

TABLE OF CONTENTS

Introduction

Part 1: Begin

1.1 loading and installing

1.2 start up

1.2.1 select player

1.2.2 scenario selection

1.2.3 game adjustments

1.2.4 scenario information window

1.3 player history screen

Part 2: Basic Rules of Engagement

2.1 run screen

2.1.1 icons

2.1.2 action bar

2.1.3 information windows

2.2 orders screen

2.2.1 mouse functions

2.2.2 action bar

2.2.3 information windows

2.2.4 menus

2.3 task force orders menu

2.3.1 track and attack

2.3.2 combine and divide

2.3.3 bombard

2.4 airfield orders menu

2.4.1 standard strikes

2.4.2 full strike

2.4.3 rest

2.4.4 CAP

2.4.5 long range CAP

2.4.6 transfer

2.4.7 search

2.4.8 return

2.4.9 exchange/reinforce

2.5 carrier orders menu

2.5.1 track and attack

2.6 base orders menu

2.6.1 expand port

2.6.2 expand airfield

2.6.3 seaplanes

2.6.4 create/merge armies

2.6.5 entrench armies

2.6.6 destroy base

2.7 infantry orders menu

2.7.1 build base

- 2.7.2 divide, merge, and entrench
- 2.8 hot keys and pull down menu
- 2.9 miscellaneous
 - 2.9.1 scoring
 - 2.9.2 air tactical screen
 - 2.9.3 ship tactical screen
 - 2.9.4 military time
- Part 3: Advanced Rules of Engagement
 - 3.1 ships
 - 3.1.1 damage
 - 3.1.2 float planes
 - 3.1.3 weapons
 - 3.1.4 armour
 - 3.1.5 tonnage
 - 3.1.6 speed
 - 3.1.7 fuel
 - 3.1.8 ammunition
 - 3.2 task forces
 - 3.2.1 patrol
 - 3.2.2 bombard
 - 3.2.3 unload
 - 3.2.4 replenish
 - 3.2.5 refuel
 - 3.2.6 dock ship
 - 3.2.7 load
 - 3.3 bases
 - 3.3.1 ports
 - 3.3.2 orders
 - 3.3.3 seaplanes
 - 3.3.4 resource points
 - 3.4 infantry
 - 3.4.1 orders
 - 3.5 aircraft
 - 3.5.1 experience
 - 3.5.2 morale
 - 3.5.3 squadron selection
 - 3.5.4 squadron orders
 - 3.6 carrier operations
 - 3.7 combat and strategy notes
 - 3.8 scenario synopsis'
 - 3.9 modem operation

INTRODUCTION

Welcome to W.W.II. You have been promoted to theater commander in charge of all aspects of the war effort. You may engage in single battles, specific missions, or theater wide campaigns to the end. Command either the American or Japanese forces as you seek conquest in the Pacific. Face either the pitiless computer or a human foe; eye to eye or via the modem, the fate of nations rests upon you.

The rules of the game are based upon common sense and the military lessons learned in our long history of conflict. The capabilities and firepower of each aircraft and ship are as accurate as possible while maintaining the easiest game play. Each ship and plane in the game becomes available to the commander at about the same time it did to the actual theater commander in W.W.II. There are scaled pictures of each individual ship and each aircraft type as well as graphics for sinkings, bombings, sub attacks, air battles, and many other events that occurred during the war. Now is your chance to rewrite history and prove once and for all that you should have been listened to.

The best way to learn the game is to read the basic rules of engagement, then play a few quick games verses the computer. Even if two players are present it is suggested that they collaborate against the computer until each understands the basics of the game. Then switch to two player mode and face each other offering no quarter and accepting none. This is war. As specific questions arise in the course of play refer to the section 3; advanced rules of engagement. Which provides an in depth study of game mechanics. This extra intelligence will give one player a startling tactical advantage over his opponent so it is suggested that the results of any such investigations be shared in order to insure that victory is achieved through strategy rather than ignorance. However, all is fair in war, as lazy opponents deserve little respect in any case. Once you understand the game mechanics you will be in full command of your forces and ready to wage war. Do not be fooled, however, the game is relatively simple to play, but nearly impossible to master. Advanced tactical considerations such as fuel supplies, pilot morale, normal wear and tear on equipment and infantry battles will keep even advanced wargamers up nights scratching their heads as the computer eats carrier after carrier and humiliates the unfortunate commander. The good news is that you, unlike those who have gone before, may try again and again, and

may achieve victory if you learn the lessons of war well. Also, it is one thing to defeat the computer or an opponent in a single battle or short scenario, but to plan and execute a one year (game time) war in one hour turns requires more than a little persistence. However, you will find that W.W.II, Pacific theater will satisfy your wargaming instincts for years to come. You stand on the brink of greatness; whether you reach the heights of success, or commit sepeku on the deck of the Yamato remains to be seen. Only you can decide.

Part 1; To begin.

1.1 Loading and installing.

- A) Put disk 1 in any floppy drive and access that drive
- B) Type Install
- C) Follow the simple on-screen instructions
- D) As the Install program runs you will be asked questions about your sound card (if any) so have this information handy.

To run the game with music and sound effect you will need at least 550k of memory available. The game will run better with the more memory available. It is suggested that at least 512k of expanded or extended memory be available otherwise the game will have to swap to disk. A disk cache will also speed play of this game.

1.2 Game start-up

Once you have successfully loaded the game you will arrive at the set up panel. This is where you will decide whom your opponent is, which side he will play and which game to play.

1.2.1 Player Selection

Just click on the Japanese or American buttons under the pictures and you can select between Human, computer or modem.

1.2.2 Scenario Selection

There are four types of scenarios to choose from. Battles, campaigns, quick games, and saved games. Which ever type of game you choose be aware that you must insure that header box matches the particular scenario you have chosen. Also, even if you choose the saved game option you must complete the player selection option as this information is not saved. Thus if you have saved a two player game and your enemy gives up in disgust, you can still complete the game by saving the game and giving control of the enemy forces to the computer the next time you wish to play. Then simply choose saved games and the appropriate saved game, and the computer will take over where the opponent has left off.

Quick games are tiny scenarios designed to quickly teach the game mechanics or just to provide an hour or so of diversion.

Battles are short scenarios involving more elements of strategy and do not provide for reinforcements.

Campaigns are long and highly complex, encompassing up to one game year and often, months of real time to complete. Alternatively, however, the campaign mode can be used as a tutorial because all aspects of the game are fully represented. Thus it may be advisable to play several campaign days or weeks, in order to fully understand game mechanics.

Saved games lists all saved games in the memory. If you wish to save a scenario at various points during the progression of a game, you must do so under different names such as CorSeal and CorSea2. (limit of 8 characters)

All of the battle and campaign scenarios are historically correct. However, do not assume that the computer will follow the historical tactics of your rival. The computer will modify play according to the opportunities it perceives as a value to scenario goals. The computer does not necessarily repeat the same tactics each time a particular battle is played. You may notice patterns, but this is a facet of any good commander. Just do not mistake the computer for a robot or you will be disappointed. As well as defeated.

If you wish to play over a modem (and this is highly recommended except if the call is long distance) see section 3.9 for full modem installation instructions.

1.2.3 game adjustments

Computer Skill - Easy, Normal, or Hard

Weapon Effect - adjust the weapons abilities to hit their targets. Normal is the realistic setting and the default.

Reinforcement Level - adjusts the level of plane, seaplane, and ship reinforcement. (Has no effect on Battles or Quick Games)

1.2.4 Scenario Information Window

This box gives a quick overview of the scenario and its objectives.

1.3 Player History Screen

This screen saves the player information keeping track of rank, score, wins and losses. There are ten positions available for saved players. Click on a position to select it. If the position is available your name will be requested and entered into that position. If position is already used a window will appear with detailed data and

give you the option to overwrite this officer with a new one in that position. Once you have selected your player ust click on the continue box to start the game.

Part 2: Basic rules of engagement.

In order to more quickly assimilate these rules, it is suggested that a quick game be played against the computer on the wimpy level. Once you have followed the instructions in part 1, you will have arrived at the Run screen.

2.1 The Run Screen

This is where the orders are carried out as the game is being played. In single human player games, all of your task forces will be shown, but they may not have been sighted by the enemy. To determine if the have been sighted a "(S)" will be next to the task force number during the orders screen. All of the action in the game happens in this screen such as bombings, dogfights, submarine attacks, air and ship tactical displays, etc. In other words time moves forward in this screen only. This screen consists of a large map, an action bar along the right hand side, and two information windows along the bottom.

2.1.1 Map Icons.

On the map are icons representing your forces and ports. Red icons signify Japanese forces, Blue icons represent US forces. Note that the run screen displays only those units visible to both players. When, during the course of play units of different types (base, army, fleet) occupy the same square , a flag will appear. If the units are from different armies, the flag will be split, half US, half Japanese.

2.1.2 Action Bar

On top of the action bar are the order screen buttons. They are used to access either players orders screen. If you don't wish to give orders merely click on the RUN button and the game will begin to run. Of course in the first turn none of your forces will have any orders so they will do nothing. However, at any time during the game either player can interrupt play on the run screen by clicking with your mouse anywhere upon the screen or depressing 'o' on the keyboard. Note that when the computer plays, it does not require an orders screen so during the computers turns it will display the run screen as a default.

Below the order screen buttons is the save button. To save the game click on this and you will be prompted to name the saved scenario. Type in a name and the game will save. Games can only be saved prior to the command phase.

Near the bottom of the action bar is the quit button. Clicking on this will exit the game although you are given a second chance in case you hit the button in error.

Below the quit button is a graphics window which cannot be accessed. It merely serves to display visual information throughout the game. In the run screen it only displays time of day.

2.1.3 Information Windows.

The left window displays the time of day and assorted like information. The right window is empty, being used only on the orders screens.

2.2 The Orders Screen

When in run mode you can get into the order phase by clicking the Mouse button. An indicator will appear in the bottom right corner of the screen. The orders screen will then be entered at the end of the next hour. This consists of a large map containing various icons, two information displays at the bottom of the screen and an action bar along the right hand side. In addition there is a hidden menu bar along the top of the screen. Note that in two player mode each player will have a confidential orders screen that an opposing player should not look at as it displays information he may not have. In other words, don't cheat; look only at your own orders screen.

2.2.1 Mouse functions

Nearly all of the game orders can be given via the mouse although there are hot keys which may be used. However the mouse is the main system of order delivery and information retrieval.

Left Mouse Button

This is the main function key. Most of the actual orders are given by clicking on the appropriate icon with the left mouse button. Double clicking is not used. Throughout the rules the term to "click" refers to the left mouse button unless the right button is specifically mentioned.

Right Mouse Button

This is generally an information retrieval key. By clicking with the right button on an icon you can bring up statistics on ships, bases, and aircraft. Using this button will also take you back to the previous menu when no icon is highlighted.

It is useful to note that clicking with either button outside of a window, and when not performing a specific operation, will close that window and return you to the previous menu.

2.2.2 The Action Bar

When you first come into the orders screen if a TF needs movement orders it will be automatically selected. You can cycle through each TF that needs orders and when you are done the END TURN button will blink on and off.

The ships abbreviations used throughout the game:

CV - Carrier
CVE - Escort Carrier
CVL - Light Carrier
CVS - Seaplane Tender
BB - Battleship
CA - Cruiser
CL - Light Cruiser
CLA - Anti Aircraft Cruiser
DD - Destroyer
RO - Submarine
SS - Submarine
AO - Auxilliary Oiler
AKA - Attack Transport
APA - Attack Cargo Ship
AP - Auxilliary Cargo Ship
AK - Auxilliary Transport
AVD - Fast Seaplane Tender
DMS - Fast Minesweeper
APD - Light Transport
AVP - Fast Seaplane Tender
AV - Seaplane Tender
ML - Minelayer

The right hand side of the screen is the location of the action bar. This is where you can access orders, and information on any visible units. Although enemy information is quite unreliable and unusually inaccurate.

At the top of the bar are five primary unit order access buttons. They are marked "TF", "AF", "CV", "Base" and "INF".

TF refers to task forces . By clicking on this button you will access known task forces. You can then click on the task force of your choice, examine it, give it orders etc.

AF refers to your port based air fields. Clicking on this button brings up the air field orders menu.

CV refers to Carriers, that is specific aircraft carriers within your task forces. This allows you to give orders to the planes upon those carriers.

BASE refers to ground installations. Clicking on base brings up an orders menu for your base operations.

INF refers to infantry units. Clicking on Inf brings up an orders menu for your infantry operations.

VIEW TF button. When first comin into orders this occurs when you click on TF above. Clicking on the view TF button allows you to see the composition of the task force. Then if you wish you can Right click on an individual ship and bring up a scale picture of it as well as all of its stats.

Menu button. This allows you to bring up the orders menu for whatever type of icon you have currently highlighted. For carriers this is aircraft orders. For ports and task forces there are various options detailed in appropriate sections below.

Move button. Clicking on this allows you to give movement orders to whatever icon is highlighted. This is done by simply clicking on the map where you wish the unit to go. A small number icon will appear on the map at that point. You may set up to five separate plot points per unit. Also, in the left hand information window a distance and time of arrival will be calculated and displayed. Mistakes can be corrected by re-clicking on the move button and re-plot the course.

Speed Throttle. If the unit is a task force you will see a throttle that can be used to set it's speed by clicking upon the desired rate of travel. Changing the speed of a task force will cause the time of arrival to be recalculated.

Next button. This will read either Next TF, Next CV, Next AF, Next INF or Next BASE. This is for use when you wish to cycle through your units.

End Turn button. When all of your units have been given the proper orders, click on this button and you will return to the run screen. Then your opponent will be able to access his orders screen, or, in the case of playing against the computer, the game will run. If both players have given orders, click on RUN and the game will run.

2.2.3 Information Windows

Located at the bottom of the screen, these will provide a large amount of data.

The left window displays game information such as the time, weather reports, distance and travel time etc. Note that these windows cannot be accessed, they are merely informational.

The right window displays information on the unit currently selected.

2.2.4 Order Screen menus

Each of the five primary unit order access buttons has

a related menu where you give orders to units.

2.3 Task Force Menu

Task Forces are the backbone of this conflict and therefore much attention has been placed on giving the player excellent control of his fleets. However, one does not have to understand everything about fleets in order to play the game so only the basic information is given here. Details on game mechanics are found in section 3.2. When you click on a Task force, the graphics display window will reveal which type of fleet it is.

Ships are identified by the following standard naval abbreviations. CV-Carriers BB-Battleships CA-cruisers DD.-Destroyers, AP-Transport SS-submarines

A carrier fleet is any task force containing an aircraft carrier. A transport fleet is any task force containing transport vessels. A battle fleet is any task force without carriers or transports. A sub fleet contains only submarines. Menu missions are described below:

2.3.1 Track and Attack(simplified menus only)

This option orders the unit to follow any sighted enemy units in an attempt to engage them in combat until the unit is no longer sighted or in the case of carrier fleets, maintain a distance to launch aircraft. Clicking this option brings up a secondary screen that allows you to choose the target by clicking on the target or cycling through the targets and then clicking the pick target button. The done button returns you to the orders screen without choosing any target.

2.3.2 Combine/Divide

You can create task forces of any size up to a maximum of twenty ships. The combining and dividing of task forces operate on the same principle. Click on the task force you desire to alter and then click on the orders menu. Choose either combine, or divide task force. This will bring up a window asking if a certain task force number is okay if there is more than one task force available for Combine/Divide. You can scroll through the choices by pressing the no option. When you have located the two task forces you wish to combine or divide to, the contents of both fleets will appear on the screen. At this time you can view each ships individual statistics by Right clicking on the desired ship. When you know which ships you wish to move, highlight them with the mouse and click to move them from one task force to the other. You are limited to a total of 30 task forces each.

2.3.3 Bombardment

This order is used against enemy bases. Bombard

missions can be chosen at any time but are initiated upon arrival in a base harbor (with simplified menus), i.e. when the task force enters the same square as the base.

Battleships are more effective than cruisers. Other ships may be used but are far less effective.

If you are not using the expert ship menus, any TF on a patrol mission entering an enemy's base square will bombard that base.

2.4 Airfield Orders Menus

Airfields are where the land based fighter and bomber squadrons operate from. There are a wide variety of air orders available in the basic game, and even more are added in the advanced rules. Though aircraft have no score value, they are by no means useless. Aircraft are a highly valuable resource that although expendable, will likely spell the difference between defeat and victory. He who controls the skies controls the seas as well. Airfield menu missions are described below.

2.4.1 Standard Strike (simplified menus only)

This options simply sends a squadron of bombers to attack a target area. Choosing this order brings up a screen allowing you to select a specific target by clicking on pick target. You may scroll through all of the possible target area by clicking on next target. The done button will return you to the main menu without selecting a target.

2.4.2 Full Strike (simplified menus only)

This works the same as standard strike except that all available bomber squadrons are sent with fighter escort if necessary. If unit selected is a carrier then all aircraft in the carriers task force will send bombers.

2.4.3 Rest

This order takes the highlighted squadron off of active duty allowing the pilots to gain some rest and relaxation. This has the benefit of raising pilot morale. To bring the squadron back on line simply issue it new orders.

2.4.4 Cap

CAP stands for Combat Air Patrol. This order puts the highlighted squadron into the air, patrolling around the base to ward off enemy attack. This may be the single most important command in the game, as a target without air cover is a sitting duck for enemy bombers. This order will remain in effect until it is changed. Cap will never fly at night; the planes will automatically land at dusk and launch at dawn. The game defaults to having Automatic Cap, but extra CAP can be added to provide extra

2.4.5 Long Range Cap

This command allows you to put air cover over units which may not have any of their own, i.e. battle fleets and transport fleets. When this option is selected you must choose the map square over which the LR-CAP will fly. If this square contains a friendly unit the cap will follow that unit providing air cover from the base. Obviously this is subject to the range of the aircraft involved.

2.4.6 Transfer

This option allows you to transfer planes from base to another base or to a carrier. Choose this by clicking on the unit you wish the planes to be stationed at and they will fly to it. This will take a varying amount of game time, but distances and times of arrival are given in the left information window. To combine or divide squadrons just transfer squadrons to the same airfield that they are stationed at and the proper menus will come up. Note that planes on transfer will fly into the night and if landing at night stand a much greater chance of incurring damage.

2.4.7 Search

This allows you to choose a squadron to go forth and seek out the enemy. The only vessels search planes will attack are submarines. The squadron will merely try to sight the opponent and report back. The planes automatically search out to the limit of their range.

2.4.8 Return

This order brings the highlighted squadron back from whatever mission it was on. Thus to abort a bombing or search, highlight the squadron and choose this option. The planes will then return home.

2.4.9 Reinforce

Used to replace losses of planes due to combat. New planes are available daily in campaign and quick games only.

2.4.10 Exchange

Though seldom used in the basic game, this option is available. See 3.5 for more details.

2.5 Carrier Orders Menu

Carrier orders refer to the aircraft squadrons based upon the carrier, not to the ship itself. Aircraft orders from carriers work exactly the same as those based on land(see section 2.4), except there is one additional option.

2.5.1 Track and Attack

Choosing this option causes the carrier to follow the target at the safest position. Click on the desired target and the carrier will follow and send bombers and fighters until the target is either destroyed or is lost to view.

This order can be aborted at any time.

2.6 Base Orders Menu

Base orders are not particularly important to the basic rules but since the options are available the adventurous commander may wish to experiment with his ports and infantry.

2.6.1 Expand port

Expanding a port is a major undertaking. It requires ten supplies and 1 to 2 game months to complete. This option will increase the versatility and efficiency of a port. Port expansion should only be undertaken in the campaign scenarios.

2.6.2 Expand Airfield

All of the rules and suggestions for port expansion apply to airfields as well, but airfield on large land masses expand faster than small islands.

2.6.3 Sea Planes

These units scour the seas in search of enemy units. They can attack only submarines and will do so upon sight. The number of seaplanes on a base effects search efficiency but not range. Sea planes require no orders unless they are to be transferred via the pool menu that comes up when this order is selected. Sea planes search both day and night, though sightings are limited at night. Seaplanes can only be transferred to another location at night.

2.6.4 Create/Merge Army

This straightforward command transfers armies to and from a base by allowing you to take supplies and companies from the base via the army pool window and vice versa. Left clicking transfers single units and supplies. Right clicking transfers all units and/or supplies simultaneously. Infantry attacks consume five supplies and usually more than one attack is needed to achieve an objective. (Remember Pork Chop Hill.)

2.6.5 Entrench

This puts your infantry units in a fortified defensive position in order to help repel enemy attacks and bombardments. Entrenched units have increased survivability.

2.6.6 Destroy

An unbelievably straightforward command designed to prevent an opponent from utilizing your base. This command requires forty eight hours to fully complete one level of the destruction and can be aborted by merging infantry back into the base. It is important to note that this is progressive command and damage to the base is accumulated

each hour.

2.7 Infantry Orders Menu

Since time began no conflict or war has ever been accomplished successfully without troops to take and then hold ground. Nor can this battle be successful without those same infantry units to invade or hold taken ground. the sole purpose of the infantry is to expel enemy ground forces from a desired place and to eliminate the possibility of the enemy ever gaining access to that place again. This can be accomplished by either destroying that base or providing enough ground units and support to assure that the enemy can never take control of that place again.

There are three types of infantry units you can build. infantry- Recognized by a soldier icon, this is any size army with supplies equal to 50% or less than the number of its' companies.

Mechanized infantry- Recognized by a truck icon this is an army with supplies equal to 50-99% of the number of its' companies.

Armor - Recognized by a tank icon, this is an army with supplies equal to or greater than the number of its' companies.

2.7.1 Divide, Merge, Entrench

These commands work as described in sections 2.6.4, and 2.6.5

2.7.2 Build Base

Executing this command requires that you first name the new base. The base will be built at the location of the highlighted unit. The new base has no port or air field facilities; these must be added using the expand port/airfield command.

A base must be near water to have a port.

2.8 Hot keys/ Pull Down Menu

These are commands that access commonly used game features. Most commands can be accessed by both keyboard and pull down menu. Note that the pull down menu is only found in the orders screen.

B-babble mode during modem play only, this command will activate a communication link between the two players.

(Alt. Q will disable babble mode). Babble can only be activated during a players order screen.

C-friendly casualties will be listed as for troops, each aircraft type, and supplies lost. These numbers are accurate.

D-distance calculator will allow you to click on two points

upon the map, and display the distance between those points in the left information box.

E-enemy casualties will be listed out the same as friendly casualties except for the loss of enemy supplies.

Note: These numbers are estimates based on reported hits by your pilots (who tend to be an optimistic bunch to say the least). Don't count too heavily on these, or any other defense department calculations.

G-Grid toggle will remove or replace the light dots that default to the 'on' at game start-up. These dots show the perimeter of each map sector. Each map sector = 50 square miles.

L-load game will kill the game in progress and allow you to start another.

M-message length can be set in a range from 0.0 to 10.0 seconds. Any number over 10 will be 10. The message length defaults to 1.2 seconds.

P-pictures will toggle graphics associated with combat and other action sequences either on, or off. This will not affect the graphic representations associated with information screens.

Q-quit game will exit to DOS. You will be given a chance to cancel this request in case you hit this button by mistake.

R-range circles will display all friendly search ranges on the map. Red for Japanese, and blue for U.S. It will display range circles of all friendly units, and any known enemy bases. This may help you to skirt around into enemy territory without being sighted. The farther from the center of a range circle, the less chance there is of a sighting.

Note: Bases need ten supplies to support search operations with sea planes. Each base has a different number of seaplanes according to it's size. This affects the efficiency of the search but not the size of the range circle. Task forces use float planes, and these have a much smaller search radius. The efficiency of this search area is affected by the total number of float planes in the task force. Float planes are replaced during replenish missions. All float plane / seaplane operations are handled automatically. Search ranges represent the actual range of the aircraft type in use and you will notice that the Japanese' have a bit longer range.

S-score will be displayed at the top of the window and will indicate whether Japanese or US are winning.

T-terrain features will be shown with no icons appearing on the map.

V-volume toggles sound either on, or off.

W-weather/forecast allows you to view weather patterns displayed over the entire map. By moving the cursor over a sector of the map, you can get an actual numerical description, and forecast (for the following hour) of the weather, in the left information box. The higher the number, and the thicker the lines on the map. the worse the weather is. This key also tells you if there is a road present and if the terrain type is impassable.

Note: This information is placed here, and not in (T)errain, to simplify accessing information for unit orders, as these will affect movement and combat.

X-coordinates of the cursor will be displayed in the upper left corner of the orders screen, and above the map.

Spacebar will allow you to exit any of the accessory screens (air and ship tactical) and the graphic display routines, such as ship sinking, float plane attack, sub attack, bombardment, etc.

z-zoom mode- if playing a campaign or battle scenario you can use zoom mode to get a closer look at a section of the map. The map will be zoomed on the selected unit and icons will be displayed in their relative area of each sector. This will give you more information on the actual location of the unit. All orders that are given in regular mode can also be done in zoom mode.

- Resign Game - This allows you to end the game all is lost. A-auto save requires that the game to have been manually saved once. The game will be saved at 0:00 hours every game day.

- time limit can be set to control the amount of time a player may spend in orders during one 24 hour game day. When playing with a time limit a countdown clock is shown in the upper right corner. When the clock reaches zero that player only has minimal time for orders until 0:00 hours the next day. Each players time in orders is tracked separately.

2.9 Miscellaneous

This section contains interesting information that pertains to game functions already discussed.

2.9.1 SCORING.

The computer keeps track of each players score during play. When viewing the score (S)key, you will see the victory level, ships sunk, and base points awarded. A negative score indicates a Japanese lead, and a positive score reflects a U.S. lead. Victories are scored according to the point difference as follows:

0-149: Draw
150-499: Narrow victory

500-999: Solid victory
1000-1999: Major victory
2000-3999: Decisive victory
4000-up: Absolute victory

Thus, a score of -563 would indicate a solid Japanese victory.

Below the score will be listed all points currently gained in the game by each side.

For player history info quick game scores are *1, battle scenarios scores *2 and campaign scores are *5.

2.9.2 Air Tactical Screen

This entertaining visual screen allows you to choose the specific ship targets for your bomb and torpedo missions. It appears when a squadron has penetrated the enemies CAP. It also allows the victim to position his ships in the most strategic defensive positions.

In this screen the defender (owner of the ships) uses the set ship button to place each of his craft as he wishes. When he is done, the attacker clicks on the ships he wishes to bomb. As he does so he will see his squadrons disappear as their targets are selected. The more ships a squadron flies over, the more likely his planes are to be shot down.

When all squadrons have been assigned targets, click on the go button and an arcade sequence will begin showing each squadron flying through ack ack and dropping its bombs. Pay attention to the information windows during this sequence for up to the second reports.

This screen can be avoided by pressing the space bar but the combat will still occur. To leave this screen press any key to continue.

Placing ships closer to the front will make their flak more effective. But will allow the planes to attack this particular ship without having to fly through as much flak.

2.9.3 Ship Tactical Screen

This screen is where opposing fleets do battle. The screen is accessed when opposing task forces occupy the same map square and are within range. There are three phases to fleet combat; movement, targeting, and firing.

Movement - cycles through both fleets depending on the speed of each individual ship. Slow ships move first as to give the faster ships the advantage of seeing the strategy unfold before they have to move. Each ship moves one square in this phase. Right clicking on any ship allows its statistics to be viewed by either player.

Targeting - After all ships have moved each vessel is allowed to target any enemy within its range. Each possible target has a percentage listed under it. The percentage

chance of all guns or torpedoes on the attacking ship to hit targeted ship. Choose the target by clicking on it. There will be a yellow mark for guns and red mark for torpedoes targeted at a given ship. When this is done a small hash mark will appear next to the targeted ship so that track can be kept of how many times each enemy has been targeted. Each vessel will cycle through all of its available weaponry including primary guns, secondary guns, and torpedoes. When all ships have targeted the firing phase will begin automatically.

Firing - happens in an arcade sequence wherein each ship looses its deadly payload against the chosen target. You will see guns fire, the shells streak toward the target and impact. If the shot is a hit the victim will show a smoke trail if the shot is a hit and damage is sustained. If it is a miss a splash of water will geyser off the side of the ship. When all of the ships have fired the process will repeat. The battle will last until all of the enemy ships are sunk, or an hour elapses at which time the run screen returns. One hour equals 3 rounds of combat.

2.9.4 Military Time

In the armed services, time is told using military time. The military clock uses one twenty four hour period, instead of two twelve hour periods. The day starts at 000 hours this being midnight. The day ends at 2400 hours, this also being midnight. Both terms are acceptable uses for midnight. After midnight time progresses normally in an hourly manner but being stated in a four digit number. So, 0230 would be two thirty A.M. The system gets confusing only after noon (1200 hours) Instead of resetting to 1, the next hour continues on to 1300 hours. So 1800 hours would be six o'clock PM. the military uses this system to prevent miscues in planning operations.

This completes the basic rules of engagement. You should now have a full understanding of how the game is played, how to move around in the various screens and what the screen icons mean. The next section of the rules is devoted to explaining in great detail, how things operate inside the game.

Part 3 Advanced Rules of Engagement

Section 3 is essential information for mastery of the conflict. Here you will learn the subtle nuances and differences that will enable you to fully exploit any weakness in the strategy of your opponent.

3.1 Ships

3.1.1 Damage

Damage to ships can be acquired by confrontation with

other ships in surface combat, aircraft bombs and torpedoes, shore batteries, and sustained high rates of speed. Damage can only be lowered by docking a ship in port, or, by returning it to the mainland (Hawaii or Japan, via Fiji or Truk, respectively) Larger ports repair damage faster than others. Ports, size 200 will repair about 1 damage point every 1 to 3 days. At the mainland, ships will be repaired faster. An estimated time, in weeks, that the vessel will be away before returning to conflict will be given. Thus, you will have an option to change your mind if you feel the unit is too valuable to send home. Keep in mind that when the ship reappears on the resource list it will cost resource points just as a normal reinforcement does.

Note: Sustaining high speeds for long periods will create wear and tear on vessels. This will be reflected with unnecessary ship damage. Keep this in mind as you continue to tear about the South Pacific on non-critical missions

Note: Higher ship damage will dissipate a ships' speed and firing capabilities proportionate to the amount of damage. This can seriously handicap a task force, as task force speed is limited to that of the slowest vessel.

Fire/flooding damage is temporary but may continue to escalate upon itself due to taking on water, uncontrolled fire, and explosions.

Docking the ship in any port, size 75 or more will eliminate all fire/flooding damage immediately. Docking in a port, under size 75 will stop fire/flooding damage from increasing. Fire/flooding damage may also result in increased ship damage if not contained.

Note: Fire damage affects ships' speed the same as ship damage, and is cumulative with ship damage

3.1.2 Float Planes

These craft are available to almost all larger ships. Float planes will attack submarines they spot, and they will search the surrounding seas for any enemy threats. Float plane operations are automatic and require no orders from the player. The range of float planes is 250 miles for the U.S., and 300 miles for the Japanese. This area will show up around the task force when range circles are called up ('R' on the keyboard).

Sighting capabilities are affected by the number of float planes in a task force, current weather conditions, and the speed and size of enemy task forces. The two numbers listed, represent the maximum/current # of float planes on a ship. The floatplane info is located on the ship information screen.

3.1.3 Weapons

Main guns are what the ship uses for surface combat and bombardment. The letter in parenthesis indicates whether the ship's HE rounds (High Explosive, used for bombardment missions only) are (L)oaded, or (E)mpty. These letters will be displayed only if they have the ammunition. All guns are valued according to size. These values are cumulative for bombardment missions and as always, the more the merrier. Larger cumulative values amount to longer bombardment missions and hence, higher damage and casualties that the enemy will sustain.

Surface combat will deplete ammunition stores, depending on the number of shots fired during a combat sequence. Range of guns depend on the size of the guns. Any firing done by ships after they have depleted their ammunition stores will have minimal effects.

Note: Surface combat is not affected by HE loads. HE loads are only for bombardment missions of shore positions.

AA strength is the flak value a ship provides in defending against attacking enemy aircraft. All flak in a task force is cumulative for defense. AA is affected by ammunition stores, in that, if all stores are depleted a ships AA values are 1/2 strength. AA guns are representative of all anti-aircraft guns on a ship.

Torpedo tubes become effective in short range surface combat. Torpedoes can be used at a range of 1 for American ships and a range of 2 for Japanese ships. American destroyers have enough torpedoes for one combat round while Japanese destroyers have one reload, for a total of two combat rounds.

Note: Torpedoes can inflict heavy damage to enemy ships. If you have plenty of these in store, you will want to get in close to unleash them. Japanese ships carried long lance torpedoes that deliver much more punch than under powered American torpedoes.

3.1.4 Armor

Deck armor indicates the thickness of a ships' horizontal armor. and how well it withstands attacks from bombs delivered by airplanes, and gunfire delivered by enemy ships.

Belt armour indicates how heavy a ships' hull armor is and how well it can withstand torpedo attacks delivered by enemy airplanes, ships, and submarines.

3.1.5 Tonnage

Tonnage is simply the mass displacement of the ship. This affects how much damage a vessel can sustain before sinking, as well as determining a ships' point value for scoring.

3.1.6 Speed

Speed lists speed potential of a ship, listing current/maximum.

Current: what a ship is limited to, after considering the effects of fire/flooding, and ship damage.

Maximum: what a ship was originally capable of without any damage.

3.1.7 Fuel

This shows the usable fuel level left as based on the actual fuel tonnage of each ship.

3.1.8 Ammunition

This is the amount of ammo a ship has in its' stores (max. 10). This number comes into play during surface combat, flak defense, and depth charge attack.

3.2 Task Forces

Task forces are the backbone of this conflict and so, much effort has gone into providing excellent control over every detail of their operation. Information on manipulating task forces is found in the basic rules, this section concerns itself with the details of operation.

3.2.1 Patrol (expert menus only)

Patrol missions are for actively seeking out enemy task forces, striving for engagement of enemy vessels. This mission greatly increases the chances of engaging an enemy that is within the same square. It is available to all task forces (other than submarine task forces).

3.2.2 Bombardment

This is the bombardment of a land based stronghold, army, or other enemy ground force.

Bombardments use a cumulative value of all vessels within the task force that have main guns that are able to attack. Every hour (turn), the task force will fire as one unit until all HE shells have been fired (Main guns list (E) after gun size on all ships' data.) Bombardments often lasted quite some time, so for calculation reasons, and realism, not all ships will fire in the first hour. Therefore the task force should be left in place to insure that all ships have fired their HE loads. Of course, if you choose to save some rounds for a later ground strike, this may be done by changing the mission. Bombardment shells do not affect surface (ship to ship) combat, and thus, it will not leave you defenseless if you unload your ships HE rounds on the enemy.

3.2.3 Unload

This can be performed by any ships that are carrying supplies or infantry once they reach a port or any land mass. Infantry units will unload at a rate of one unit/hour

minimum. The supplies will come off at about one unit/day. Larger ports will unload cargo faster. These stats are for each individual ship within the T.F. This mission can consume quite a bit of time so have a task force well prepared defensively.

Note: five infantry units equal one supply unit, for storage and transport consideration.

3.2.4 Replenish

These missions can be done in ports of 50 size (with at least 50 supplies) by all task forces. All ship ammo stores, fuel, and guns, and float planes will be replenished. The amount of time required to complete the mission will depend upon the size of the port and the amount of all consumables required. Ships on unload and load missions in a port that can replenish will replenish automatically.

3.2.5 Refuel

Refueling at sea allows ships that are low on fuel to take fuel from others in the same task force. All ships with more than 25 fuel will begin refueling all ships with less than 15 fuel. Task force speed will drop to eight while performing this mission.

3.2.6 Dock

Docking ships enable you to repair ship damage. The ability of a port to repair damage is limited to its' size. While in dock, ships cannot be attacked by submarines or enemy vessels. But they become prey to aircraft strikes and bombardments upon ports within that base. All docked ships will be noted in the base information box at the lower right corner of the screen when that base information. is called up. To remove ships from dock, you will have to call up the base orders menu. and build a new task force. To dock a ship, click on the task force once it is in the same sector as a port. When you click the 'dock' function, the dock ship screen will appear. All ships within that task force will be listed below the task force number. All ships will list out their current ship, and ship damage, ammunition, and fuel levels. Clicking on the ship will move them into the port. Once you have completed transferring the desired ships between task force, and the port, move the pointer outside of the window and click either button.

3.2.7 Load

This operation can only be done near a shore or a friendly port. One very important bit of information is the fact that once you close the load cargo screen you have committed those ships to the load operation for the duration of the task. Open the load cargo screen by clicking on the

command when it becomes high-lighted. At times, more than one option is available to you for loading and you will be asked if the port, or infantry unit upon which the task force is located, is OK. Clicking (No) will select the next available option, or it will take you back to the task force orders menu if no other options are available. Once you have chosen the agent to load to the task force, you will be in the Load task force screen. You can now decide what you would like to load onto each ship within the task force. Move cargo and infantry on and off the ship by clicking on the + or - bars. Five Infantry units (companies) are equal to one cargo unit. It will take seventeen hours to load ships, Unless you are loading infantry units only If this is the case, then loading time is reduced to only three hours. Different combinations of cargo and infantry will not shorten the load time. Port size, and all other modifiers will not have any effect on load time. It will be either seventeen hours, or three hours. Check to insure that you have the correct amounts BEFORE you exit this screen. Once you exit, you are committing all ships in that task force to that operation until it is completed. You can dock up to a max of 20 ships in a size 5 port (Fiji and Truk can hold 20 ships).

3.3 Bases

Bases are any permanent stronghold that can contain both an airfield and a port. A base can only contain a port if it is located on a sector that has access to water. As you look at the map, the bases are noted by a tent icon. Red for the Japanese, and blue for the U.S. When you click on a base icon, you will see in the right information box, all general info. pertaining to that base: Port size (% of improvement), garrison #, ships docked, airfield size (% of improvement), supplies, and damage to both port and airfield. Bases consume supplies besides requiring certain amounts for operation. There is a chance that a base will consume one supply per 100 base size (port size + airfield size) per week. If this is an enemy base, you would be shown all the same information accurately, except that the port and airfield damages would be estimated. Once again, do not rely to heavily on these numbers.

With each base expansion consuming 10 supplies, air operations requiring a minimum of 10 supplies, ports requiring 50 supplies (to replenish), armies requiring supplies to attack, you quickly understand that logistics is of prime importance to achieve success. Cutting the enemies supply lines can ground his aircraft, leave his ships

without fuel and ammo, and render his armies ineffective. Since an airfield with less than 10 supplies will use two resource points flying in one supply a day (done automatically-in an attempt to re supply the airfield so the aircraft based there can resume operations), destroying enemy logistics can also reduce his ship reinforcements. Bases can be very important to achieving success, but, because of their supply demands, can become liabilities.

The size of a base (airfield + port + garrison) determines the amount of flak (anti-aircraft guns) that defend the base against air attacks. You should carefully consider where and when you build new bases.

3.3.1 Ports

Ports are the support base for fleet operations, they allow refueling and rearming of your ships, rapid loading/unloading of ships, and limited repair facilities for damaged ships. A port takes approximately 1 - 2 months to build or expand 25 points. A port must be size 50, have 50 supplies, and damage of less than 50% to refuel and rearm (replenish mission) ships. It must be size 75 to instantly repair fire/flood damage on ships. A port of 200 will repair damaged ships at a rate of approximately 1 ship damage point repaired on each damaged ship in dock every 1 - 3 days. A port includes minefields and shore gun emplacements that defend against enemy ships and subs. It also allows seaplane operations when it has at least 10 supplies. A port of 100 with at least 10 supplies and no damage has the equivalent firepower of about 20 destroyers. If the port is damaged 50% then the defenses are at 50% strength. If the port has less than 10 supplies then all defenses are halved.

3.3.2 Base Orders Menu

Bringing up this menu allows you to access all base operations. At the top of the menu is the name of the selected base. Below that are the specific operations.

Build task force is possible if there are any ships currently docked in the bases port docking facilities. When you select this operation, you will bring up a prompt asking you if an available task force # is OK (expert ship menus only). You can select the next unused number by clicking on the (NO). After you have chosen a task force number, you bring up the build task force window. Here you can get information on all ships docked in that port by right clicking on that ship. Click on the ships that you desire to move to the new task force.

Note: If any ships are docked in a port, the number of ships in dock will also be available to the enemy if they were to click on that base icon.

Build army is possible if there are any troops in the bases garrison. If you need to move troops along the ground, you must first create a new army with this command. Clicking on this when it is high-lighted will bring up a prompt, asking you if the next available infantry # is OK. Select the next number by clicking on (NO). Once you have selected a number, you will bring up the build army window. At this time you will have access to all garrison and supplies in that base. Clicking on the numbers along side infantry and supplies moves them back and forth between the army and the base. It is possible to move the entire amount of supplies, or infantry companies at one time by right clicking on the destination side. This can help speed the transfer of large groups.

Note: The more supplies an infantry has, the faster it will move. Also, an infantry unit needs at least five supplies to attack.

Expand port will allow that base to eventually accommodate more ships, and better serve the fleet. Larger ports can repair ship damage faster, unload ships faster, expel fire damage. They have more seaplanes, and therefore, more efficient sightings and sub defence. Larger ports can defend themselves better against enemy task force invasions and bombardments. A base needs at least ten supplies to expand a port. Expansion will halt when port damage becomes greater than 50%, though this will continue without having to expand again once that level is brought below 50%. Expansion of a port will be noted in parenthesis next to the port size in the right info. box. When this number reaches 100, the port will have increased to the next size. Ports increase in increments of 25, to a maximum of 200. (i.e. by expanding a 50 port, it will become a 75 port. Expanding it again, once it reaches 75, will make it a 100 port at a cost of another ten supplies etc.)

Note: If a base has an operating airfield be sure to keep 10 supplies extra or you will not be able to operate your aircraft or seaplanes.

Expand airfield will allow greater amounts of air traffic since the number of planes a base can support, is equal to the size of the airfield. Expanding an airfield is the same as expanding a port. The only difference is that in an area where there is a large area of land, the airfield will expand at twice the rate of one where land is obviously a commodity. The cost of expansion is ten supplies. The amount of expansion is 25 per expansion, to a maximum size of 250.

Attack refers to infantry fending off enemy units that

are in the area. It takes five supplies to initiate an attack. The enemy unit must be sighted before any attack can occur. When the attack is over, the results will be displayed in the left info. box, and the garrisons disruption will go to 100, less any entrenching they have done. That unit will not be able to attack again until its' disruption goes below 25. This will take a day or so depending on the amount of disruption. When a unit attacks, it will first suffer the effects of being attacked (higher disruption), before it attacks.

Note: A good rule of thumb for infantry attacks is to first disrupt the enemy (with bombardments or air attacks) and then attack with a 3 to 1 company strength advantage. Keep in mind each supply unit with an army counts as one and a half companies. Entrenchment's also add strength to either attacking or defending armies so soften them up good before sending in the grunts!

Entrenching your garrison will help them to withstand the effects of aircraft, task force, and enemy infantry attacks. The cost is two supplies, and once you begin entrenching a garrison, it will continue to improve until it reaches 100 or an attack knocks it down to zero. Entrenching takes the damage of two disruption points when considering its' value in combat. A unit that is entrenched, and attacks, will lose that entrenchment value, after the attack is completed. This entrenchment will be effective in that one attack though, so it won't be a complete loss.

Destroy base may become necessary if that area is about to be overwhelmed by an enemy attack. This of course is a last resort unless you are plundering the enemies strongholds rather than occupying them. It takes 48 hours to degrade a base one level, and there will be no garrison inside the base so it can easily be taken by an enemy unit so plan ahead. A destroy mission will halve the size of the port and airfield down to a size of 25, at size 25 it is then completely destroyed. To stop a base from being destroyed, you must re-occupy it with troops. this is done with an infantry merge mission. The longer a base goes before an infantry unit merges with it, the more damage it will suffer to its' port and airfield.

Note: A base is destroyed in the same manner it is constructed, a little at a time. A large base will take several destroy missions to totally demolish. This is not something to try with a large base facing imminent attack as during the destroy mission the base is unprotected and subject to capture. It is better in this situation to leave your garrison entrenched and put up some defense. If

you withstand the first attack you can then try a destroy mission while the enemy is recovering its disruption only if you can keep it disrupted with air or bombardment attacks of your own.

3.3.3 Seaplanes

These are available to all bases with a port. This operation allows you to replace downed seaplanes from the pool, and to transfer seaplanes, from one base to another via the pool. When you choose this command, a small window will appear, allowing you to move planes in, or out of the pool by clicking on either side of the bar. This can only be done during dark hours. You can find out when this is by looking at the left information box when the orders screen is active. You can also press "W" to bring up the weather screen, this will tell you at what hour dusk is. There is a maximum number of seaplanes according to the size of the port. This number is noted in the seaplane pool window. All seaplane searches and attacks are done automatically, you need to give no orders for them except which base they will be assigned to. Attacks on ports, either by aircraft or bombardment have a chance of destroying some of the seaplanes based there.

3.3.4 Resource points

In the campaign games these are available at Truk for the Japanese, and Fiji for the U.S. This is where you will get all reinforcements from the mainland. When you select this option, you bring up a prompt that will ask you which class of ships you would like to chose from. (CV-Carriers BB-Battleships CA-cruisers DD.-Destroyers, AP-Transport SS-submarines). Resource points are earned daily by both sides. Once you have decided, by clicking on the appropriate letters, you will see the resource selection menu. The U.S. receives 11 points per day, Japanese 8 points per day. After July 1 1942, U.S. begins to receive 15 resource points per day. Resource points are spent three ways.

1. By "purchasing" ships (ship reinforcements) from the resource selection menu.

2. By returning aircraft to the reinforcement pool (1 point each aircraft).

3. By having less than 10 supplies at an active airfield (2 resource per day- this represents air transport facilities being used to re supply one supply unit a day to the airfield in an effort to allow the airfield to continue operation).

Note: This effort takes place automatically, the transport aircraft used are not from your airfields and the supplies are not deducted from any bases. The airfield being re

supplied must have aircraft stationed there, have less than 50% damage, and have less than 10 supplies. One supply will be added to the base at 0:00 hours each day at the cost of two resource points a day until the above requirements are no longer met.

3.3.5 Ship Arrivals

All ships that will become available to you during the game are listed on this screen. In the first column after the ship name and class, are the number of weeks before it will become available to 'buy' with your accumulated resource points. When the time is one week, it actually could become available any day during the current week, so continue to look for a ships' availability at the beginning of every day (0:00). If the number reads (0), then that ships is available at this time. The second column, lists the amount of resource points necessary to commit the ship. You must have that many points to bring that ship into service at either of the respective ports. Below the listing of ships, are the number of resource points you have in stock. Above the list of ships may either be <more>, or <back>. Clicking on either of these will show you a continued list of ships in the resource pool. You can get information on each individual ship by right clicking on it. Clicking on an available ship will bring it into play immediately and charge you the respective amount of resource points.

3.4 Infantry

Infantry units are made up of one or more companies. Companies are the smallest unit that infantry will break down into, and thus all damage taken by infantry units will be measured in companies. A company consists of 100 men. There are three types of infantry units, infantry, mechanized infantry, and armored infantry. To access the commands for an infantry, you will click on the icon representing the desired unit. When this is done you will see information about the unit, displayed in the right information box: companies; entrenchment value (0-100); and supplies. This will also bring up the infantry orders menu.

3.4.1 Infantry Orders Menu

Move infantry from one place to another by using this command. Upon choosing this command, the menus will disappear to allow you an unobstructed view of the map. At this time, place the cursor along the path you want the infantry to travel and click on it. A white plot point, with a number (1) will appear. Now continue the path. Each subsequent click will produce another white square and they

will be numbered sequentially. You have five plot points to make a course. This should suffice in routing around hills and staying along roads. Distances, time of travel, and time of arrival will be noted in the left information box with every plot point you place. If you do not need all five points, you can leave the plot screen by right clicking anywhere on the screen.

The different types of units move at different rates of speed as follows:

Infantry moves at 1MPH.

Mechanized moves at 2MPH.

Armored moves at 4MPH.

Terrain types have an effect on movement rate.

Roads = movement rate x2

Normal = movement rate x1

Limited pass = movement rate x1/2

Impassable = movement only in light green area

Attack an enemy position. An infantry unit must have five supplies to attack. There are many factors that go into calculating infantry combat. The first casualty of an attack will be disruption. Entrenching will help to lower the disruption of a unit substantially. When you attack, you will gain the benefit of any entrenchment's for that attack only. After that, the value, and entrenchment are gone. Any supplies that are with your attacking infantry will do damage equal to 150% of the damage done by a normal infantry unit. When a unit attacks an enemy position, they themselves will first be subject to the defenders attack, and will suffer the effects of disruption, and casualties before their attack is committed. It is therefore, an advantage to raise the disruption on a defending unit by some other means (i.e. air attack) before attacking their position. Entrenching your army will substantially increase its' chances of surviving assaults from enemy units. One entrenchment is equal to two disruption points when calculating the effects of combat. Entrenching costs two supplies but the unit will continue to increase its' entrenchment value until an attack knocks it down to zero or you move the infantry. More supplies can be spent to speed up the process of entrenching if the need arises. To entrench your unit, click on the order as it becomes highlighted. The supplies will disappear, and the entrenchment value will start at one, and begin rising with time to a maximum of 100.

Merge infantry with another infantry unit or a base. This may become necessary when you need to reinforce a unit under attack. Clicking on this will bring up a prompt,

asking you if a certain infantry, or base is the intended unit of your merge. When you have chosen the recipient, you will be able to move companies, and supplies to and from the current destination to become reinforcements for infantry, or garrison in a base. If you have chosen to destroy a base, but have opted for another method, you will need to re-occupy that stronghold with an infantry unit by merging back into the base. This will halt all destruction from progressing any farther.

Build Base - All infantry companies and supplies in the army will become the garrison of the new base. You will be asked to type in the name of the new base and will need to start construction of a port and/or airfield (at a cost of 10 supplies each). A base without a port or airfield really has no value.

Divide army can be accomplished at any time you have more than one company in an infantry unit. By clicking on this option, you bring up a prompt, asking if the next available infantry # is OK. When you have chosen a number, the divide army screen will appear. Listed at the top, will be the two units you have selected. The current unit will list companies and supplies. You can move units and supplies around by clicking on them. Disruption will follow troops anywhere they go, and dividing them out to a new infantry # will not eliminate this damage.

3.5 Aircraft

Search planes ranges - Japanese 615 Miles
US 575 Miles

Aircraft deployment will become integral to your battle plans, and although aircraft losses do not show in the score, the loss of planes in great numbers can be devastating to your campaign. The necessary air support and struggle for air superiority will be conducted extensively using the following orders, and described menus.

Aircraft are listed in specified squadrons and can be located on any land mass with a sizable airfield, or a carrier. Each individual airplane within a squadron will be tracked through various stages of mission, and post-mission development.

3.5.1 Experience

Training air crews becomes a task left to a commanders discretion. All aircraft reinforcement appear with an experience/moral level of 50/50. This level represents the initial training received by the pilots, they know how to take off, fly some maneuvers, and land their aircraft. They have no combat experience. Air crews gain experience by

flying missions. Putting a group of 50/50 level aircraft up against some veteran pilots is a good way to get these new guys out of your hair, they won't exist any more. Pilots may gain one experience point a day (up to level 75) by just flying. A rear echelon airfield CAP, search missions, or attacking undefended targets are good ways to train pilots. To increase past level 75 experience can only be gained by combat missions. Surface strikes and air to air combat will keep your guys improving. Air crews gain bonus experience when they destroy enemy aircraft of greater experience levels than themselves or by getting credit for sinking ships.

3.5.2 Morale

Morale levels can go no higher than a squadrons experience level. Thus a squadron with a 90 experience will reach 90 morale when sufficiently rested. When entering combat, a squadron's experience and morale are taken into account, so rest those squadrons you see with low morale levels. Morale is gained by resting or doing extremely well in a battle. It is lost by battle casualties, hits on the airfield or carrier the aircraft are based at, or flying constantly with little rest.

3.5.3 Squadron selection menu.

Here you will have a list of all available aircraft on this base. The different types are listed in squadron numerical order. The menu is set up listing in order from left to right:

- 1-the types of aircraft a squadron contains
- 2-the number of planes within a squadron
- 3-the squadron's experience
- 4-the squadron's morale
- 5-the type of mission, if any, that the squadron is assigned to. The abbreviated notes for such missions will be noted following each mission description. From this menu, by right clicking on a specific squadron, you will bring up a scaled graphic representation, and all general information relating to the type of plane within that squadron.

Note: the information on the types of planes are not specific to any certain squadron, and will not change. By clicking on a specific squadron you will bring up the squadron orders' menu.

3.5.4 Squadron order's menu

This will give you access to all orders. The information box in the lower right corner will show specific squadron information including a brief description of any mission the squadron has orders for. It will detail the type of bomb load and target if any. Along with this, will

be specific information detailing the condition and status of the planes within the selected squadron as noted by the following one letter abbreviations.

#pl-the total number of all planes in the squadron selected.

U-the number of planes under repair.

F-the number of planes fueling for a mission or ready status.

R-the number of planes in ready status.

A-the amount of planes in the air, either heading toward a mission or returning from a mission.

L-the number of planes currently landing.

The list of orders you select will cover any tasks needed by the air service. One thing you should note, is that if you assign a squadron to a mission that it will not be able to complete by night hours, they will simply stay in ready status. Planes may return from missions during night hours but will suffer casualties while making night landings.

Rest will stop any mission preparations, or ready status being executed by a squadron. This will have no effect on any squadron with planes in the air. In order for morale to be increased, a squadron must be in rest status.

Note: A squadron in rest status will have no mission indicators listed at the right side of it on the squadron selection menu.

CAP or Combat Air Patrol orders that squadron to defend the airspace above its' home base from enemy air attacks. Squadrons assigned to this mission will circulate their planes through stages of fueling, ready, landing, and actual air time (this will be noted in the information box as the hours progress). Not all planes will stay in the air constantly. The effectiveness of a cap is relative to many factors including weather, time of day, number of planes in service, number of planes in the air, amount of enemy escort planes, amount of enemy bombers, experience and morale of both factions. CAP will automatically land and return to ready-fight status at dusk. Thus, some planes may be landing during night hours.

Note: squadrons assigned to CAP will have a 'C' after its' listing on the squadron select menu.

LR-CAP or Long Range CAP, will allow a squadron to give air defense to an area distant area or target, such as a base, infantry unit, or task force. LR-CAP may be extended out to the distance of that squadrons' range. LR-CAP efficiency decreases as the target square moves away further from the squadrons base as planes will be expending fuel to reach the destination, and will therefore have less fuel to fly the actual mission with. Once over a designated target

for defense, the LR-CAP will act exactly as a normal CAP. Planes will circulate through all stages, always returning to its' own home base for replenishing. When you select this mission the menus will disappear allowing you full view of the map. choose the target square for LR-CAP. A blue boarder will flash on the screen for a few seconds around the selected square. If you chose a square that contains friendly infantry or ships, you will be given the option to select any available forces in that square when the prompt window appears. This will allow the LR-CAP to follow the surface units to provide CAP as they continue to move, as long as they do not exceed the range of the CAP squadron.. Note: Squadrons executing LRCAP will have an 'L' after its' listing.

Escort missions(expert menus only) allow different squadrons to fly common missions together for protection and convenience. Squadrons can only escort other squadrons if they are readied for the same type of mission within the same hour. The only exception, is for fighter escorts, whereas a squadron that has been in ready-fight status can fly with another squadron to protect it from enemy CAP. These missions must be within the planes' range or you will receive an error message. When you select this mission you will be shown the squadron selection menu and will need to click on the squadron you would like to escort. The escorted squadron must have a mission selected or you will receive an error message. An escorted squadron will help to divide an enemy CAP over a target area and thus, have an impact on its' effectiveness.

Note: Escort missions will be acknowledged by an 'E' listed after the squadron on the Squadron selection menu.

Ready-(Expert menus only)Fight will prepare a squadron for immediate launch to avert an attack. This task will take one hour to complete. This is necessary for planes going out on escort missions but not for those scheduled for CAPs.

Note: Ready-fight missions will be acknowledged by an 'F' listed after the squadron on the squadron selection menu.

Ready-HE (Expert menus only)(High Explosive) will arm a squadron, capable of carrying bomb loads, with air to ground bombs for use against airfields, ports, infantry units, and bases. These can be used against ships, but with less effective damage. This task will take one hour to complete.

Note: Using HE bomb loads will cut the effective range to 2/3 of its maximum. Squadrons selected for this mission will have an 'H' listed after it on the squadron selection menu.

Ready-AP (Expert menus only) (Armour Piercing) This will arm a squadron, whose planes are capable of carrying bomb loads, with bombs that are most effective against task force targets. Armour piercing loads are next to worthless against ground targets. As with other Ready type missions, this will take one hour to complete, before the squadron can launch on a strike mission.

Note: Using A.P. bomb loads will cut a squadrons range down to 2/3 of its' maximum. Squadrons selected for this mission will have an 'A' listed after it on the squadron selection menu.

Ready-Torpedo. (Expert menus only) Arming a squadrons planes with torpedoes can only be done if the plane type is capable of carrying torpedoes. These loads are extremely effective against task force targets and will prove to be ineffective against any type of ground forces. This mission, as in other ready missions, will take one hour to complete before the squadron can launch on a strike mission.

Note: Using torpedoes will cut the effective range of the plane down to 50% of its' maximum. Squadrons selected for torpedo missions will have a 'T' listed after it on the squadron selection menu.

Transfer planes to another squadron, either on the same base, or to another base, or a carrier if that plane has the ability to operate from a carrier. Planes have their range increased by (x4) when they are transferring. Keep this in mind when selecting a site for your planes to transfer to. Upon selecting this mission all windows will disappear to allow full view of the map. To choose what base, or carrier you would like the planes to transfer to, simply click on the appropriate icon. This will bring up the station selection window, and you will be given a selection of all available places within that square that the planes may be transferred to. If you have selected to transfer planes to another squadron on the same station, clicking on that base or carrier will automatically bring up the squadron selection window. Here is where you will access all squadrons currently at this station that contain the same type of planes as those in the squadron you currently have selected, and an empty squadron (if you need to create a new squadron). Transferring planes to another base will take time, according to the distance of the transfer, but if the planes are only being placed in another squadron on the same base or carrier it will be done immediately. A squadron will transfer only those planes that are currently in fueling or ready status. A squadron cannot transfer planes that are in the air or landing, you will need to let

these planes land before selecting this mission for them. Note: Transferring planes will have a 't' listed after it on the squadron selection menu. When you transfer planes to a different squadron on the same base, keep in mind that ready planes will transfer first, then fueling planes next, then damaged planes under repair last. Those planes that are in the air or landing cannot be transferred. This becomes important when you need to divide out damaged planes from a squadron.

Return from a currently selected mission. Executing this order will have all planes stop any further progress of a mission and head back to their base or carrier of operation. Once on the ground they will be at rest status until further orders are given. Squadrons selected for return missions will have an 'R' listed after it on the squadron selection menu.

Search missions will have that squadron scout the surrounding area of its' base or carrier of operation for enemy units. Search missions will encompass an area with a radius equal to the range of the planes within the selected squadron. The efficiency of such missions will be effected such factors as weather, number of operational planes, amount and size of enemy units, and how recently an enemy unit has been sighted. Search missions will also provide squadrons with valuable air time and thus increases its' experience up to a maximum of 75. this is a good way to break in squadrons that are new to the campaign. Squadrons selected for search missions will have an 'S' listed after it on the squadron selection menu.

Reinforce a squadron with new planes from the mainland. Any squadron on a land base can receive new planes from the reinforcement pool. Upon selection of this 'mission' the reinforcement window appears. In this window, you will be able to see the amount of planes in the pool that are the same as those in the selected squadron (You cannot reinforce a squadron with any type of planes other than what the squadron contains). On the right side of the small bar will be the current squadron and the number and type of planes it contains. Below this is the projected morale and experience of the squadron and this may change as fresh, yet inexperienced planes and pilots are added to a squadron. Adding 10 rookie pilots with exp. of 50, to a squadron of 10 aces with exp. of 110 will have the squadrons average experience be 80. You may find it advantageous to separate these two groups for combat. If both of these squadrons fly the same mission together i.e. escort one another, or CAP, they will still fight with their average experience of 80,

but the less experienced squadron will take more of the casualties, and thus, can save veteran pilots. Of course combining the two makes for easier management, and higher efficiency on some missions, due to an increase in number of planes. To move aircraft in or out of the pool, click on the destination side of the bar and this will take planes from the opposite side. It is important to know that if you supplement the pool with planes already in the campaign, you will be expending resource points to do so at a rate of one point for each plane. Another penalty is that you will lose any experience that that plane has earned, as you are transferring the plane not the pilot. The advantage to all of this is that you can transfer planes to another station very quickly without concern for ranges.

Exchange one type of aircraft for another type. This order is typically done when a new type of aircraft is introduced into the campaign and you will need to create a squadron for them. Another case may arise if the need to create a squadron of aircraft on a base that does not contain them, and a transfer would be impractical. Before you can exchange planes, you must create a squadron with the same amount of planes in it that will be in the squadron you are trying to create with new planes and have access to in the pool. Usually one plane will suffice as you can reinforce this squadron at a later time. The type of plane you choose to exchange is important. There is a penalty of lost experience for planes that are exchanged. Bringing in a different model aircraft for pilots trained with a specific type of plane i.e. fighter for fighter, there will be a slight loss of experience acquainted with the use of new and unfamiliar planes. Yet by bringing these new planes into a squadron of pilots trained in a different type (Bomber pilots changing over to carrier fighters) will see them suffer a greater loss of experience. Thus you will want to use the same type of planes on both sides of the exchange when possible. Normally this will have little play in the game and can be avoided by exchanging small numbers of planes and reinforcing them later. Yet at times you may want to put your experienced pilots to use in a new model aircraft.

Once selected, this order will bring up the aircraft exchange window. Here will be a list of all types, and models of aircraft that have been, or may become available to you during certain campaigns and scenarios. If there are any currently available in the pool there will be a list of the amount that you have access to. Click on the new plane type, and they will be exchanged for the previous type.

Note that the previous airplanes that were exchanged out are not lost but are added back to the pool. These can be brought back into play at any time as reinforcements or exchange orders but note that their experience will be 50.

Strike (expert menus only) a target with the selected type of bomb load. This Order can be selected once you decide to send an armed squadron in for an air attack upon enemy units. Any target can be selected as long as it has been sighted recently. Whether or not that attack is effective will depend on many circumstances. Some may be within your control while others such as weather, and enemy CAP, are not. A strike can be chosen in the same hour as a ready order. The planes will commence takeoff in the hour following their being readied. They will then proceed to the specified target and drop bombs. As this is happening, the combat windows will appear while the game is in the action phase. You will be able to see scaled graphic representations of the planes involved in any conflict. If you are getting poor damage from apparently effective bombing runs, you may want to double check the type of load you are carrying. Each bomb hit on a base or airfield represents about 10% damage to that facility. The type of bomb load will be listed in the information box along with the new target you have chosen. If these are incorrect simply redo the strike orders. Attacking an enemy icon will give you one or more of the following options to strike; Base, Port, Airfield, Patrol, Inf, or TF.

Attacking the base will bring casualties upon troops and supplies only. Attacking the airfield will damage the airstrip and any aircraft on the base. Airplanes that are in ready status are at an increased risk of sustaining damage, the Airfield will try to put these planes into fueling when an attack occurs to avoid damage.

Note: The higher the damage to an airfield the greater the casualties taken by aircraft operating from that field and the greater the loss in morale for those aircraft. An airfield at 50% or more damage will not be able to launch aircraft until damage is less than 50%. Airfields repair themselves automatically with larger airfields repairing faster than small ones.

Attacking the port will bring casualties to troops, supplies, docked ships, and seaplanes. This action will also damage the port, and the shore batteries.

Note: Ports with 50% or more damage will not be able to replenish task forces until damage is less than 50%.

Patrol orders your aircraft to search for ships only. After arriving in the designated sector the aircraft will

search a 70 mile radius trying to locate any enemy shipping. Aircraft will stay on station as long as their flight range allows, at maximum range they are on station only one hour before returning. This command is helpful when you believe enemy shipping is present but you have not sighted them. Patrol is also effective against enemy submarines, as aircraft on a patrol mission are searching for any enemy shipping and will strike submarines with generally more devastating results than float planes or seaplanes.

Attacking infantry will attack the designated army, causing casualties to troops and supplies. This attack will also increase disruption or reduce entrenchment.

Attacking TF attacks ships in the task force.

3.6 Carrier Operations

Carrier operations are the same as airfield operations with a couple exceptions. Airfields may operate all their aircraft in a given hour. Carriers operate only a portion of their "full load" during any single hour. When viewing a carrier (right mouse button when ship is highlighted) you will note the aircraft operations/maximum number in the left hand column. Operations number is how many aircraft operations the ship may carry out in one hour. Maximum is how many aircraft can be carried on the ship. An aircraft operation consists of 1 aircraft landing or taking off. The lower right hand corner shows air operations remaining for that hour. Landing aircraft will take priority, a squadron ordered on strike will take 1 hour to ready. This is what makes carrier warfare tough on the nerves. Add the possibility of strikes not finding their target, or attacking the enemy task force and not sighting the enemy carriers, or not hitting the enemy carriers, or getting massacred by the enemy CAP, or getting your carrier hit before your strike is launched, or being sighted but not know where the enemy carriers are! Somebody said war is hell. Carriers will not launch aircraft after their deck damage exceeds 30% which is a combination of ship and fire/flooding damage. Damaged carriers will cause casualties among the aircraft on board and the aircraft that land or take off from their damaged flight decks. Carriers are also unable to repair their damaged aircraft if they are loaded above 90% capacity. Aircraft that are in the air when a carrier is sunk will try to land on another carrier or airfield (within range and space permitting) otherwise they are lost at sea. Not a lot of fun when you lose a group of ace pilots.

Note: There is only one time when carriers and airfields may

be overloaded. With a carrier task force in the same sector as an airfield aircraft may be transferred between carrier and airfield without regard for capacity of either. This is done to make "arranging" your squadrons easier between carriers and airfields. If your carrier leaves the sector with more aircraft aboard than allowed the only mission you will be able to fly from it will be to transfer aircraft off until you no longer exceed capacity.

3.7 Combat and Strategy Notes

Night surface action will start at closer range than day surface action.

3.8 Scenario Synopsis'

3.9 Modem Instructions

If you would like to play over a modem you will need to use a Hayes compatible modem capable of a baud rate of 2400. One person will be designated the dialing player and the other will be the receiver.

Receiver will only need to click on four(4) boxes.

1-modem play (yes).

2-com. port (1,2,3,or 4) which your modem is installed to.

3-select answer.

4-then click on the "start game" box, and wait for a connection.

Dialer is the person who pays for the call and therefore gets to select the game scenario and the side he wishes to play. The dialer makes the following selections:

1-modem play (yes)

2-com. port, (1,2,3, or 4) which your modem is installed to.

3-pulse or dial, as is appropriate for the type of local phone service available and being used at the modem location.

4-DIAL (select). At this time a prompt for a phone number to the receiving player will appear. Enter the number to be called and press enter. The number will not be dialed until start game is selected.

5-dialing player choose the side you are going to play for this scenario.

6-select scenario (campaign, battle, or saved game) that you are going to play. If a saved game is selected the computer will verify that the saved game is present on the receiving computer. If not, it will use Xmodem to upload the game to the receiving computer before play commences.

7-start game, the computer will now dial the phone number

entered and, after a successful connection is complete, will display the map for the game selected. The upper right corner will display a message giving you the status of the other player as it changes throughout the game session.

Both players will have the ability to talk to your opponent using (B) 'babble' function during your orders screen. Dialing player will control what is played by his/her selection on the setup screen once in the modem screen. Answering player only needs to select com port, baud rate, pulse/tone then dial, then enter phone number and hit return.

If a saved game is not available on the answering computer it will automatically be transferred by RModem