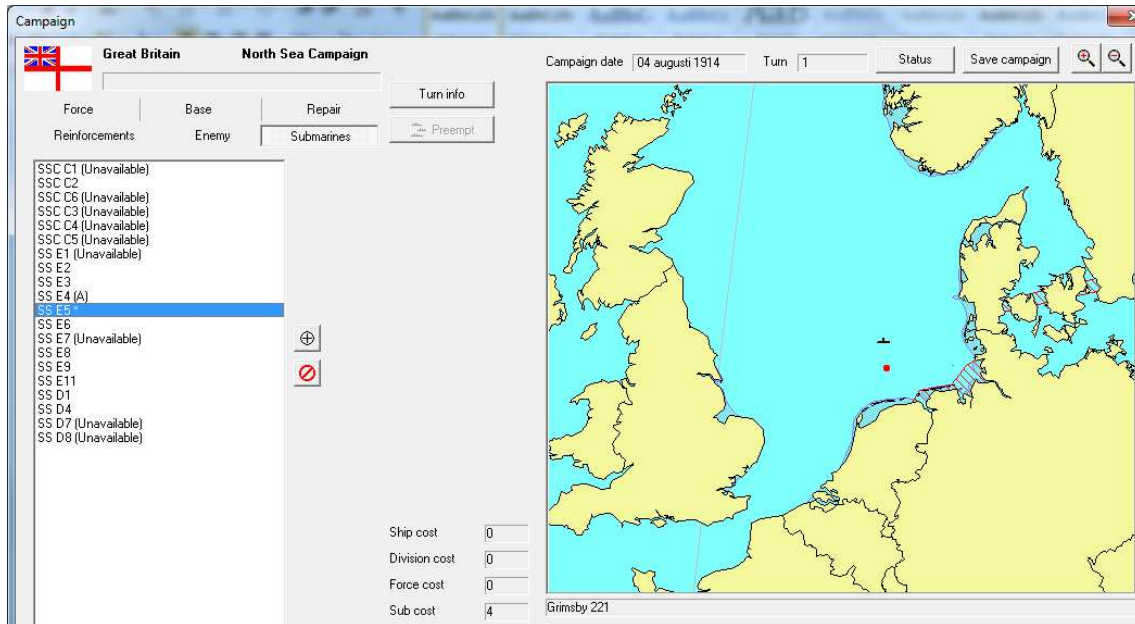
SUBMARINES

Available submarines can be deployed to patrol areas at the start of an operation. Once deployed, they cannot be moved or influenced. Deploying a submarine cost 2 OP. Submarines cannot be deployed in minefields (friendly or enemy), and deploying them near a minefield means that there will be a risk that they blunder into the minefield and hit a mine.

Submarines will not always be available for operations, reflecting maintenance and technical difficulties.

Submarines are deployed by selecting a submarine in the list, clicking on the cross button and then clicking on the map where you want the submarine to be deployed. You can un-deploy a submarine by selecting it and pressing the stop button.

While deploying submarines outside enemy bases can reap rewards in torpedoed enemy ships, it also increases the risk to the submarine. Areas outside bases were frequently patrolled, and there is a risk that submarines deployed too close to enemy bases or assembly areas will have been sunk or forced to dive by local patrols even before the scenario starts.



There are three types of submarines:

Short range coastal submarines (SSC) simulate small coastal submarines. These can only be deployed within 150 nm of a friendly base. They have a relatively small supply of torpedoes, and after expending these they will return home. Some submarines are treated as SSC even if they technically had longer range, due to doctrine or usage by the owning nation.

Minelaying submarines (SSM) will lay a small minefield at the location deployed. They will then lurk around in the neighborhood. Due to the space taken up by the mines, they have a small supply of torpedoes, and after expending these they will return home.

Normal submarines (SS) can be deployed anywhere and have no special capabilities or limitations.

Do not deploy submarines too close to each other, as there is a small chance they will erroneously attack each other.

LAND CAMPAIGN

In some campaigns (notably the Russo-Japanese war) the simultaneous land campaign is abstractly simulated. The land and naval campaign will affect each other. The victory level on the naval campaign will affect the development of the land campaign; if the player is faring better than historically, enemy progress in the land campaign will be slower. The land campaign can have various effects on the naval campaign such as:

- Loss of OP.
- Ships damaged by bombardment in besieged bases.
- Bases surrender (and ships in them are lost).

The player will get messages telling him about important developments in the land campaign.

DIFFICULTY LEVELS

You may select the desired level of difficulty at the start of a campaign. This may not be changed after the campaign has begun.

Easy

Battles will mostly be balanced. You will not be relieved of command, however badly the campaign goes. Victory and defeat will be assessed at the end of the campaign.

Normal

Enemy forces will be will be roughly comparable to your own, with some swings. If you perform really badly, you will be relieved of command and lose the campaign.

Hard

The size of enemy forces can vary considerably. Enemy forces will receive a slight crew quality bonus and some slight OP discounts if needed. If you perform badly, you will be relieved of command and lose the campaign.

VICTORY AND DEFEAT

You will win the campaign if you have a positive VP balance compared to the enemy as indicated in the victory conditions for the campaign.

In some campaigns, you are required to have a certain proportion of operational dreadnought ships (dreadnought battleships (BB) and battlecruisers (BC)) compared to the enemy. If you fail this during any turn you will suffer a VP deduction. Conversely, if you surpass this ratio by a considerable amount you will receive a bonus VP award.

For example, as the Germans in the North Sea campaign, you need to have half as many operational dreadnoughts as the British. If you have less you will be penalized. If you have more operational dreadnoughts than the British, you will get a VP bonus and a hug from the Kaiser.

It is advisable to give some thought to the dreadnought ratio before sending ships for refit, as only operational ships (not in repair) count. Ships in training do count.

DESIGNERS NOTES, WW1 CAMPAIGNS

The movements of big ships in and out of theater has been reflected in the OOBs, but for smaller ships this has in many cases not been possible. There was constant movement of light cruisers, destroyers and submarines between different theatres, and to recreate all those transfers would have baffled the player organizing his fleet, added little to the game and provided a substantial research effort, if at all possible. Instead the OOB aims for a reasonable level of light forces based on those ships mainly active in the theater.

Fleet organization, especially of light forces, underwent several changes on both sides during the war. The OOB is based on the situation at the start of the particular campaign. New ships arriving as reinforcements are placed in their historical formations when possible, but for light forces most new ships are simply placed in consecutively numbered divisions and flotillas, as it would have been impossible to preprogram all the organizational changes in the historical OOB.

The off and on of the German submarine campaign against merchant shipping uring WW1 is heavily reflected in the availability of German submarines to support fleet operations, but is also reflected in the need for the British to hold back destroyers for ASW duties. Also British submarines were to a considerable extent employed in ASW duties, so somewhat paradoxically, the availability of British submarines in the game will also go down when the Germans are conducting unrestricted submarine warfare.

In the Baltic region, I have used the names of cities and towns in use officially at the time, which in Imperial Russian times tended to be those of German or Swedish provenance, thus for example *Baltischport*, *Reval* and *Arensburg* instead of the present names of *Paldiski*, *Tallinn* and *Kuressaare*.

DESIGNERS NOTES, RJW CAMPAIGN

The RJW campaign has some features not present in the WW1 campaign. The Russian forces are split between two bases, Vladivostok and Port Arthur, and it is not possible to rebase between them except the hard way, steaming to the other base in a scenario. The Russians also receive substantial reinforcements during the campaign. Moving these from Cam Ranh Bay to Vladivostok or Port Arthur can be a challenge. Russian operations in the game are severely curtailed by shortage of OP:s and repair facilities, and a Russian player will probably be finding himself with an untrained fleet in bad need of refit after a year or so. This might feel frustrating but I believe it reflects reality. Nevertheless, an enterprising Russian human player should be able to rack up enough victory points to keep the Japanese land campaign at a slow pace. Even so, the Japanese army will advance, and the steady advance should put a feeling of impending doom on the Russian player. The problem for the Russians is that a fleet at Port Arthur is best placed to interfere with Japanese operations, but it is ultimately doomed when Port Arthur falls. Vladivostok is a safer port, but also far away from the main focus of the action.

For the Japanese, the challenge is to detect and intercept any Russian raids on merchant shipping. This can be a problem, especially as the Vladivostok squadron can strike almost anywhere with minimal warning. Also, many missions will require you to bombard Port Arthur or place blockships, and you will discover that tangling with the Port Arthur coastal batteries can be a frustrating experience, often incurring damage that will put your ships in dockyard hands while not inflicting lasting damage on the coastal fortifications. And last but not least, the Russians do have a numerically superior battlefleet, even though they will not have the OP:s to sortie it very often.

Minelaying can reap rich rewards, and just as in the real war, mines will probably be one of the main shipkillers. For the Russians, scarce OP:s will force the player to choose between frequent minelaying or saving OP:s for fleet sorties.

Note that due to limitations in the way SAI models ship data, it was not possible to accurately represent the split main armament of the Japanese cruiser *Kasuga*, and she has been represented armed with two twin 8 in turrets like her half sister Nisshin. The difference in combat power should be negligible.