

WWII - Battles of the South Pacific

QQP™

Quantum Quality Productions, Inc™

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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. 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 straightforward game play. Each ship and plane in the game becomes available to the commander at about the same time as it did to the actual theater commander in W. W. II. There are scaled pictures of each ship and 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 and then play a few quick games against 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 Section 3- "Advanced Rules Of Engagement" - which provides an in depth study of game mechanics. This extra intelligence could 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 well the lessons of war. 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 "WW2 :Battles of the South Pacific" 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 and press <enter>.
- c) Follow the simple on-screen instructions.
- d) As the installation 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 available memory. The game will run better with additional memory. 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

Prior to entering the game you will be asked for information from the manual. You must answer this question correctly to continue.

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. Whichever type of game you choose, be aware that you must ensure that the 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 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 maybe advisable to play several campaign days or weeks, in order to fully understand game mechanics.

Saved Games lists all saved games on disk. 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. (The name is limited to a maximum 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 in relationship to the specific scenario's 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 5.0 for full 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. (This 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. As you play the game and win or lose scenarios you will change rank. This information is kept for you on the player history screens. There are two screens: one for Japanese player's history and one for U.S. history. This screen will allow to see your rank, score and playing history. The screen requires you to enter a name or use one already available prior to proceeding. To enter a name just click on an available player and a screen will come up allowing you to enter a name. Once a player is selected just click on Continue to proceed. If you wish to overwrite a player with a new one, select the player to overwrite and then click on overwrite and you will be able to enter the new name.



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 show if they have been sighted an "(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 pork.. Red icons signify Japanese forces, blue icons represent U.S. 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 U. S., 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 computer's 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 be saved, 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 similar information. The right window is empty, being used only on the *Orders Screen*.

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 "click" refers to pressing 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 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 task force 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 ship abbreviations used throughout the game are:

AK	Auxiliary Transport
AKA	Attack Transport
AO	Auxiliary Oiler
AP	Auxiliary Cargo Ship
APA	Attack Cargo Ship
APD	Light Transport
AV	Seaplane Tender
AVD	Fast Seaplane Tender
AVP	Fast Seaplane Tender
BB	Battleship

CA	Cruiser
CL	Light Cruiser
CLA	Anti Aircraft Cruiser
CV	Carrier
CVE	Escort Carrier
CVL	Light Carrier
CVS	Seaplane Tender
DD	Destroyer
DMS	Fast Minesweeper
ML	Minelayer
RO	Submarine
SS	Submarine



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. 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 airfield orders menu.

CV refers to the specific aircraft carriers in your task force. This allows you to give orders to the planes based on 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 entering 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 statistics.

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 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-plotting the course.

Speed throttle. If the unit is a task force, you will see a throttle that can be used to set its 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 buttons. This location 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, and SS-Submarines

A sub fleet contains only submarines. A carrier fleet is any task force containing an aircraft carrier. A transport fleet is a task force containing transport vessels but no carriers. A battle fleet is any task force without either carriers or transports. 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 that you want to alter and then click on the orders menu. Choose either Combine, or Divide task force. If there is more than one task force available for Combine/Divide then a window asking if a certain task force number is okay will appear. 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, the contents of both fleets will appear on the screen. At this time you can view each ship's 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 for each player.*

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, 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 task force on a patrol mission entering an enemy's base square will bombard that base.

2.4 Airfield Orders Menus

Land based fighter and bomber squadrons operate from airfields. There are a wide variety of air orders available in the basic game, and 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 protection.

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 capability 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 mission, 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 section 3.5 for 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 for the following 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 airfields on large land masses expand faster than those on 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 affects 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 Crete/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- Indicated by a soldier icon, this is any size army with supplies equal to 50% or less than the number of its' companies.

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

Armor - Indicated 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 adjacent to water to have a port.

2.8 Hot keys Pull Down Menu

These commands access commonly used game features. Most commands can be accessed by both keyboard and pull down menu, and where there is a keyboard command this letter is indicated in the left column below. Note that the pull-down menu is only found in the *Orders Screen*.

- 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.
- 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 player's *Orders 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 = 2000 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 its 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 U.S. forces 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.

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.

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.

Resign Game - This allows you to end the game all is lost.

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 player's 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.

Score is based on size of port, size of airfields and ships sunk. In some scenarios the score is adjusted to even play by giving bonus points to one side or the other. Captured bases are counted as double for scoring purposes.

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. Placing a ship closer to the front will make its flak more effective, but will allow the aircraft to attack that particular ship without having to fly through as much flak.

When the defender is done placing his ships, 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 its planes are to be shot down.

When all squadrons have been assigned targets, click on the Go button and a graphic 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.

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. Night surface action will start at closer range than day surface action. There are three phases to fleet combat; movement, targeting, and firing.

Movement - cycles through both fleets depending on the speed and position 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. This represents the likelihood of the attacking ship hitting the targeted ship using all of its guns and torpedoes. 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 a graphic 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. A hit on the victim will initiate a smoke trail if damage is sustained. A splash of water will geyser off the

side of the ship for a miss, 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. Three rounds of combat occur in one hour.

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 0000 hours this being midnight. The day ends at 2400 hours, this also being midnight. Both terms are acceptable to indicate 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 mis-cues 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 the meaning of the screen icons. The next section of the rules is devoted to explaining in further 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, 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 on most all larger combat 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 float plane information is located on the *Ship Information Screen*.

3.1.3 Weapons

The 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 (and were more accurate as well).

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 armor 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. You can dock up to a maximum of 20 ships in a size 100 port (Fiji and Truk can hold 20 ships).

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.

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 (or. 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 enemy's 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 Parts

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 to size 25. A port must be size 50, have 50 supplies, and damage of less than 500/. 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 minefield 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 defense. 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 resource points 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 choose 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. Initially the U.S. receives 11 points per day and Japanese 12 points per day. After July 1, 1942, Japanese receive only 8 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 are needed; 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 0000 hours each day at the cost of two resource points a day until the conditions above no longer exist.

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 (0000). If the number reads (0), then that ships is available. 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 infantry unit in this game, and 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 represent-

ing 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 1 MPH.
Mechanized moves at 2 MPH.
Armored moves at 4 MPH.

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 high-lighted. Two supplies units will be used, 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 differ slightly for the two forces. They are:

Japanese	615 Miles
U.s.	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.

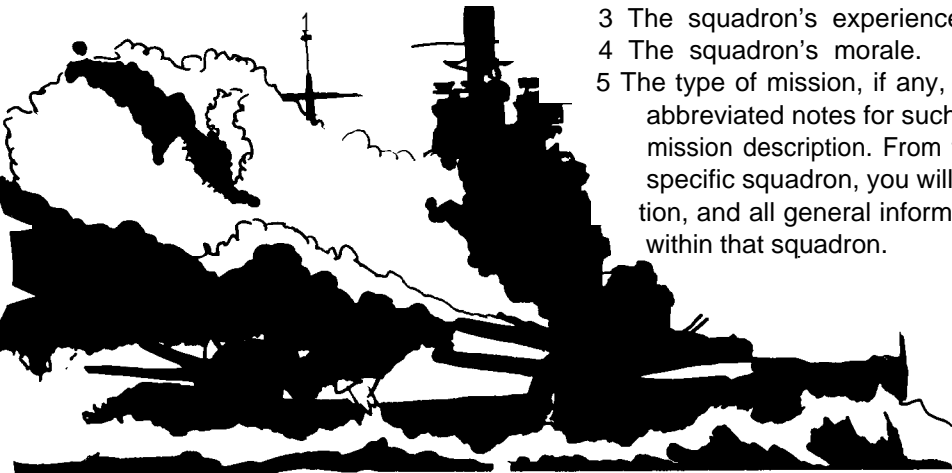
3.5.2 Morale

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-clickirrg 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.



There will be a single letter mission indicator on the Squadron Selection menu next to each squadron as summarized in the following table:

Letter	Mission
A	Arm with armor piercing Arm
C	Combat Air Patrol
E	Escort
H	Arm with high explosive
L	Long-Range Combat Air Patrol
R	Returning from previous mission
S	Search
T	Arm with Torpedo
t	Transfer Rest (no indicator)

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 Orders 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 planes in the squadron selected.

- U The number of planes under repair.
- F The number of planes fueling for a mission or arming 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 indication 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 maybe landing during night hours.

Note: A squadron assigned to CAP will have a 'C' after its listing on the Squadron Selection 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 maybe 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 for the actual mission. Once over a designated target for defense, the LR-CAP will act exactly as a normal CAP. Planes will circulate though 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 for selection of 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: A squadron executing LR-CAP will have an 'L' after its listing on the Squadron Selection menu.

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, where a squadron that has been in arm-flight 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 indicated by an 'E' on the Squadron Selection menu.

Arm-(Expert menus only) Arm flight 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 CAP'S.

Note: Arm-flight missions will be indicated by an 'a' on the Squadron Selection menu.

Arm-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 effectiveness. 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' indication on the Squadron Selection menu.

Arm-AP (Expert menus only) (Armor Piercing) This will arm a squadron, whose planes are capable of carrying bomb loads, with bombs that are most effective against task force targets. Armor piercing loads are virtually 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' indication on the Squadron Selection menu.

Arm-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' indication 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 destination. 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 to which the planes maybe transferred. 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. This 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 separate 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 by 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 in-

crease 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 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 number of planes as will be in the squadron you are creating 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 class 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 have your experienced pilots use a new model aircraft.

Once selected, this order will bring up the aircraft exchange window, There 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 number to which that you have access. 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 conditions 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 a 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.

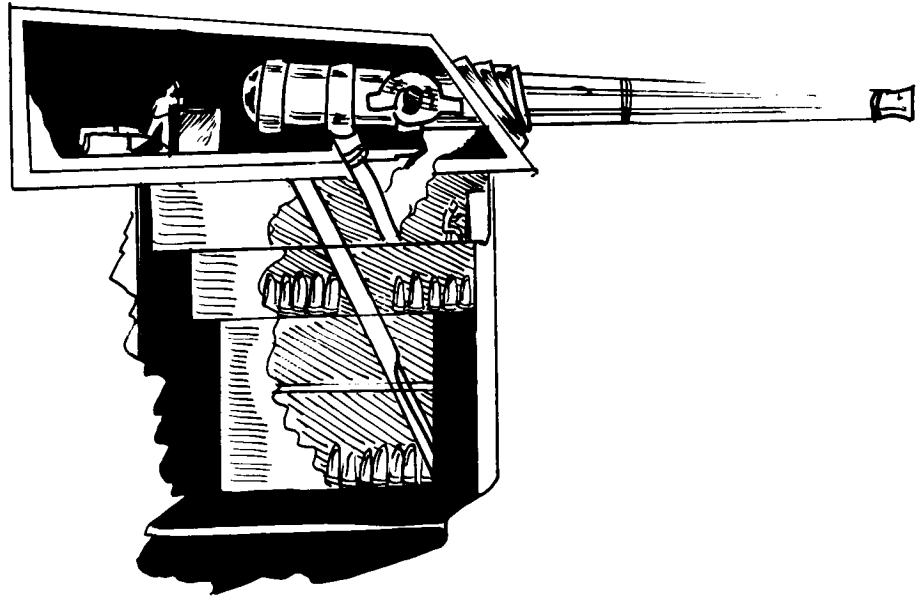
Attacking TF attacks ships in the task force.

3.6 Carrier Operations

Carrier operations are similar to airfield operations. 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 adjusting your squadrons easier. 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.



4.0 Combat and Strategy Notes

4.1 Scenario Synopsis'

This section contains the name of each scenario, a quick description from the *Setup Screen* followed by a more detailed description. These design notes are by Mike Isom.

FLATTOPS

Summary: A basic balanced carrier battle with each side getting 6 CV'S and 3 light escort carriers. The scenario starts at close range and may the best air commander win! Watch out for submarines and surface engagements. Shells and torpedoes can be just as deadly as airstrikes. Four day time limit. 2 hours playing time.

Description: Flattops is a basic carrier battle. Each side has a total of 9 Carriers (6 CV'S + 3 CVL'S) and a strong escort of battleships, cruisers, destroyers, and submarines. Both sides face virtually the same challenge, sink the enemy without getting sunk yourself.

The Japanese hold several key advantages in this battle. Japanese ships are generally faster than their U.S. counterparts, their aircraft have slightly longer ranges, and their ships carry more and better torpedoes. The Japanese commander should try to launch his aircraft at extreme range, turning away after the launch, to keep out of range of the American's aircraft. He should also strive to engage in surface battles, especially at night, when his Long Lance torpedoes can munch enemy ships like cookies.

The U.S. does hold a few advantages of its own over the enemy. The U.S. aircraft are of much sturdier stock than the Japanese. The U.S. believed in armor protection for its pilots while the Japanese minimized armor for more range and maneuverability. In extended air battles, all else being equal, the U.S. aircraft will eventually decimate the Japanese. The second advantage is that dive bombers hit more often than torpedo bombers, and the SBD is the best dive bomber in the game. Compared to the Japanese, the American torpedo planes (TBDs especially) are quite anemic and generally only prove useful in hitting slow moving damaged ships. The U.S. commander will have to close with the enemy to engage him with his aircraft. Expect the Japanese to try to engage your carriers with his surface craft (you should be doing the same to him) so keep a good sized escort with the carriers at all times. One of your best carrier escorts is the CLA Atlanta class light cruisers. The Japanese really don't have an equal to this ship. You only have a few of them so treat them like gold. They carry a AA (anti-aircraft) strength of 16 compared to a destroyers AA strength of 4. The more AA strength you have with your carriers means the fewer planes that will get through to hit them. Keep your carriers moving at their best possible speed and make sure the carrier fleet is on the "carrier" mission. It helps them avoid surface combat.

SEATRK

Summary: Build your own battle. Each side receives points to "purchase" surface combat ships only. There are no carriers or combat aircraft in this game. Each side has 1 port capable of refueling/rearming ships. The winner is determined after 7 days of battle. Strategy hint - knock out the enemies resupply port ASAP! 2 hours playing time.

Description: This is a custom, build it yourself surface battle. There are no carriers or combat aircraft. You fight the entire battle with surface warships only. In a sense, it is similar to a “capture the flag” game, in that each side has only one port capable of rearming and refueling its own warships. If that base is destroyed, the enemy must continue the fight with the fuel and ammo he is carrying. That means once his ships have fired their ammo they won't get any more, which, of course, is good for you and bad for him. Disabling the enemies home port is as simple as bombarding it until it has less than 50 supplies. Since this scenario gives you only the supplies you start the game with, there is no opportunity to resupply your home port. You need to be simultaneously attacking the enemy home port, protecting your home port, and sinking as many enemy ships as possible.

The only aircraft in the game are seaplanes (search planes operating from your ports) and float planes (search planes operating from your ships). Either of these aircraft may attack enemy submarines when sighted, but are otherwise only used for conducting search operations.

The design of the map allows only 4 passages to the enemy base. One is occupied by a friendly outpost, one by an enemy outpost, and two are clear. It is a good idea to get light forces guarding each passage to give warning of enemy intrusions as soon as possible.

The Japanese receive 700 points to purchase ships while the U.S. receives 850. This handicap was established because of the overwhelming strength of Japanese torpedoes. They are much more powerful and dependable (about half of all U.S. torpedoes are duds) and also have a longer range. Additionally, unlike their American counterparts, most Japanese cruisers are armed with torpedoes. Most U.S. cruisers had their torpedo tubes removed prior to the war because of excessive topweight causing ship instability. The Japa-

nese destroyers all carried full reloads for their torpedo tubes while most U.S. destroyers carried no reload or only a partial reload. The submarine can be a relatively cheap but powerful weapon in this scenario if used properly. Large “wolf packs” will probably be most effective. Don’t forget to include lots (spelled many) destroyers. They are the all-round workhorses of any navy and your only defense against the submarine.

FREE4ALL

Summary: 1 base each. 500 points to pick any ships you want for battle. Support your efforts with land based air power. Choose to build carrier fleets, battle fleets, or invasion fleets. Victor determined at the end of 7 days. 2 hours playing time.

Description: This is another “build it yourself” scenario but includes carriers, land and carrier based aircraft, and transports. Each side has 500 ship-purchasing points so that the play of this scenario will be quite varied. Besides the standard carrier vs. carrier battles you could try to outpoint the enemy by using unusual tactics. With only light forces like destroyers and submarines, you might manage to sink several high point capital ships by swarming him at night easily outscoring him. Or try capturing his base. Basically you can try new strategies and tactics in this quick scenario.

Remember, this is a battle for points and plane losses don’t count against you but ships losses do. Use your land based aircraft against the enemy’s shipping. If you are playing the Japanese, try to engage with your small ships at night. The Americans have a slight advantage in daytime gunnery and they should bring their big guns to play during daylight. The destroyers that

are such a pain at night are easily smacked by aircraft, battleships, or cruisers during the day. Since the bases are in close proximity, fighting will probably be fierce and constant.

Don't let your ships fight when low on ammo or torpedoes. Keep returning them to base for reloads, as they lose efficiency and firepower when fighting with depleted ammunition. In this small battle area fuel will seldom be a problem, so go ahead and operate your fleets at high speed. Just keep an eye on your destroyers as they only carry a couple days fuel when operating flat out.

If you are bombarding the enemy base, remember each ship carries only 1 shot of HE (high explosive). After that is fired the ship will do no further damage to enemy troops or shore facilities. To do maximum damage to an enemy base in the minimum time, divide your bombardment fleet into 2 or 3 ship fleets. Try to put one heavy (BB or CA) in each fleet. The result will be most all the ships firing their HE in the first hour. The disadvantage is that the port defenses will engage each small fleet individually and probably damage more ships. This is a good tactic to use when the enemy has reinforcements coming and you need to shoot and scoot.

AMPHIB

Summary: Allied Forces execute an amphibious landing against a Japanese held port/airfield. Allied forces include 32 transports and escorts. Japanese base defended by airfield, subs, and a battle fleet. Time limit 7 days. 2 hours playing time.

Description: This is a good scenario in which to practice making an amphibious landing. After your first attempts, you may increase your appreciation of the efforts and coordination required by the Navy and Marines to execute a landing during WWII. Since any landing could (and does in many other fine war games) constitute an entire game by itself, we were required to simplify a few things for this game. The intensive fighting on the beach that accompanied many landings is not truly represented here, but neither is it a “walk on the beach”. If the landing is in the same sector as an enemy port, then the port defenses (shore guns and minefield) will engage the landing fleet while it is unloading. To minimize the efforts of the defenses, you should bomb or bombard the port as much as possible prior to the landings. A port size of 100 has the equivalent firepower of about 100 five inch guns. If the port sustained 70% damage, then its firepower would be Only 30% or about 30 guns. Supplies also affect the defenses, but only if the port is reduced to below 10 supplies. At that time the port firepower is cut by 50%. Minefield effectiveness is also reduced. Obviously, if one desires to capture a port, the port’s defenses must be reduced or you will see many of your unloading transports slipping beneath the waves (with their valuable cargo).

The unloading process itself is quite time consuming. The infantry companies onboard are offloaded first at the rate of one per hour. Then supplies follow at the rate of one per day. Until a landing ‘army’ has 5 supplies it may not launch an attack. The defender may choose to form an army from his garrison and attack the invaders first. This has the effect of disrupting the invaders and pre-empting the attack on the port. The invading army would be forced to wait until its disruption fell below 25 to finally launch an attack. To achieve success without suffering large infantry losses, you should generally have a 3 to 1 advantage of troops. Don’t forget that each supply unit counts as 1 and 1/2 companies. In the case of a close battle, you can help your forces by entrenching them prior to the attack. Keep in mind that during all

this time the defenders will be recovering both disruption and damages. It is important to keep the pressure on the defenders and not allow them time to recover.

In this particular landing you will also face a defending battle fleet, enemy submarines, and an operating airfield. You have 7 days to capture the base. Keep some planes on a patrol mission in the same sector as your transports as this will help catch attacking submarines. The U.S. carriers will be kept quite busy fighting off enemy air attacks and surface fleets, keeping a CAP over friendly ships, keeping AS (anti-sub) patrols in the air, and beating down the port defenses. You should be able to beat the computer defender fairly easily once you get the hang of it.

CLASH

Summary: This scenario is a major surface battle. Use it to practice your ship tactical skills or just to send some steel to Davy Jones. This is a quick game with no ports, carriers, or aircraft - just guns and torpedoes in pure ship to ship combat. Batten down the hatches and pass the ammunition. Winner is the last one floating. 1 hour playing time.

Description: This surface engagement is good for practicing your surface battle tactics. Both sides start with battle fleets in the close vicinity. The last one floating wins. Use this one to learn how best to use a fleet (or lose one) in WWII's ship *Tactical Battle Screen*. The Japanese hold quite an advantage at night and at close range because of the Long Lance torpedo. During daylight American gunnery is slightly better.

For the U.S. player the trick is to keep your heavies out of Long Lance range. Your destroyers carry only one load of torpedoes so try not to waste them. Enemy destroyers are extremely difficult to hit with a torpedo, but, if it looks like you are going to lose a destroyer anyway, then you might as well let em' fly. This next statement may seem to be stating the obvious, but here it is. *Sink Ships!* A damaged ship will be fighting you in the next engagement. It will most likely damage or sink more of your ships. You will have to divert guns to finish it off. It is better to sink 2 ships than to damage 8 in this scenario. In longer games or campaigns it might be more important to damage ships and slow them down for other ships or aircraft to finish off, but in this battle concentrate on sinkings. If you can sink a heavy ship early, you are probably saving some of your own ships from getting sunk by it later. With a playing time of about 2 hours this is a good battle to choose when you just feel like scrapping some iron.

MOP-UP

Summary: U.S. forces are pushing back Japanese on all fronts. These islands sit astride U.S. supply routes. Japanese forces have been able to attack supply convoys passing the area from small hidden bases. U.S. forces hold definite air superiority in the area but Japanese night attacks have been costly to the Americans. The Japanese, have sent what reinforcements they could scrape together. U.S. forces have 10 days to neutralize the Japanese bases. 4 hours playing time.

Description: This battle takes place later in the war when the Allies have pushed the Japanese well back towards their home islands. The Japanese have managed to holdout in numerous areas, requiring extra forces be allocated to contain or eliminate them. The Japanese have maintained several fortified bases in this island chain. The US. has maintained nearby

airfields to keep these Japanese forces contained. Lately, nearby supply routes have experienced night raids and kamikaze attacks. Although U.S. airstrikes have kept the Japanese bases damaged they have been unable to close them entirely.

CINCPAC has decided to rid itself of this nuisance permanently and has designated forces to conduct mop up operations. The Japanese high command has been touting the “victories” accomplished by these brave forces. Consequently they wish to maintain these bases at all costs. They have managed to scrape up reinforcements and send to the beleaguered defenders. The Japanese have been ordered to hold at all costs. The local U.S. commander has been “[loaned” forces for 10 days to neutralize all Japanese bases in the area. To be “neutralized” a base can be captured, destroyed, or damaged and reduced to less than 10 supplies.

Even though the U.S. forces are vastly superior to the Japanese, the defenders may be able to cut down the attackers sufficiently to prevent the destruction of their bases. The U.S. commander should be careful as the Japanese have managed to bring in a battle fleet to help the defenders. The Japanese commander should concentrate his efforts on destroying as many of the enemy transports as possible, thereby making it easier for his ground forces to hold. Get your reinforcements unloaded before the U.S. carriers find and sink them. Try to ambush the American carriers with subs by day and destroyers by night.

INVADE

Summary: In early 1942 the Japanese are in the midst of “expansion fever”. U.S. forces are still reeling from Japan’s opening blows. Japan masses forces for yet another strike, a major island in the South Pacific. Meager

Allied forces must hold out as long as possible and prevent capture of facilities intact. Japanese have 14 days to occupy the island and have as many ports and airfields operational as possible, otherwise, the allies will have sufficient time to bring up reinforcements. 4 hours playing time.

Description: Japan's lightning attack caught most of the South Pacific completely off guard. Japan's forces, experienced veterans of the war with China, swept through island bases that were ill-equipped and unprepared for the type of war Japan brought with it. Major bases were overrun and ports demolished. Airstrikes demolished planes on the fields and ships at anchor. Even those areas that received warning were unable to delay the Japanese advance for long.

This battle simulates a large island in the path of the Japanese advance. The Japanese have 14 days to occupy the island and capture as many operational ports and airfields as possible. If the allies can delay the Japanese longer they will have sufficient time to bring up reinforcements. Even with vastly superior forces, the Japanese offense could be stalled if the U.S. can keep its airfields open long enough to trim down the invading transports.

The Japanese attacker has the "burden of proof" in this battle. The attacker must press the attack, the defender can just engage delaying tactics. Since this island has inland airfields, it will be necessary to close these fields with airstrikes and march overland to capture them. It may reduce losses if you unload troops *next* to a port and then attack on land. That way you won't be losing ships to port defenses while unloading. Watch the allied ports carefully to see which ones are demolishing their facilities and plan your attacks accordingly. Remember to keep all the airfields closed or you will lose

needed troops and ships to airstrikes. It would be extremely helpful to quickly capture a 50 or larger port, let it repair itself (2-3 days), so that you will have a refueling point.

From the defenders point of view, the outlook is not too rosy. You have scattered and weak forces with which to face an overpowering adversary. If you can, keep your forces "hidden" and bring them into play against the enemy transports. Decide which facilities you can not defend and demolish them before the Japanese can attack. Keep in mind it takes 48 hours to carry out a demolition operation and about the same amount of time for the Japanese to land enough troops and supplies to attack it. Any effort that delays the enemy works in your favor. Facilities that are demolished can't be captured. If you can destroy a few attacking ships and hold on to a couple facilities you will win.

LIBERATE

Summary: By late 1943 U.S. Forces are firmly on the offensive. The Japanese are now the ones reeling from attacks. Japanese surface forces are short on fuel and not expected to show. Supplies are running short and high aircraft losses have eliminated the cream of Japan's pilot corps. A U.S. landing force approaches to liberate a major island. The numerous forces defending the island have been ordered to hold at all costs. U.S. to capture entire island in 18 days. 4 hours playing time.

Description: This battle is actually a return to the invasion scenario a year and half later as the American forces return to liberate the island. The Japanese ground forces have expanded the facilities and are well dug in. By late 1943 U.S. Forces are firmly on the offensive and the Japanese are on the defensive. The Japanese navy is short of fuel and not expected to make

a showing. Supplies shortages are cutting back Japanese operations and many garrisons are on short rations. High aircraft losses have eliminated the cream of Japan's veteran pilot corps. Japanese air power is expected to be present but ineffectual due to the lack of experience by its pilots.

The U.S. orders - recapture the island and liberate its people. The Japanese defenders are expected to put up fierce resistance. The American morale needs a boost and we need to show them a quick, clear victory. In two and a half weeks we expect you to clearly be in control of the island with minimum losses.

The Japanese defenders are ordered to hold at all costs. It is expected that a drawn out campaign will be distasteful to the American public and help bring the war to an end, leaving the Japanese in a position of power in the South Pacific. The Imperial Navy has dispatched a special reinforcement fleet to aid the defenders. More aircraft have been flown into beef up the defense. Unfortunately they are new pilots and lack much experience or flight time. The defenders supply situation is poor, resupply convoys have been decimated by U.S. submarines and aircraft. It may become necessary to take supplies from infantry units to keep the airfields operational.

The U.S. forces need to plan their assaults carefully to capture as many facilities as possible. Establishing a resupply port early can be a great help. Japanese air power should be knocked out as soon as possible. Keep alert for stray Japanese warships and submarines.

YAMAMATO

Summary: Japanese Admiral Yamamoto dreamed of meeting U.S. forces in a giant showdown of naval forces and defeating them in one massive blow. This showdown never came to be. This scenario makes Yamamoto's dream possible as the bulk of the naval strength of both countries is currently present in this theater. Either side has 8 days to force defeat on the enemy. 5 hours playing time.

Description: Japanese Admiral Yamamoto dreamed of meeting U.S. forces in a giant showdown of naval forces and defeating them in one massive blow. This showdown never came to be. This scenario makes Yamamoto's dream possible as the bulk of the naval strength of both countries is currently present in this theater. With almost the entire navy present, either side can inflict irreparable damage on the other. Both sides of this battle have massive forces available. This includes not only carriers, warships, submarines and landing forces, but also strong land based air power. In this "all out" battle it is wisest to operate under the umbrella of your land based aircraft and to lead the enemy into their range.

One way to negate strong land based air groups is to sneak in powerful bombardment forces (battleships and cruisers) and blast the airfields during the night or early morning hours when the aircraft can't strike back. This will (hopefully) close the airfield for a time and destroy aircraft on the ground. Other battle tactics include massing your carriers to combine their CAP for mutual protection. Keep the carriers on the move and try not to be predictable with their movements. This will help prevent enemy subs from catching the fleet. In this battle you will get the chance to use all types of forces. There are many possible strategies that could be used successfully here. In general, try to keep your ships fully armed and deny the same to the enemy. If

you can, damage or destroy his refueling ports, bombard his airfields, concentrate your forces so any attacker suffers more damage than dishes out. Keep your landing forces well escorted. It only takes a small cruiser group among your transports to really ruin your day. On your first attempts playing with this many forces it will probably be quite overwhelming and confusing. Hang in there and learn from your mistakes.

CORAL

Summary: Starts May 7, 1942. Japanese forces poised to invade Port Moresby. Japanese have 2 CVS and 1 CVL against 2 U.S. CVS. Battle length is 8 days. Original battle resulted in U.S. sinking 1 CVL, damaging 1 CV, Japan sinking 1 CV, damaging 1 CV. The Port Moresby invasion fleet was turned back. 5 hours playing time.

Description: The Battle of Coral Sea was notable as one of the first carrier vs. carrier battles. In actuality it was pretty much a farce from both points of view. Full of mistakes and confusion, both sides learned important lessons from this battle. Here's the story.

The Japanese plan is to land at and capture Port Moresby. Besides the landing force, the Japanese have a Covering Group (with the light carrier Shoho) and a Strike Force (with the carriers Shokaku and Zuikaku). Admiral Nimitz had pieced together the Japanese plan through decoded radio intercepts. Nimitz ordered the carriers Yorktown and Lexington into the Coral Sea to repel the invasion.

On May 7th, Japanese scout planes sighted enemy ships and a strike was launched. The Japanese aircraft arrived expecting to engage a carrier group, but the ships turned out to be nothing more than the oiler Neosho and the

destroyer Sims, both of which were immediately sunk. Then the Allied Support group (a cruiser and destroyer force) under the command of Rear Admiral John Crate was sighted. The Japanese launched a strike at this group and returning pilots reported sinking a cruiser and a battleship, and torpedoing a second battleship. Actually, none of the ships in this group had been hit. Immediately after the Japanese strike had departed, U.S. B17s also attacked Crate's Support Group, mistaking them for Japanese, but they didn't make any hits either.

At about the same time, U.S. scout planes sighted a Japanese Cruiser Force and reported it as a Carrier force. The Lexington and Yorktown launched strikes immediately. Meanwhile a scout from the Shoho sighted the U.S. carriers and the Shoho prepared to launch a strike. At this time the Japanese commander, knowing airstrikes could kill hundreds of Japanese soldiers, ordered the Port Moresby Invasion Force to withdraw to avoid the enemy aircraft. The U.S. airstrikes failed to find the "carrier" force they had been sent after but lucked out and came across the Shoho launching aircraft. In minutes, the 93 American aircraft sent the hapless Shoho to the bottom.

Later in the afternoon, the Japanese Commander, frustrated at not knowing where the U.S. carriers were, launched a 27 plane strike to search for them. Unable to find the U.S. carriers, this group was on its way home when it was intercepted by U.S. patrol planes, losing 9 planes to the Americans. They then mistook the Yorktown for a Japanese carrier and tried to land. One was shot down. Finally, finding their own carriers after the Japanese commander turned on his searchlights, 11 more were lost trying to land. Neither side felt a night surface action would be beneficial so all was quiet as both sides maneuvered for position during the night.

Early the next day, May 8th, the two carrier groups were about 100 miles apart. Both sides had spotted the each other and both had launched strikes. The American strike hit first, but poorly, as many of the planes in the strike had become lost on the way and had to turn back. As the strike arrived over the Japanese Carriers, the Zuikaku ducked into a nearby rain squall and remained unseen throughout the attack. The American aircraft sighted the solitary Shokaku and the SBDs hit it three times, rendering it inoperable. Now the Japanese strike hit the Lexington and Yorktown. The Lexington was heavily damaged while the Yorktown took only one bomb hit that did minimal damage. Japanese pilots withdrew, reporting the sinking of 2 U.S. carriers. A few hours later, an accident aboard the Lexington ignited fuel vapors. Damage control parties were unable to control the fires and eventually the "Lady Lex" was abandoned and scuttled. The Japanese carriers withdrew, believing they had sunk both U.S. carriers.

Here you may reenact the Battle of Coral Sea. The Americans called it a victory because the Port Moresby Invasion Force was turned back. The Japanese considered it victory as they had sunk a large carrier for the loss of a small one. What really hurt the Japanese in this battle was the loss of 77 of their veteran pilots. Unlike the massive pilot training going on in the U. S., the Japanese flying school only produced 100 pilots per year. Thus the U.S. could readily replace her losses, the Japanese could not. Now you can take command of either side and try to change history. Even though none of the battles in this game are preordained, you will be surprised how often the results bear a striking similarity to the actual history of the war.

MIDWAY

Summary: Historically accurate recreation of the forces involved in the battle of Midway, the turning point of the war in the Pacific. The Japanese are set on the capture of Midway and must succeed within 8 days. U.S. must defend while inflicting major casualties on the enemy. One of the most famous battles of all time. Starts June 2, 1942. 4 hours playing time.

Description: The Battle of Midway is probably one of the most famous sea battles of all time and is certainly prominent in any historical account of the war in the Pacific. The battle is recreated here in accurate detail to each and every ship and aircraft involved. A condensed version of the story follows.

The Japanese had planned the invasion of Midway in great secrecy. Besides capturing Midway, Yamamoto's intent was to bait the remaining U.S. carriers into battle with the Combined Fleet's 6 carriers. Unknown to the Japanese, U.S. code breakers had deciphered Japanese coded radio messages and deduced Japan's intentions. Yamamoto approached Midway with one of the largest fleets ever assembled. A screen of Japanese submarines had been set up between Midway and Hawaii so that Yamamoto would know when the U.S. carriers had sortied. Unfortunately for him, the U.S. carriers were already waiting northeast of Midway.

In the early morning hours of June 4th, the Japanese launched a strike of 108 aircraft at Midway Island. The strike bored through Midway's CAP and did major damage to the island's facilities. At the conclusion of the attack, the Japanese strike commander determined that Midway's airfield was still operational and would require another strike. Meanwhile, the U.S. had sighted the Japanese Carrier Force and were moving its carriers into strike range.

After launching the first strike, Admiral Nagumo had equipped the remaining Japanese aircraft with torpedoes in anticipation of meeting the U.S. carriers. During this process several aircraft from Midway attacked the carrier force. These attacks, while unsuccessful, convinced Nagumo that he should order a second strike on Midway. The waiting strike had to be armed with HE bombs instead of torpedoes. Sometime later a Japanese search plane reported U.S. ships in the area. Nagumo ordered that the ready aircraft be rearmed with torpedoes. These changes in armament were causing the carrier hangers to fill with ordinance which would normally be safely stored in the ships magazines. Aircraft from the first strike were beginning to return and had to be recovered as well. A new sighting report reached Nagumo claiming enemy carriers were present, so he decided that it would be best to reorganize his aircraft and have them all prepared to attack enemy ships.

By now the American carriers had launched strikes, but some of these had become lost and separated. A flight of TBD torpedo planes were the first to find the Japanese carriers and attack. This flight was pounced on by the 51 fighters of the Japanese CAP. None survived. Soon a second flight of TBD's attacked the carriers, and these too were decimated by the CAP. A half hour later, a third group of TBDs attacked, and they suffered the same fate. The Japanese fighters were all at low altitude finishing off the last torpedo attack when the first SBDs arrived at high altitude. Having no fighters near them, they had a virtually free shot at the Japanese carriers. Within moments the dive bombers turned the crowded carrier decks into raging infernos. Three of the largest carriers (Akagi, Kaga, Soryu) were sinking wrecks.

The Hiryu, still undamaged, managed to launch a 24 plane strike which found and damaged the Yorktown. Hearing the success of that flight, the Hiryu then launched another attack at the Yorktown. Meanwhile the Enterprise and Hornet had launched a second strike at the Japanese carriers. The

Hiryu's second strike hit the Yorktown and left it dead in the water. The second U.S. strike of 24 SBDs found the Hiryu and left it a burning wreck. The Hiryu was scuttled a little while later. The damage control parties of the Yorktown were about to get things under control when the Japanese submarine I-168 arrived on the scene and torpedoed it. With their 4 largest carriers sunk, the Japanese withdrew from Midway. The loss of over 250 aircraft and their pilots would be a blow from which the Japanese would never recover. The two remaining U.S. carriers gave chase and finished off the heavy cruiser Mikuma, which had been damaged earlier by a collision during a submarine attack.

In playing any reenactment of the Battle of Midway, it is virtually impossible to recreate the surprise the Japanese must have felt at the preparedness of the Midway defenses and the appearance of three U.S. carriers. Since that surprise was part of winning the battle, you might think it impossible to play a realistic Midway battle. Actually, the computer plays the Japanese attack quite unaware of the U.S. carriers. In playing this battle against other human players, I have found it to be surprisingly well matched. It certainly does appear so at first glance. The Japanese must capture Midway or sink the U.S. carriers to win. The game lasts 8 days, and if the U.S. player can keep his carriers afloat, he can make capturing Midway quite costly if not impossible.

4.2 Campaigns

General Information

The campaign games in WWII are long running games which allow the player(s) time to develop and execute long range plans.

Each side receives the same ships, aircraft, and men that were available in the theater during the war. Careful planning and execution are necessary to succeed. Logistics will constantly be a factor as maintaining a steady flow of supplies is absolutely necessary to keep ports and airfields operational. Sometimes, cutting the enemies supply lines can be more effective than shooting down aircraft or sinking ships.

Keeping aware of the enemies movements and build-ups will help you determine his plans. For yourself, use deception, feint movements, and hide your forces. Make the enemy believe anything that's not true. The "fog of war" is built into WWII. Pilots return with "optimistic" reports. Sightings are not all that accurate. Things are not always as they appear. It makes you believe the statement - *War Is Hell*.

If you are used to the small conflicts and battles presented by many types of games, you will find reason to rethink many of your previously "successful" strategies. A carrier lost today will be missed tomorrow, and the next day, and next week, and next month, and next year. The enemy will continue to build and reinforce regardless of your plans or losses. When one of your front-line bases runs short of supplies and is inoperable for weeks, you will start thinking "logistics". One sure way to cut the enemies flow of supplies is to capture his supply base. Truk serves as the Japanese supply base, Fiji is the allies' supply base. Besides the large number of points a supply base is worth, its capture cuts off all flow of ships and supplies to the enemy. He will still receive aircraft reinforcements but nothing else.

Since enemy land based aircraft are always a royal pain, I have discovered the fastest way to close an airfield. Bombardments. Heavy cruisers and battleships, brought in under the cover of darkness, can wreak havoc on the largest airfield. Time your arrival to bombard during the hours of darkness,

when the aircraft are unable to attack. On the other hand, it can be quite difficult to defend yourself completely from such an attack, especially if the enemy has fast battleships. You can, however, make such attacks costly. A large destroyer force, on patrol mission at night, can prove to be an effective deterrent to moonlight bombardments.

Submarines can easily operate behind enemy lines, looking for those juicy transports. The commander that fails to provide sufficient escorts for his transports will eventually not have the problem. Patrolling aircraft can make life miserable for subs, and besides, this is a good job for those training squadrons you might have just lying around.

Improving the experience level of your pilots before committing them to battle can be very important, especially if you want them to survive past their first engagement with enemy fighters. There are a couple different ways of handling your aircraft reinforcements. Some players will add reinforcement aircraft directly to their experienced squadrons. This tends to dilute your more experienced air groups. There are times when this is necessary, but it is much preferable to form training squadrons at rear area airfields. These pilots may then be allowed to become more proficient before being committed to battle. It may seem that you need them now, but, remember you are playing a long game and you may easily need them more later.

CORAL SEA

Summary: Campaign starting May 2, 1942. Japanese still in "expansion fever". U.S. currently has only 2 CV's in area, Japanese have 2 CV's, 1 CVL. In 3 weeks U.S. gains 2 CV's, in 5 weeks Japan gains 4 CV's and 2 CVL's. Game can run one full year, so long range plans are important to win.

Japanese should expand before U.S. industrial might can begin to make the difference. Choose your own objectives in the longest campaign of the game. 100+ hours playing time.

Description: This is the Coral Sea Campaign, the longest campaign in the game, where you can play almost a full year of game time. Since this campaign starts prior to the losses suffered at Midway those forces are available in this scenario. When the Japanese reached their prewar goals so much quicker and easier than had been anticipated, many in the Japanese High Command experienced what was termed “expansion fever” or “victory disease”. It was basically an attitude of ‘why stop now?’. So Japanese forces were ordered to continue to expand beyond the original goals set by the Japanese war planners.

This became the second of two major mistakes made by the Japanese. The first was the failure to formally declare war on the U.S. before the Pearl Harbor strike. (The declaration of war was supposed to have been delivered 30 minutes before the strike but was held up by a problem in communications.) The second mistake was the expansion beyond the capabilities of the Japanese supply organization. The first mistake changed Americans from “isolationists” to a people set on retaliating for the crime they felt the Japanese perpetrated on them at Pearl Harbor. It committed Japan to a long war with an industrial power she could not hope to match in the foreseeable future. The second mistake extended Japan’s “Sphere of Coprosperity” beyond her logistical abilities. Japan’s “front” was stretched over thousands of miles of Pacific.

With the U.S. to the east, China to the west, and the British and Australians to the south, Japan might have been wiser to follow her original plans and consolidate her newfound holdings rather than continue to expand, In this

campaign Japan still has plans of expanding. One avenue is down the Solomons to the undefended Guadalcanal and Tulagi. A second route is through Port Moresby into Australia itself. A third possibility is to make a drive to the Noumea/Espirito Santo area in an attempt to cut off Australia.

Japanese Strategy: Japan starts the campaign with 3 carriers to the American's 2. In 3 weeks the U.S. gains 2 more carriers temporarily giving them the upper hand. At about 5 weeks into the game the Japanese will receive 6 more carriers regaining the advantage. The Japanese should go to the offensive as soon as they have established a definite carrier superiority. The U.S. industrial power will eventually overcome the Japanese so it is necessary for them to make their advances early. Whether you decide to capture it immediately or not, Port Moresby will be a pain in your side. An occasional bombardment can help keep the airfield in disarray. Until the 5th week when you have a definite advantage, it might be best to keep your transport fleet safely behind lines. Keeping them out of sight will also prevent the enemy from guessing your intentions. Keep a couple of your float plane equipped submarines in the areas around Fiji and Noumea to spot the American ship's movements. If you decide not to take Tulagi then prepare forces to ambush any U.S. efforts to reinforce that base. The U.S. carriers will probably not sit idle, so include plans to deal with them. It is also important to save your resource points for the carriers that become available in 5 weeks. Try not to waste your valuable G4M's piecemeal against the enemy fighters. They have a very long range and can be excellent at picking off transports.

U.S. Strategy: You face two immediate challenges, defending Port Moresby and Tulagi. If it looks as if the Japanese are going to strike Tulagi in strength it might be better to demolish the base rather than turn it over. I opt to defend Port Moresby and to make it a royal pain to the enemy. Expect to lose some

aircraft trying to keep this airfield open against constant Japanese airstrikes. If the Japanese bring in their carriers to support the air assault it can get quite bloody. Keep in mind that they are taking substantial aircraft losses as well. Don't keep your valuable B25's or B17's there. Reinforcing Port Moresby can be difficult, so here again expect to take some losses. As soon as you get another carrier or two, you can try forcing an engagement with the 3 Japanese carriers. If you wait until the Japanese have all 9 carriers it will be quite difficult if not impossible to successfully take them on. Other than that instance, time is on your side. The U.S. receives more aircraft reinforcements than the Japanese and generally repairs ships faster. An early concentrated effort against the Japanese transport fleet will limit their future reinforcement efforts and their offensive capability. It is important to be building new "forward" bases. That way new landings can proceed with the support of land based air power. The seaplanes operating from these new bases will also expand your search plane coverage, allowing you to see more of the enemies movements. The Japanese strength is centered around Rabaul and their defeat will come as a result of its capture. An alternate method is the capture of Truk. The forces required for either of these efforts will be huge. It is critical that the enemy have no advance warning of either assault as even a minor reinforcement effort would doom the attack.

SOLOMONS

Summary: The first U.S. offensive, Operation Watchtower, the capture of Tulagi and Guadalcanal is started Aug. 7, 1942. Major Allied forces are poised to capture Guadalcanal. Japanese forces are currently out of place to defend Guadalcanal but are threatening Port Moresby. Japanese reinforcements will be arriving daily. If the Japanese hold out in Guadalcanal, it will be extremely difficult to capture later. Watch for change of U.S. landings, which could pick other Japanese locations to target. 80+ hours playing time.

Description: The U.S. is poised for its first major offensive, Operation Watchtower. The Japanese have been building a large airfield at their new base on Guadalcanal. The U.S. intends to capture this facility before its completion and make it the advance base for U.S. operations in the South Pacific. The base is currently occupied by only a meager ground force. The Japanese have few forces in the area, but once they discover the U.S. effort they will begin transferring forces as quickly as possible. Since this campaign starts after the Battle of Midway, the ships lost in that battle and in the Battle of Coral Sea are gone and not available here.

U.S. Strategy: You have a major force, loaded for bear and ready to go. Guadalcanal is an easy conquest if concentrate your efforts there. You also have the choice of several other targets to capture. I have succeeded in capturing Rabaul but it is not easy. Shortland and Tulagi also seem to cry for capture. Be careful splitting your landing forces for multiple targets. I have succeeded but failure was not far away. If the Japanese manage to hold an reinforce Guadalcanal, it will be a tough nut to crack later. This close to other Japanese bases, the security of your transports will be difficult if not impossible. The targeted base(s) will need to be heavily bombarded and damaged prior to the arrival of your landing forces. The enemy will surely try to hit these ships with every means at their disposal. The enemy will have a sizable air force at Rabaul and will be bringing up carriers almost immediately. A secondary concern is the proliferation of enemy infantry in the Port Moresby area. Sloppy playing could lose Port Moresby.

Japanese Strategy: The Japanese player starts out in a tough situation. The U.S. has forces ready to pounce on Guadalcanal and there's not much you can do about it. You will be receiving reinforcements daily. It is important to determine the direction of the U.S. assault before you commit your limited defenses. If the U.S. commits all its forces to assaulting one of your smaller

bases, you can pretty much kiss that base good-bye. Since the attack will probably be close to your other bases, it will be fairly easy to counterattack the transports at night with your light forces. With your available ships, aircraft, and submarines, it should be possible to make a sizable dent in the attacking forces. A strong effort or feint towards Port Moresby may provide a distraction to the enemy. Once the enemy is committed to a landing, you have the valuable option of carrying infantry on your destroyers. This allows you to quickly move in reinforcements while not risking more valuable ships. After the U.S. has established its landing(s), you will have your hands full trying to weaken them and prevent the arrival of more reinforcements. Since you will be getting carriers anytime, be careful when attacking piecemeal with them. The combined force of the U.S. carriers could easily pick them off one at a time. Use your land based aircraft to attack enemy shipping and infantry. Don't send them against the U.S. carriers without plenty of escorting fighters or you will just be throwing them away.

ESPERANCE

Summary: The final struggle for Guadalcanal. Starting date Oct. 9, 1942. U.S. has held Guadalcanal against continued Japanese pressure. Japanese refuse to give up and attempt to recapture the field. Nightly raids from the "Tokyo Express" run the "Slot" from Rabaul and Shortland bombarding U.S. Marines and dropping supplies and reinforcements to Japanese troops. Numerous night engagements are the result of efforts to stop the "Tokyo Express". 60+ hours playing time.

Description: This campaign starts as Japan is making its last concentrated effort at recapturing Guadalcanal. Since the initial capture of Guadalcanal by the Americans, the Japanese have refused to give up the island. Almost nightly, the Japanese run destroyers, cruisers, and sometimes fast battle-

ships down "The Slot" to bombard the airfield and Marines on Guadalcanal. Japanese destroyers would carry troops and supplies on deck, dumping them just offshore for the defenders to pick up. These fast freights became known as the "Tokyo Express". U.S. ships, submarines, and torpedo boats waited in ambush to cut off the flow of supplies.

U.S. Strategies: Reinforce Guadalcanal and repel Japanese attempts to recapture the island. Once you have Guadalcanal well established and secure, use it as a jumpoff to attack Rabaul, Shortland, or even Truk. During this time it is important to keep an eye on Japanese movements. The enemy has a powerful carrier force that could definitely threaten your plans. Rabaul is a large enemy stronghold and a major center of Japanese air power. It will usually be unsafe to approach during daylight hours. Rabaul will likely keep up continuous airstrikes on Port Moresby and any other Allied forces within range. If you decide to attack Rabaul with carriers, sneak in during darkness and strike at dawn. Combined with an early morning bombardment, you can disrupt Rabaul long enough to do some real damage. During the fight for Guadalcanal, the enemy may make a quick switch to Port Moresby.

Japanese Strategies: Your first order of business is to stop the establishment of a major U.S. airfield at Guadalcanal. Since you have the strongest carrier force in the theater, you should be able to cut off Guadalcanal and seek and destroy the U.S. carriers. A very effective technique is to keep your carriers hidden as long as possible. While the enemy doesn't know where your carriers are, he must keep many of his forces in reserve to fight them should they appear. By appearing, striking hard, and then vanishing, you can keep the enemy in total disarray. Once you have accumulated sufficient landing forces, you are free to take your choice of Allied bases. I prefer to stage from Guadalcanal and capture Noumea, cutting the enemy in two and capturing an already good sized port and airfield.

5.0 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.

The *Modem Screen* consists of a button bar and a terminal area. Before you can hookup with the other computer you need to select both a port and baud rate. Once this is done the comm port will be open and ready for use. If you pick Null for the baud rate it will allow you to hookup two computers across a null modem cable through an external RS-232 port.

The terminal area allows you to type commands to the modem directly and it will also display information from the modem. It sometimes will be necessary to type an initialization string or to lock a baud rate to the modem in order to hookup between modems that might not otherwise properly connect.

In order to play modem play you need to understand that one computer will be the controlling computer and the other will be the slave. The controlling computer will be the one that dials and the slave will be the one that answer. In null modem a window will come up asking if this is the controlling computer. If both computers answer Yes then there will not be a hook up.

Receiver/Slave will only need to click on four times.

1 *Setup Screen*, click opposing player Modem.

2 *Setup Screen*, click Start.

3 *Modem Screen*, ensure proper comm port and baud rate.

4 *Modem Screen*, click Answer.

The dialer/controller 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/controller makes the following selections:

- 1 *Setup Screen*, select the side he wants to play for this scenario.
- 2 *Setup Screen*, select scenario type (campaign, battle, or saved game) to be played. 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.
- 3 *Setup Screen*, click Start.
- 4 *Modem Screen*, ensure proper comm port and baud rate.
- 5 *Modem Screen*, select Pulse or Dial, as is appropriate for the phone service used at the modem location.
- 6 *Modem Screen*, choose Dial, then enter the phone number of the receiving player and press the *enter* key. The computer will dial the phone number and, after a successful connection, enter the *Player History Screen*. Choose your player, then click on Continue. The selected map will come up. 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)abble” function during your *Orders Screen*.



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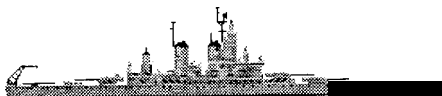

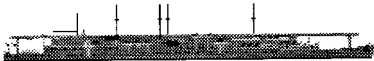

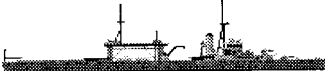






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As a condition precedent of the warranty coverage provided below and to ensure identification, the original purchaser must complete and mail to Q. Q.P. Inc. 1046 River Avenue, Flemington N.J. 08822, within 30 days after purchase, the Registration/Warranty card enclosed in this product. To the original purchaser only, Q.Q.P. Inc. warrants the media to be free from defects in material for 30 days. If during the first 30 days after purchase a defect in media should occur, the software may be returned to Q.Q.P. Inc., who will replace the media at no charge. If at any time after the initial 30 day period your media becomes defective, the media may be returned to Q.Q.P. Inc. for replacement at a \$8.00 service charge.

In no case will Q.Q.P. Inc. be held liable for direct, indirect or incidental damages resulting from any defect or omission in the manual, or other related items and processes, including, but not limited to, any interruption of service, loss of business, anticipated profit, or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

B		Battleship USS Iowa 6" guns 57000 tons 33 kts
CV		Carrier IJN Akagi 91 planes 43000 tons 31 kts
CVL		Light Carrier IJN Ryuho 31 planes 17000 tons 27 kts
CVE		Escort Carrier USS Chenango 31 planes 14000 tons 18 kts
CVS		Seaplane Tender CVS Chitose 12000 tons 28 kts
CA		Heavy Cruiser IJN Myoko 8" guns 15000 tons 34 kts
CL		Light Cruiser CL Hobart 6" guns 9300 tons 33 kts
CLA		Anti-Aircraft Cruiser USS Atlanta 5" guns 8400 tons 33 kts
DD		Destroyer IJN Akizuki 4" guns 3800 tons 33 kts
SS		Submarine IJN I15 2500 tons 24 kts
RO		Submarine IJN RO33 900 tons 19 kts

AKA



Attack Transport
AKA Mercury
6750 tons 18 kts

APA



Attack Cargo Ship
APA McCawley
13500 tons 17kts

APD



Light Transport
APD Gilmer
1800 tons 24 kts

DMS



Fast Minesweeper
DMS Trever
1800 tons 30 kts

AP



Auxiliary Cargo Ship
AP Kinagawa Maru
9000 tons 18 kts

AK



Auxiliary Transport
AK Brazil Maru
13000 tons 22kts

AVD



Fast Seaplane Tender
AVD Thorton
1800 tons 24 kts

AVP



Fast Seaplane Tender
AVP Makinac
2400 tons 20 kts

AV



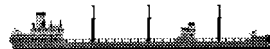
Seaplane Tender
AV Akitshushima
4800 tons 20 kts

ML



Minelayer
ML Okinoshima
4800 tons 20 kts

AO



Auxiliary Oiler
USS Neosho
14000 tons 16 kts

QQP

Quantum Quality Productions, Inc.

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Flemington, NJ 08822

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