Empire of the Sun VASSAL Module User Guide

Module version 5.10.1

Updated Nov 20, 2021

As a brief introduction, this guide's purpose is not to explain how to use VASSAL. The document assumes the player is already familiar with VASSAL and the basics of moving counters around, using its menus, connecting to servers to play online, logging moves for PBEM play and other basic VASSAL functionality. This guide is to explain how to use this specific module and its various features created specifically for playing Empire of the Sun.

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Conventions

To indicate a hot key or keyboard command the document will use < command > to indicate key presses. For example, **<F>** means press the F key. Combinations will use the + sign. For example, **<CTRL + R>** means press the Control and R keys at the same time. Similarly, there is **<SHIFT + 1>** which means to press the Shift and 1 keys together.

Setting up a new game

Unlike previous versions the scenarios are no longer defined via pre-defined files. To start a new game, you will always choose "New Game". Join as the "Referee" player so it can properly setup cards and pieces. The *Set Up* menu button on the *Chat Window Toolbar* presents menu options for setting up the various scenarios. The four options are shown in *Figure 1* (please note that these pictures won't match your system exactly due to different operating system UI styles).
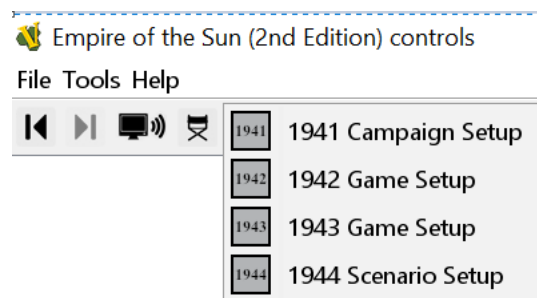
Figure 1. Game Setup Options

Please note that upon selecting an option VASSAL will seem to freeze. This is normal as it takes a small amount of time to run through all the automation scripts to clean up the current map, organize the cards and set up the pieces. After the window reports that the scenario setup is finished use "retire" to switch to the right player side before drawing any cards (unless using an online card utility like ACTS or playing solitaire).

For competitive purposes, a third party should generate the initial game file as "Referee" after setup and then send it to both players so they can choose their sides and play. If the players aren't using VASSAL to track cards or die rolls playing a side is generally irrelevant since all players can manipulate the game counters without restriction. In casual games the honor system should suffice for players to generate a game file and not use the "Referee" side.

Resuming a game saved by an older version of the module

Occasionally, a game might be started using an older version of this module, saved, then later resumed with a newer version. There are no guarantees, but this should work fine if the player who loads the saved game "refreshes" the game counters before resuming play. To do this, run the menu option *Tools -> Refresh counters*, which will pop up a dialog window. Push the *Run* button with the checkboxes left unchanged from their defaults, as shown.

The results of the refresh process will be output to the Chat Window after a few seconds. In the absence of any obvious errors, the game should now be ready to be resumed with the new module version. As always, both players in a live game must be running identical versions of the module.

Figure 2. Refresh counters dialog

Chat Window Toolbar

By default, the module's Chat Window and Main Map Window are combined into a single Combined Application Window with a single toolbar. If the **Use combined application window (requires restart)** box is un-checked in the Module *Player Preferences* window, then the two windows will be separate, each with their own toolbar. This section describes the buttons found on the Chat Window Toolbar, seen here:

Figure 3. Buttons associated with Chat Window

Undo (Rewind)

This is VASSAL's standard "undo" function to take back moves.

Replay (Forward)

This is VASSAL's standard "replay" function to move through a play log.

Server

This is VASSAL's standard server connections function with a different icon.

Role (Retire)

This is VASSAL's standard "retire" function to switch between player sides or become an observer.

Set Up

This is a pull-down menu allowing you to choose a scenario setup (1941, 1942, 1943 and 1944).

Roll a die

This icon has the 1d10 which will show a randomly rolled result from 0-9. Recommended for online live play.

Charts

Various useful game charts are shown in a window here with tabs to switch between them. They have a mountain of useful information. They include combat charts, battle factor calculators, movement rules, national HQ, unit reference, sequence of play and more. Take the time to explore the player aid charts.

Japanese Hand

The window is public so anyone can open the hand BUT only the Japanese player and Referee can see the face down ("HIDDEN")

cards. Observers and Allied players will only see card backs unless the card is flipped face up. See the *Japanese / Allied Hand* section.

Allied Hand

The window is public so anyone can open the hand BUT only the Allied player and Referee can see the face down ("HIDDEN") cards. Observers and Japanese players will only see card backs unless the card is flipped face up. See the *Japanese / Allied Hand* section.

Decks

This button opens a window which lists the cards in each player's **Discards** pile and **Removed From Game** pile. A player may draw a previously discarded card back into his hand (such as when exchanging a card) by right-clicking on the selected card within their **Discards** list and selecting the **Return to Hand** menu option. The selected card will be added to the hand face up and visible to the opponent. It can be made hidden via the card's **Flip** menu option.

Resource Hexes List

This window will show a list of which resource hexes are controlled by Japan and which are controlled by the Allies.

Progress of War List

This window will show a list of locations marked as Progress of War to easily keep track of them during play.

Active Units List

This window will show a list of activated units of both sides, along with their current location.

Out of Supply Units List

This window will show a list of units that have been marked Out of supply, along with their current location.

On-map Replaceable Units List

This window will show a list of reduced units on the map which may be brought back up to strength via replacement, along with their current location.

Eliminated Units Window

This window brings up the piles of non-replaceable eliminated units.

Replaceable Units Window

This window brings up the piles of eliminated units that *can* be brought back via replacements (as indicated by a white dot on the counter).

Allied Reinforcements

This window contains all Allied reinforcement pieces grouped by turn or special event.

Japanese Reinforcements

This window contains all Japanese reinforcement pieces grouped by turn or special event.

Markers

This window opens the *Markers Window* from which marker counters can be created and put on the map. This includes markers for card events (like Paratroopers, Doolittle, High Altitude Interceptors, etc.) and game play aid markers like Battle hex markers and Range markers.
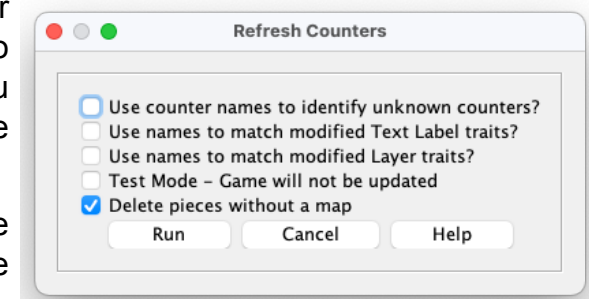
Main Map Window Toolbar

By default, the module's Chat Window and Main Map Window are combined into a single Combined Application Window with a single toolbar. If the **Use combined application window (requires restart)** box is un-checked in the Player Preferences, then the two windows will be separate, each with their own toolbar. This section describes the buttons found on the Main Map Window Toolbar seen here:

Figure 4. Buttons associated with Main Map Window

Unit Display Options

This button opens a popup menu by which a player can toggle various options when displaying unit counters. The menu contains the following options:

1. **Toggle Rounded Counters.** This option will switch the display of counters to have rounded corners or straight ones. It's merely aesthetic and has no impact on gameplay.

- **Toggle Setup Locations.** This option causes units to show/hide their printed at start setup location (or turn arrival for a reinforcement). It is merely aesthetic and has no impact on gameplay. It's an option to help de-clutter the counters and the fact that in VASSAL they aren't really needed since the setup commands place the units in their proper locations and the units in the Reinforcements charts are already in their proper places.

- **Toggle Single Step Stripes.** This option will cause single step units on the map to show a stripe like two step units when they are reduced. The purpose is to show that for combat, a single step unit behaves the same as a reduced two step unit. This makes it easier for people to see which units can be hit or not when assigning damage during battle resolution. Note that this does not change the rules regarding replacements, single step units still can't receive replacements, nor can they be "flipped".

Range Tool

This is VASSAL's standard range tool for measuring distances between two hexes "as the crow flies".

Hex Control Marker Mode

This button toggles restrictions for changing the status of control markers to help you follow the rules for *Progress of War* (s 16.47 in the rulebook). For more information, see *Map Hex Control.*

Toggle Control Marker Borders

This button toggles the display of hex borders for control markers in a hex.

AZOI Options

This pull-down menu allows you to control hex shading display of Japanese and Allied Aircraft ZOI on the map. The menu contains the following options:

- **Set AZOI On.** Enables shading to display AZOI hexes. The style of shading is controlled separately.
- **Set AZOI Off.** Disables shading to display AZOI hexes.
- **Switch between Solid/Line AZOI Pattern.** Toggles between two styles of AZOI shading – solid or line pattern.

See the *Air Zone of Influence (AZOI)* section for more details.

Overlay Options

This pull-down menu allows you to enable or disable display of overlays that shade hexes of individual countries/territories on the map. The menu contains a master On/Off option to control whether any overlays are displayed and one menu option for each national territory to specify which nations should have their overlays displayed when the master setting is On.

See *National Overlays* section for details.

CBI Infrastructure Routes

This pull-down menu allows you to toggle the display of a strategic transportation route on the map to show whether it's built or not. Routes that are red in color are ones that aren't built yet. Once a route is toggled to black it means the route is built and functions normally. This is less obtrusive than the actual game markers. The menu contains options for each of the four transportation infrastructure routes which must be constructed before use - *Kwai Bridge* (hexes 2108 and 2109), *Jarhat* (hex 2104), *Imphal/Kohima* (hex 2105) and *Ledo* (hex 2205).

Movement Trail Options

This pull-down menu allows you to turn on/off movement trail displays as you move units across the map. The menu contains the following options:

- **Show Movement Trails** will show trails for all units on the main map which have moved. Japanese units will have red lines as they move across the map and Allied units will have blue lines. At each intermediate stop of movement, a white circle with a properly colored outline is shown. This can be useful to indicate the "legs" of air units or the specific route of naval units as they move across the map.

- **Hide Movement Trails** will stop showing the movement trails. However, they still exist and can be shown again.

- **Toggle Movement Trails** toggles between showing and hiding trails. Its only purpose is as a way to define its **<CTRL + T>** "hotkey" as a quick and convenient way to toggling trails.

- **Clear Movement Trails** will erase all existing movement trails; this is typically done at the end of each card play (or "round"). Note that Trails work in conjunction with "Moved" Status. Any unit that has its Moved status "unmarked" (e.g. – via the **<CTRL + M>** hotkey) automatically has its movement trail erased when its "Moved" tag is removed.

See *Movement Trails* section for details.

Inter-Service Rivalry Options

This pull-down menu allows you to toggle the current ISR status of Japan or the US. To simplify the status of inter-service rivalry, it is set exclusively through this menu rather than individual counters. This menu will automatically display the rivalry symbol (white triangle) on impacted HQ's and flip the relevant ISR marker on the map. This helps keep all counters synchronized. When Japan enters ISR, the module will halve the number of its available ASPs.

End of Turn

This button automatically executes various end of turn clean up functions like converting progress of war hexes and moving the turn marker forward. See *End of Turn* section for more details.

Show/Hide Unit Counters

This button toggles the display of units on the map, to show or hide them. It is useful for temporarily removing all game counters to view the map hexes beneath them.

Show/Hide Control Markers

This button toggles the display of control markers on the map, to show or hide them. It is useful for examining details of a map hex.

Screenshot

This is VASSAL's standard button to take a screenshot of the current map.

Zoom In

This is VASSAL's standard button to zoom in one level on the map.

Set Zoom

This is VASSAL's standard button to set a specific zoom level for the map.

Zoom Out

This is VASSAL's standard button to zoom out one level on the map.

End of Round Cleanup

This button is intended for use after each Strategy Card has been played and all its battles and Post Battle Movement have finished. It performs the following cleanup operations:

- Clear "Moved" status on all units. This has the side effect of clearing all Movement Trails. This step can also be performed by itself via the **<ALT+ M>** hotkey.

- Clear "Active" status on all units. Note that the **<ALT + J>** and **<ALT + A>** hotkeys can also be used to deactivate all Japanese and Allied units respectively.

- Removes all Battle Hex Markers from the map and clears battle tags from all units. This step can also be performed by itself via the **<ALT + B>** hotkey.

- Removes all Range Markers from the map. This step can also be performed by itself via the **<ALT + R>** hotkey.

Flipping Counters

If it makes sense for a marker or unit to flip from front to back or vice versa it will have a Flip right-click menu command that can be accessed with the hotkey **<CTRL + F>**.

Map Hex Control

The map has been significantly altered with an eye to providing better information and gameplay features. Aside from moving pieces around the map per normal VASSAL usage many map hexes have commands added to them for the purposes of setting control. You can now select a hex (and the entire hex will be highlighted) and use the right-click menu to add/change/remove control markers. The module no longer has control markers that are created from a piece menu. Instead, the game keeps track of hex control, and it will allow appropriate menu commands for that hex to alter control. Note that not ALL hexes have this feature, only hexes for which tracking control is relevant have it. There is no point in having control markers for water hexes and unnamed locations.

If a hex has a city, airbase, port or is a resource hex, you will be able to select it. In addition, the hexes corresponding to the *Kwai Bridge* (2108 and 2109) can have a Japanese control marker for purposes of fulfilling the requirements of "Kwai Bridge" (Japanese Card #18). Hex 3606 in Honshu Japan must be controlled by the Allies to conquer the Home Islands and can also be selected.

Here is a summary of the control related commands found in a hex's right-click menu:

- Japanese Capture **<CTRL + C>** (gray Japanese flag)

- Japanese Control **<CTRL + J>** (color Japanese flag)

- Progress of War **<CTRL + P>** (gray US/UK/USSR flag)

- Allied Control **<CTRL + A>** (color US/UK/USSR flag)

- Remove Marker **<CTRL + R>** (no marker at all)

- Change US/UK Flag **<CTRL + F>** (toggles between a US and a UK flag, no impact on gameplay)

The module supports two modes of hex control: Free Form and Restricted. The *Hex Control Marker Mode* toolbar button is used to switch between these modes.

Free Form Hex Control

You can alter the hex's control marker status freely. You can even add a control marker to a hex your side originally owns. This allows players maximum flexibility in changing the status of the hexes as they see fit.

Restricted Hex Control

In this Restricted Mode, the hex right-click menu will follow a strict set of rules and not allow you to put flags on hexes you originally own, in order to minimize display clutter. Not all commands will be available at the same time for a particular hex, only those that make sense. For example, a hex that starts the game inside the border of the Empire of Japan will not have Japanese Capture or Control commands, only Progress of War. Once a hex is under Progress of War, it can be set to Allied Control (usually at the end of the game turn via the *End of Turn* toolbar button). Hexes that are under Allied control (with or without a marker) can be set to Japanese Capture.

The point of using "Japanese Capture" is that these hexes do not count for Progress of War and can only be set back to Allied Control by changing or removing the marker. This is per the rules on *Progress of War (16.47)*. Note that even though Progress of War is only relevant starting on Game Turn 4, the hexes will nevertheless keep track of captured/controlled hexes and progress of war (it was simply easier to have the program do this all the time).

The exceptions are the *Kwai Bridge* hexes (2108/2109) and hex 3606 in Honshu; these are unnamed locations, so they are not eligible for Allied Progress of War. They will be set directly to Japanese/Allied control, or the marker is removed as the case may be. The Aleutian Islands hexes don't have control markers because their national status depends on continuous occupation by Japanese forces (aside from Dutch Harbor which may become Japanese controlled with an invasion).

Use the *End of Turn* menu toolbar button to automatically convert Captured/Progress of War hexes to the proper control marker (or remove it entirely if need be), so they don't have to be done one by one.

Status Markers on the Map

Various status markers have been defined as non-moveable so they can't be moved by dragging with the mouse. These markers can only be moved via commands (using either the right-click menu or hotkeys). Most numerically based status markers can also be set

directly to a value using numeric hotkeys. In general, the number keys **<0>** thru **<9>** will set values from 0 to 9. For 10 or more use **<CTRL + number>**. For negative values use **<SHIFT + number>** (for example, *War in Europe* values go from -7 to +3). Note that these numeric hotkeys WON'T appear on the right-click menu to avoid clutter. The details of specific markers follow below.

Japanese Divisions in China

This marker is non-moveable; you can select but not move it by dragging. You can use **<CTRL + S>** to subtract one division and the marker will automatically move along the track to the left accordingly. You can also use **<CTRL + A>** to add one division and it will move one box to the right. This marker has numeric commands to set values directly as well.

China Front Status

This marker is not moveable; you can select but not move it by dragging. You can use **<CTRL + C>** to move the marker towards collapse one box at a time. You can use **<CTRL + S>** to move it towards Stable one box at a time. It also has numeric commands from **<0>** (Collapse) to **<5>** (Stable) to set the front directly if needed. The marker can be flipped to note when a China Offensive is conducted. Any time you flip this marker to the "Offensive Conducted" side this will create a Japanese China OC Marker on the turn track for the current game turn.

India Status

This marker is not moveable; you can select but not move it by dragging. You can use **<CTRL + R>** to move the marker towards revolt one box at a time. You can use **<CTRL + S>** to move it directly to the *Stable* box. The marker can be flipped over to its *Surrender* side.

Burma Road Marker

This marker is not moveable; you can select but not move it by dragging. You can use **<CTRL + C>** to move the marker directly to the CLOSED box. You can use CTRL + H to move it directly to Hump box. You can use <CTRL + O> to move it to the Open box. The marker can be flipped to set it's Hump/No Hump side.

Game Turn Marker

This marker IS moveable; you can move it along the track freely (this is because units can also be placed on the turn track, and you need them to stack). However, it still has a next turn function **<CTRL + N>** for advancing the turn and it can also be set directly with numeric hot- keys. It can also be flipped to keep track of the card event *Tojo Resigns* (Japanese Card #43). NOTE: If you play with cards in VASSAL, playing this card as an event will automatically flip this marker to its "Tojo Resigns" side as appropriate.

Political Will Marker

This marker is not moveable; you can select but not move it by dragging. You can use **<CTRL + S>** to subtract one PW and the marker will automatically move along the track towards the bottom accordingly. You can also use **<CTRL + A>** to add one PW and it will move one box towards the top. This marker has numeric hotkeys to set values directly as well.

War in Europe Marker

This marker is not moveable; you can select but not move it by dragging. You can use **<CTRL + S>** to subtract one from the *War in Europe* status and the marker will automatically move along the track towards the bottom accordingly. You can also use **<CTRL + A>** to add one and it will move one box towards the top. This marker has numeric hotkeys to set values directly as well.

Japanese Resources Marker

This marker is not moveable; you can select but not move it by dragging. Resources are tracked automatically by the module whenever control of a resource hex changes. This alleviates the burden of the player having to do this manually. Note also that the *Resource Hexes List* toolbar button will open a window displaying which side controls each of the resource hexes. In addition, the *Japanese Resources Marker* has a "Calculate Japanese Resources" menu option which could be used to force the module to recalculate the number of Japanese controlled Resource Hexes and reposition the marker accordingly, in case it ever became "out of sync".

Progress of War Marker

This marker is not moveable or selectable. *Progress of War* hexes are tracked automatically by the module whenever control of eligible hexes change. This alleviates the burden of the player having to do this manually. Note also that the *Progress of War List* toolbar button will open a window displaying the current list of hexes which qualify towards Allied *Progress of War*.

ASP Markers

Figure 6. Allies start with 6 ASP, Japan with 5

This marker can be freely moved along the general resources track. The implementation is a little different in that the numeric hotkeys are used not to track ASPs and move the token but instead to track the number of ASPs that side has USED in the current turn. The position of the marker in the general record track indicates the starting number of ASPs available during that turn. The marker has a transport ship silhouette with both values expressed as "#Used APS / # Actual ASPs". In addition, the Japanese marker can be flipped to set Barges/No Barges per the event *Ants* (Japanese Card #73). There are right-click menu commands for modifying used ASP by +1 or -1. The module will automatically reduce the number of Japanese ASP available when it is under Inter Service Rivalry (ISP).
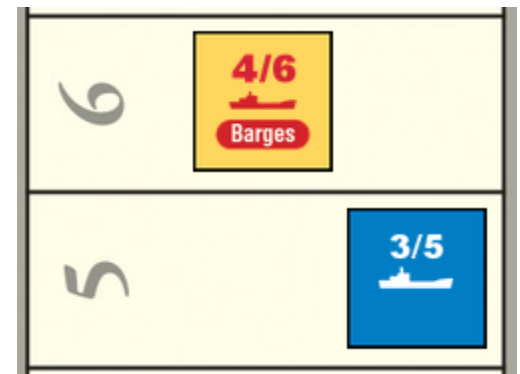

Figure 5. Both sides have 2 unused ASP remaining

Commands for Units on the Map

Units on the map have commands associated with them (via a right-click menu item and/or a hotkey). Those commands are listed below. Note that not all commands are available on all units.

Activate <CTRL + A>

This command toggles a unit's activation state. When activated, a red or blue colored border (Japanese or Allied respectively) will appear on the counter and serves a reminder for which units are active in the current offensive. Use the same command for both turning on and off this feature.

Place Battle Marker <CTRL + B>

This command creates a battle marker in the hex occupied by the unit. That marker will always appear on top of the units. This is a convenience function for placing one quickly via menu or hotkey. You can also create them by pulling them from the Marker Window (see *Battle/Range Markers* section).

A newly created battle marker will have a default letter assigned to it which is intended to uniquely identify the battle. This letter can be changed by selecting the battle marker, then typing the letter to be assigned. Note that if you enter the **<CTRL + B>** hotkey while an entire stack is selected, then multiple markers will be created (one for each unit in the stack) which is probably not desirable. A battle marker can be deleted with the **<CTRL + D>** hotkey, and all battle markers are deleted as part of the *End of Turn* cleanups.

Join/Leave Battle <Shift + B>

This function is an alternate way to designate battles. Sometimes units will fight at range, and you want to mark them as participating in a specific battle, sometimes air units in the same hex will fight at different battles and the battle marker isn't suitable to note this. By using this command, you activate a battle tag in the upper left corner of the unit. This works exactly like a battle marker; use a letter command (**<A>**, **<B>**, **<C>**, etc.) to assign the unit to the appropriate battle.

Command Area <CTRL + C>

This command is only available on HQ units. It toggles the display of shading showing all hexes within the general command area defined by the range of the HQ. The color of that shading will roughly correspond to that of the counter's background color. Note that this is useful primarily to see if a battle hex is within a range of an HQ (since the range is "as the crow flies"), depending on whether you are tracing a supply or activation path an HQ may not reach a unit even if it's within nominal range of the HQ.

Delay <CTRL + D>

Some allied units have this command available so they can be sent directly to the Delayed Reinforcements Box. Note that the box now has an invisible grid and units have enough room to form 8 separate stacks without covering the descriptive text within the box. The command segregates and fully uses the 8 spaces and will split them into 3 stacks for US Navy air, ground and naval units, 3 stacks for Commonwealth air, ground and naval units plus 2 stacks for US Army air and ground forces.

Eliminate <CTRL + E>

This command will a send a unit either to the *Eliminated Units Window* or the *Replaceable Units Window*, depending on whether the unit is allowed to be rebuilt via replacements. Note that many HQ units DON'T have this command because they are supposed to go to the turn track if eliminated (in which case use the Next Turn command to send them to the track automatically).

Flip <CTRL + F>

Covered earlier but repeated here for completeness, if the counter is a 2 step unit or a marker with two sides it will have this command available.

Full Strength / Reduce <SHIFT + F> / <SHIFT +R>

These commands don't appear on the right-click menu; they are hotkey only. If the counter is a 2-step unit it will have these commands available. They allow you to switch the unit between Full Strength and Reduced strength. This may be useful in a stack that needs to reduce all its full-strength units but without flipping existing reduced strength units (as would happen with the Flip command). Or restore one or two reduced units to full strength in a stack with other full-strength units without having to individually select them out of the stack. It is convenient in some situations.

Replace with Halsey <CTRL + H>

This command is only available on the Allied *South Pacific HQ (Ghormley)* counter. It swaps that counter with its *(Halsey)* variant, as per the *Halsey Replaces Ghormley* event (Allied card #20).

Mark Moved <CTRL + M>

As counters are moved across the map, VASSAL keeps track of the fact that the unit has moved and will display an appropriately colored "tag" on the right side of the counter to indicate that it's been moved. This command will toggle the movement status of this individual unit. All units have their "Moved" status cleared as part of the *End of Turn* cleanups.

Next Turn <CTRL + N>

This command is only available on non-dot HQ Units. It sends the HQ to the Game Turn Record Track, on the space for the next game turn. Note that for Turn 12, the command will "wrap" and send HQs to Turn 1.

Place Range Marker <CTRL + R>

This command creates a range marker in the hex occupied by the unit and will appear on top. This is a convenience function for placing one quickly via menu or hotkey. You can also create them by pulling them from the Marker Window (see *Battle/Range Markers* section).

Supply Status <CTRL + S>

This command toggles the Supply Status of the unit. An Out-of-Supply (OOS) unit will be marked by a fuchsia-colored stripe and will appear on the *Out of Supply Units List*. An air-capable unit that is OOS will automatically lose its AZOI if it is currently being displayed.

Figure 7. Dutch units are OOS, with no AZOI

Japanese / Allied Hand

For those not using a separate online card tracker like ACTS, the game can keep track of cards during play. Each faction has its own hand window. The windows are public so each side can see the number of cards their opponent is holding and whether they have a Future Offensive card played. Both windows have a similar layout: The left-hand side is a space for setting face up cards removed from the game; the next space is the deck of cards to draw from. The space immediately to the right is the discard pile area. After that there is small, framed area for placing one Future Offensive card. Then there is a wider rectangular space for the hand of cards. In general cards are drawn face down, so observers and the opponent only see the backs of the cards, while the owner can see "through" the card. There is a colored frame with the text "HIDDEN" in the lower right corner to indicate the owning player that this card is face down and unrevealed to anyone else. Cards can be flipped like many other game pieces.
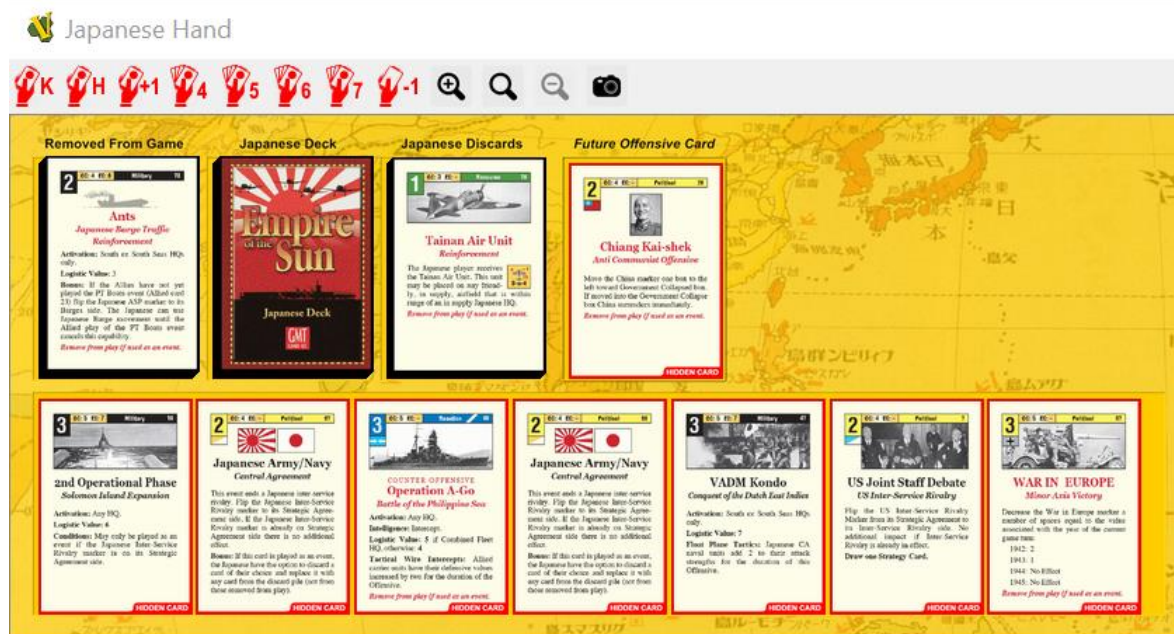
Figure 8. The Japanese Hand Window

The Japanese player owns the Japanese cards, and the Allied player owns the Allied cards. However, the Referee player can see both side's cards (this is helpful for solitaire play and referee games).

These windows have a toolbar with buttons with some helpful features for each side. Both sides have buttons to allow for drawing 4, 5, 6 or 7 cards. In addition, there is a button for one additional draw (+1). For Japan there is the additional feature of a button for randomly discarding one card (-1), as well as a button (K) for drawing the specific card "Vice Admiral Kondo" (Japanese Card #47) per rule 17.25E. Finally, the Japanese have one button (H) for drawing the three 1942 historical hand cards "Vice Admiral Kondo", "Colonel Tjusi" and "Central Force" (Japanese Cards #47, #3, #59 respectively); after holding these three cards in hand, Japan can click the 4 button to complete its seven-card hand.

Figure 9. The Allied Hand Window

The Allies have one button (A) for drawing the "Arcadia Conference" (Allied Card #4) event into their hand per rule 17.25D. Afterwards they can click the 4 button to complete their five-card h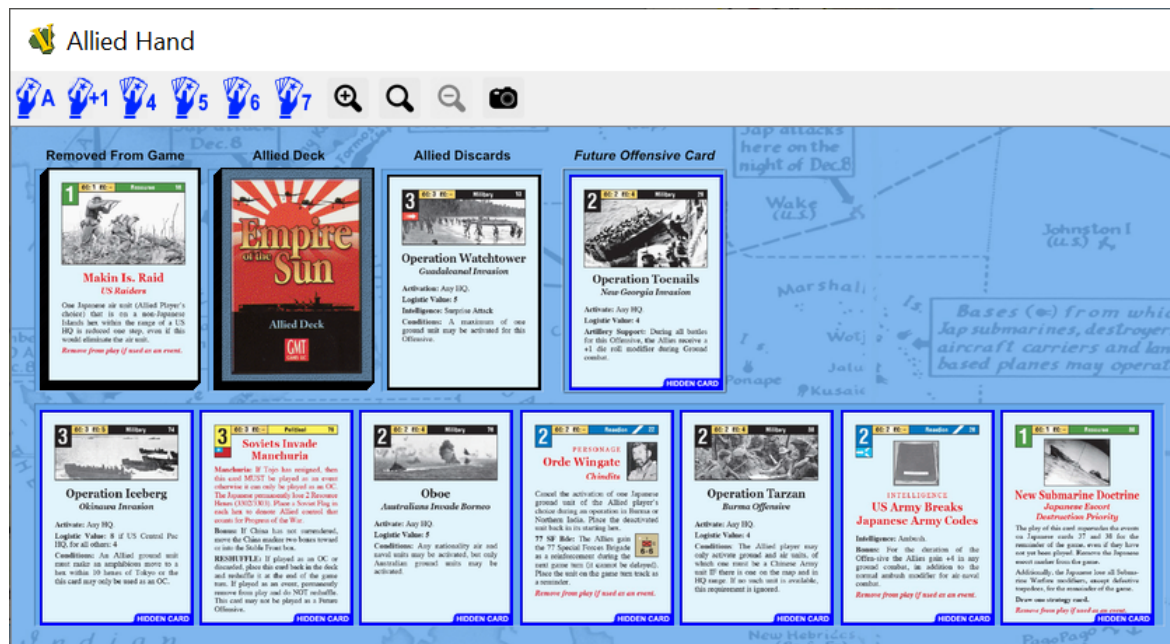and for the 1942 scenario. Otherwise, if they decide not to take Arcadia, they can click the 5 button to draw a normal five card hand. Both windows have buttons for increasing/decreasing the zoom level, setting it to a specific zoom and taking a snapshot of the card hand.

Card Piles

Right clicking on a discard pile in a player hand window allows the player to select a card for drawing back into their hand. This is one way to bring back a card, but a better mechanism is to use the *Decks* window which is separate from either hand window. Here, all four piles (Allied Removed/Discarded, Japanese Removed/Discarded) can be examined as a list of card titles with their most relevant stats. An individual card can be selected from this list and returned to a player's hand if need be.

Eliminated Units Window

This window shows the eliminated, non-replaceable units for both sides. In general, all units with a white dot will get sent to this window when they are eliminated. It has two general regions; one for Japanese forces and one for Allied forces, organized vertically. In addition, each region has separate rows for Air units, ground units and naval units. By double clicking a row it will fully expand and show the units. Two HQs can also arrive here if they are eliminated: *Combined Fleet (Yamamoto)* and *South Pacific (Ghormley)*.
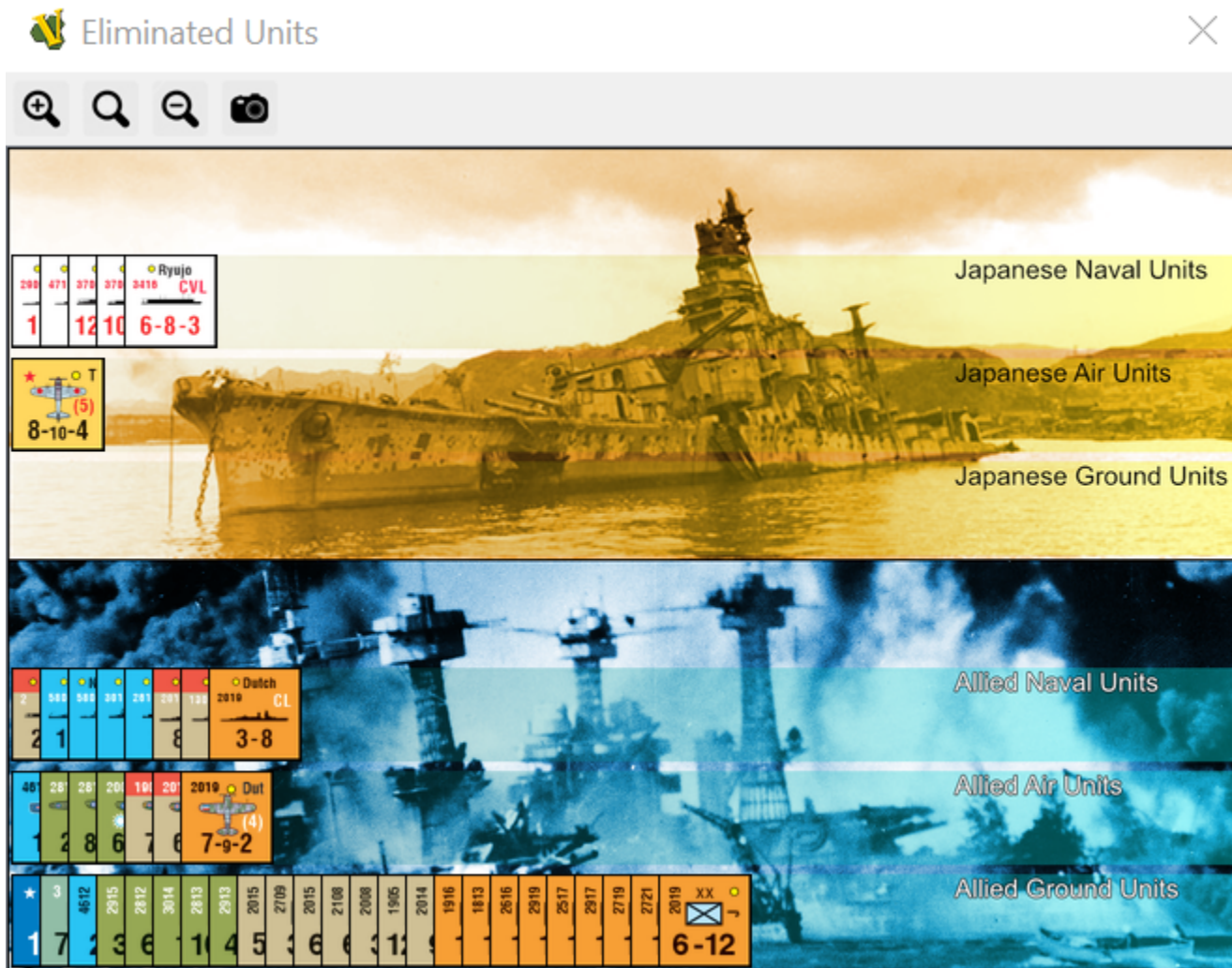
Figure 10. The Eliminated Units Window

Replaceable Units Window

This window shows the eliminated units for both sides which *are* eligible to be rebuilt via replacements. The layout is identical to that of the Eliminated Units Window. Note that units here don't stack on top of each other and instead stack spread out like cards in the hand window. This allows you to more easily see the units. You can select any one and move it from the window back to the map as a replacement whenever required.

Figure 11. The Replaceable Units Window

Japanese/Allied Reinforcements Chart

These windows not only show the reinforcements for each turn or available via special event, but the actual counters are also here as well. Select and pick up any reinforcement to place on the map. Use the delay command for Allied units that have been delayed by the War in Europe and send them to the box. Note that the Japanese Tokyo Express marker is in the Japanese Reinforcements window (since only one can exist at a time it's treated more like a unit than an actual marker to prevent duplicates).

Markers Window

Various game markers that aren't already on the map can be created from this window. They are in four separate categories as tabs, and many can be created over and over as needed (even though for many of them it makes no sense to have more than a single marker). All have *Delete* options and the battle markers have a cloning function.

Battle/Range Markers

Battle Marker: This will be your most used marker in the entire game. It's a small green square marker with a letter to identify the battle and you place it on the hex that battle is occurring. You can use the same marker next to units to indicate they are participating in that battle at range. When you select a battle marker use any of the letter keys **(<A>**, **<B>**, **<C>**, etc.) to switch that battle marker's letter appropriately
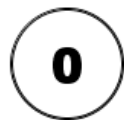
Range Marker: This marker is intended to help trace a supply or activation path by counting hexes (or legs of movement). You place the circular marker from the window on the map and it starts with a "0", each time you move it, it will mark its path and increase the count by one. This allows you to demonstrate a supply/activation path and its length, since the marker keeps track of its movement.

Card Event Markers

All card event markers are kept here. Please note this is different from card event "units" like 14th Air Force, 7th Armored Brigade or Tainan Air Group which are kept in the Reinforcements windows of their respective sides. Here you will find:

Barges / PT Boats: for the card event "Ants" (Japanese Card #73) there is a Barges marker but remember to flip the Japanese ASP marker as well. The reverse side of this marker is the Allied PT-Boats marker.

Convoy Escorts: for the card events "Grand Escort Command" (Japanese Card #38) and "1st Convoy Escort Fleet" (Japanese Card #37). Place the marker on the turn track to reflect play of these cards. The front side is the +2 escorts modifier, and the back is the +4 escorts modifier.

Defensive Doctrine: for the card "Island Fortifications" (Japanese Card #31) and the new defensive doctrine. Place the marker on the turn track as a reminder that a +1 modifier is in effect for ground battles in Japanese controlled one-hex island hexes.

Doolittle Raid: for the card event "Doolittle Raid" (Allied Card #6). Place this marker on the turn track when you play it as an event. This is a reminder that the card event "China Operation: Doolittle Raid Reprisal" (Japanese Card #6) is now eligible to play as an event.

High Alt Interceptors: for the card event "High Altitude Interceptors (Japanese Card #31). Place the marker on the turn track as a reminder that whenever the U.S. rolls for strategic bombing, there is a +1 modifier to the bombing rolls until the Allies control an airbase in

Japanese Paratroopers: these markers can be used for the following card events: "Western Force" (Japanese Card #58), "Central Force" (Japanese Card #59) and "East Force" (Japanese Card #60). If applicable, use this marker on the target hex. You can change which force the paratrooper belongs to with the <W>, <C> or <E> commands, each letter corresponding the proper force.

Panama Canal Attacked: for the card event "Submarine Launched Air Attack on the Panama Canal" (Japanese Card #80). Place the marker on the turn track as a reminder that Allied reinforcements are automatically delayed next turn regardless of the War in Europe level.

U.S. Submarine Doctrine Marker: for the card event "New Submarine Doctrine" (Allied Card #80). Place the marker on the turn track as a reminder that the Japanese can no longer play convoy escort cards as events for the rest of the game. Remember that any existing convoy escort marker should also be removed.

National Status Markers

Here are found the national status markers that can be used to indicate the surrender of a country. Select and place on the map as needed. For Alaska Occupied and Hawaii occupied it's suggested to place the marker on the turn track corresponding to the first national status segment continuous occupation has started, to properly keep track of the condition. If Occupation continues then move it from the turn track to a space on the map near the territory in question. These two markers can use numeric hotkeys to send them to the proper turn **(<1>** (turn 1) through **<CTRL + 2>** (turn 12).

Miscellaneous Markers

In this panel there are various game markers that didn't fall into the other categories:

Allied/Japanese Activations: use this marker to keep track of your activations on the Strategic Record Track as needed. Note however that you can also use the "Activations" window to see how many and which units have been activated.

Allied/Japanese Drawn Cards: use this marker to keep track of how many bonus cards you have drawn in the current turn. As the marker reminds you, a side can only draw three extra cards for whatever reason during a game turn.

Allied/Japanese Future Ops: future offensive markers are here to keep track of when a card was played as a Future Offensive. It's recommended to place it on the turn track, so players are aware which turn the card was set aside (so you do not play a Future Offensive in the same turn it was designated as such).

Allied/Japanese Passes: use this marker to indicate how many passes you have available. When you no longer have passes you can safely delete the marker.

Japanese China Offensive: use this marker to indicate on the turn track when Japan launched an OC China Offensive. This is a helpful reminder since You're not allowed to launch one on successive turns.

Japanese Air/Naval Replacements: use these markers to record available Japanese air and naval replacements that haven't been Japan accumulates after playing the proper event cards.

Strategic Bombing: use this marker on the turn track to remind you that Strategic Bombing has been executed during the current turn (allows you to keep track in case there's any doubt). Alternatively, use multiple copies of this marker on the turn track to keep track how many successful bombing rolls have occurred per turn (keep track of A-Bomb requirements and how many cards Japan loses)

Submarine Warfare: use this marker on the turn track to remind you that Strategic Bombing has been executed during the current turn (allows you to keep track in case there's any doubt). Alternatively, use multiple copies of this marker on the turn track to keep track how many successful bombing rolls have occurred per turn (keep track of A-Bomb requirements and how many cards Japan loses)

Game Turn: only use this marker if you are upgrading your game from revision 5. The game setup wrongly deleted the game turn marker in this revision. You can restore this marker to continue your game and upgrade to more recent revisions without this issue.

Air Zone of Influence (AZOI)

The module supports an option to use hex shading to display the two-hex AZOI zone surrounding around air-capable units. Japanese AZOI hexes are shaded in red and Allied AZOI hexes are shaded in blue. This feature is helpful to visualize the influence of air units and carriers for purposes of establishing supply and communications lines. This feature is controlled via the *AZOI Options* menu on the Main Map Toolbar.

This feature is strictly optional, and you can leave it turned off as desired. As a helpful feature, toggling a unit's Supply Status will automatically turn off its AZOI if it's being displayed, such out of supply units can't generate zones of influence. As soon as you toggle the supply status it will display AZOI once again. An additional feature is that AZOI will only show if the unit is on the map in a hex, it won't show AZOI off map (i.e. - Delayed Box, Turn Track, etc.).

There are two modes of shading used to display AZI hexes: solid and line pattern.

Solid shading

In solid shading mode, a translucent shade of solid color is used to shade the AZOI hexes. Japanese AZOI are shaded with red and Allied AZOI hexes are shaded with blue. Where one side's AZOI neutralizes the other they will overlap and form a purple color.

Allied Long-Range Bombers (LRB) will have their AZOI hexes shaded with blue striped diagonal lines, to indicate that they can't neutralize Japanese AZOI and when such hexes are also within Japanese AZOI, the background shade of the hex will generally remain shaded in red.

Figure 12. AZOI Solid Shading

Line pattern shading

In line pattern shading mode, AZOI hexes are generally shaded with colored diagonal lines. Japanese AZOI hexes are shaded with red lines which diagonal from upper left to lower right, and Allied (non-LRB) AZOI hexes are shaded with blue lines which diagonal from lower left to upper right. In hexes where each side's AZOI neutralizes the other, the shading will form an "X" pattern as each side's lines will cross each other's.

Allied LRB (which cannot neutralize Japanese AZOI) have their AZOI hexes shaded by an array of blue dots rather than blue lines. These dots are aligned such that they will be covered up by the diagonal red lines where they overlap with Japanese AZOI hexes. This is to signify that the Japanese AZOI cancels the LRB's AZOI but the LRB's influence can't neutralize that of the Japanese AZOI.

This mode is intended for those who find solid shading too visually obtrusive. Use whichever shading mode you find more useful.

Figure 13. AZOI Line Pattern Shading

National Overlays

This feature is meant to help point out all the hexes that belong to a particular nation or territory. Initially when you turn it on ALL such hexes will be displayed. You can turn off individual countries/territories in the same menu and VASSAL keeps track of which ones are active and which ones inactive. They are solid shades of various colors. It is recommended you turn off AZOI temporarily while you check to see which hexes belong to which entities. It's not really meant to use continuously for playing, more for checking, especially during the National Status Segment.

Movement Trails

Similar to AZOI, the *Movement Trail Options* menu has options to universally control movement trails for all units at the same time on the main map. Japanese units will have red lines as they move across the map and Allied units will have blue lines. Note that at each stop a white circle with a properly colored outline is shown. This can be useful to indicate the "legs" of air units or the specific route of naval units as they move across the map. Trails can also be used to show where a unit began its move from. When a "moved" unit is selected, its movement trail is highlighted by a slightly thicker line and the white circle of its starting location (along with any intermediate stops) will also be displayed in "pure" white rather than partially translucent white (see Figure 13).

Trails work in conjunction with "moved" Status. Any unit that is "unmarked" cleans up its movement trail in addition to the "moved" tag
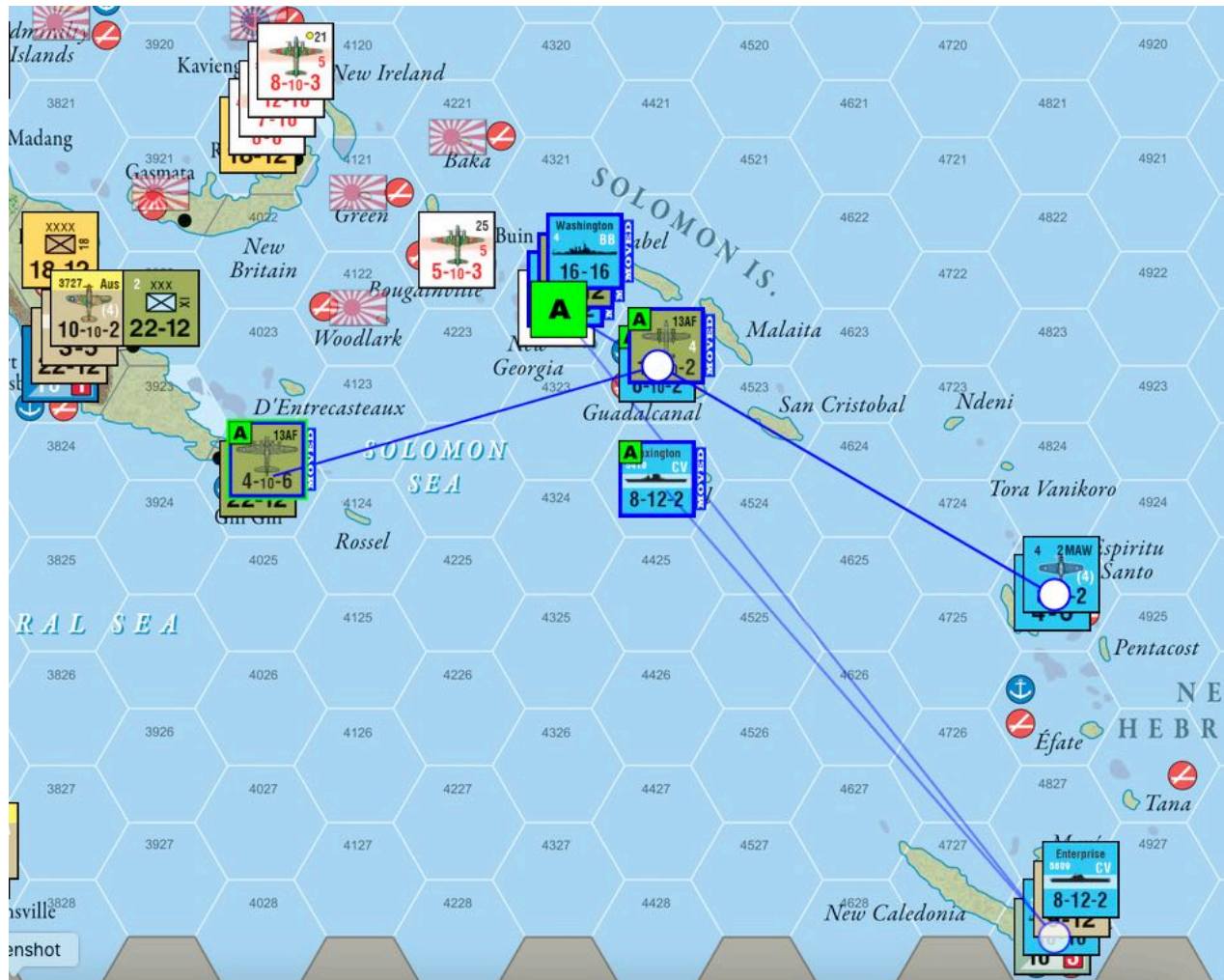

Figure 14. 13AF LRB (selected) moved 2 "hops" starting from Espiritu Santu

Map Flare

Pressing **<ALT + LeftClick>** in any hex will generate a "Map Flare" in that hex, appearing as a red pulsing circle which persists for a few seconds. This is often useful to highlight a hex to an online opponent. Note that the activating key combination has been changed as of module version 5.10, because the key combination used in module version 5.9 was already used for another purpose on Mac computers.

Figure 15. Map Flare highlights hex 2109

End of Turn

The end of turn button will execute the following functions in sequence to facilitate end of turn clean up:

- **Convert Progress of War hexes:** all the Allied Progress of War hexes will be converted to Allied control, resetting progress for the next turn. Gray allied control markers will become fully colored.

- **Convert Japanese captured hexes:** all Japanese captured hexes (gray) will be converted to Japanese controlled markers (color) to signify they are eligible for progress of war in the next turn.

- **Advance the Turn Marker:** The turn marker will move forward to the next turn unless it's turn 12 (which is the end of the game anyway).

- **Reshuffle Allied/Japanese card decks:** If the *Manchuria* card is in the Allied Discards pile this will trigger an automatic reshuffle of the allied deck in case you forget to do so. Likewise, the presence of the *Tojo* card in the Japanese Discards pile will trigger an automatic reshuffle of the Japanese deck.