

War in the Pacific: Admiral's Edition

20 August 2022

Version 1.01.27

Welcome.

Thank you for playing War in the Pacific: Admiral's Edition™! We are always looking for ways to improve your gaming experience. For the latest information on the game, please go to the Matrix Games web site at www.matrixgames.com.

Below you will find the latest and greatest information on War in the Pacific: Admiral's Edition™. Information in this document supersedes that in the official game manual.

Troubleshooting:

Ensure that your system meets the minimum system requirements. These are found in the game manual. Also, ensure that you have the latest video and sound drivers available for your system and that you have upgraded to the latest version of DirectX from Microsoft. The vast majority of reported problems are resolved by upgrading all drivers and DirectX to the latest versions.

If you are still experiencing problems with the game, please post in the War in the Pacific: Admiral's Edition™ Tech Support Forum at www.matrixgames.com/forums or contact our Help Desk at www.matrixgames.com/helpdesk. Please provide as much detail on your issue as soon as possible.

To obtain optimum game performance, close all other applications before beginning a game.

IMPORTANT-Dual/QuadCorePerformanceandCommandLineSwitches:

We've found that a number of newer multi-core systems with multi-threaded graphics drivers can be particular about how they want War in the Pacific: Admiral's Edition to work. We've added a number of new command line switches which, in our experience, make it possible for every system to get the best performance out of War in the Pacific: Admiral's Edition. They are defined below as "Performance Switches" and we recommend that every player give them a try as they can even improve performance on older systems in many cases.

There are also a number of other command line switches that may be useful to players.

To use any of these, Right click to edit the Properties on the "Quick Start" shortcut to the game (located in your Start Menu folder for War in the Pacific: Admiral's Edition). Do not edit the default desktop link, which points to an "autorun.exe" as that won't work. You have to use the Quick Start link which points directly to the game executable. You'll want to add these to the end of the "Target" field to get them to work. For example, when you are done your target field could look like this:

"C:\Matrix Games\War in the Pacific Admiral's Edition\War in the Pacific Admiral Edition.exe" -wd -altFont -cpu2 -multiaudio -dd_sw

PerformanceSwitches

(Please note that the old –dual switch has been removed in favor of the below combination of more configurable switches)

-SingleCpuStart : Starts the game in single CPU mode. Switches to multi CPU mode if available later. We've found this to be useful on some multi-core systems, especially AMD processors.

-SingleCpuOrders : Starts the game in single CPU mode and stays in single CPU for the orders phase, switches to multi CPU mode for running the turn, then switches back to single mode for the next orders phase. We've found this to be useful on some multi-core systems, especially AMD processors. Use this or –SingleCpuStart, not both.

If either of the above are used with one of the -cpu# switches noted below, it will use the specified CPU, otherwise both of these switches default to the first CPU. If a -cpu# switch and one of these -Single switches are used, the turns will always be processed in multi-processor mode.

-cpu# : (cpu1, cpu2, cpu3, cpu4) Switches set the cpu affinity for multi cpu systems. It will do nothing for single cores and will default to using all cores if a core is designated which is not there (for example using -cpu3 on a dual core system). We've found this to be very useful on some multi-core systems, especially Intel processors.

If used alone, the -cpu# switches will keep the game running on the CPU specified all the time. If used with the -SingleCpuStart switch, it will only use that core when starting the game. If used with the -SingleCpuOrders switch, it will stay in single CPU mode for starting and the orders phase, but will run in multicore. If one of the SingleCpu switches is used without a -cpu# switch, it will default to cpu 1 when it is in single core.

-multiaudio : Invokes a fix that changes audio timing for multicore machines.

-dd_sw : Handles DirectDraw via Software. We've found this can make a huge difference on many systems as far as reducing interface lag and making button clicking in-game more responsive. On a few newer systems this can cause some visual glitches and slow combat animations though, so give it a try and remove it if it's not ideal on your system.

PerformanceExamples

For example, on an Intel Dual Core system here, we use the following switches:

-cpu2 –multiaudio –dd_sw

On an AMD multi-core system, we use the following switches:

-SingleCpuOrders –cpu2 –multiaudio

Try these switches in different combinations to see what works best for your system as what works well on one may not be ideal for another. However, we have yet to find a system that didn't benefit at all from at least one of these switches performance-wise, so test them out!

WideScreenSupport

New in the third official update:

-px -py

To have any effect x must be greater than 1024 and y must be greater than 768. If values less than or equal to px=1024 and py=768 are used the original values of 1024 and 768 will be substituted.

Spanning mode is not supported and user should ensure that both the video adapter and monitor support the px and py values.

We were unable to test on all possible monitor combinations, if you experience issues you should immediately remove the -px -py from your command line switches to revert to standard display behavior.

Examples:

-f -px1920 -py1200 for a 1920x1200 monitor in full screen mode

-w -px1680 -py1050 for windowed mode, so that the window is within desktop

OtherSwitches

- colorBlind : Support for color blindness
- deepColor : Enables 32 bit color, intended for Full Screen mode
- altFont : Enables alternate in-game font (Lucida Sans Unicode)
- w : Windowed mode
- wd : Windowed mode, daily autosaves
- ww : Windowed mode, weekly autosaves
- fd : Full screen, daily autosaves
- fw : Full screen, weekly autosaves
- r : Show Roads
- autosave : Daily autosave
- archive : Put data reports in archive directory
- skipVideo : Skip the intro video when starting the game
- fixedArt : Will not use rotating images

ChangeHistory:

V1.01.27– 05 March 2022 (Game version shown as 1.8.11.27)

1. **Ninth Update** – This release is a comprehensive release updating all previous versions to v1.01.27
2. **Code Changes**
 1. Naval support not present at 0(0) port once port is built up
 2. Another underway ammo replenishment issue if AE unable to reload the biggest weapon on ship
 3. Drawing ship a/c from pool at base uses replacement group if nearby
 4. Tweak what is an 'instructor' for TRACOM purposes and allow casualties to them

5. Tweak group training mission not getting many op losses for low experience pilots (increased fatigue of low experienced pilots and aircraft)
6. Aircraft upgrading to blank airframe
7. Mines not removed from ships in non-ML taskforce
8. Repair/maint of seaplane not expending supply (1 point per plane from tender supply if more than seaplane support at base). Exceeding support did expend normal supply.
9. Added confirmation to 'Disband TF' button

V1.01.26– 17 September 2016 (Game version shown as 1.8.11.26b)

1. **Eighth Update** – This release is a comprehensive release updating all previous versions to v1.01.26
2. **Code Changes**
 1. Air attacks against TF with many small craft improved as game tended to go after only one of them.
 2. City attack target selection assumed max TF speed of CV for target selection. Changed to use cruise TF speed.
 3. Correct hex control value if hexside is not truly 'blocked'
 4. Fix offmap TF moving onmap without correct setting. Resulted in TF move direct to onmap hex
 5. Fix rare case where the highest TF# was not allowed to form new TFs when alone in hex
 6. Fix case where 'surrounded' units disappearing without VPs
 7. Fix 'surrounded' units having disabled devices doubled each time checked (and then above bug kicked in and it disappeared)
 8. Fix case where leading TF going off map resets destination of following ones
 9. Changed CS-capable TF to 'Human->CS:' for control; speed remains as original TF
 10. Fix case where same hex patrol not using endurance (randomise expenditure)
 11. Tweaked ship repair screen; '\$'/'%' after days indicate refit after repairs
 12. Fix issue with getting reserve planes from pool; reserves can only draw up to their limit
 13. Tweaked group screen to add 2 manual replacement methods
 14. Tweaked fire damage on ships with fuel cargo
 15. Add back button to database aircraft and ship list
 16. Fix ship repair screen that used ARD in calculations for all repair modes
 17. Fix factory change on base capture by 'occupation'
 18. Changed unit TOE not to upgrade if unit upgrade is OFF (more control)
 19. Add TOE name so as to the show on some TOE screens
 20. Fix 'major repair by large port' setting when only one major type available
 21. Add ops message when ARD being used for repairs
 22. Fix level bomber and breakdown type toggles for base and list
 23. Tweak repair logic for repair ship usage (don't select AR/D if it can't be used by ship – it could be marked as used when not really)
 24. Fix some columns not sorting in aircraft data list
 25. Fix display of a/c in convoy LCU on reinforcement screen
 26. Fix loss of national base on reinforcement screen (was defaulting to Aden*)
 27. Tweak for reinforcement screen, filter out units with no arrival base by default
 28. Tweak AI forces when routing thru off-map bases; some extreme end-game conditions
 29. Fix fuel check to ignore base with no fuel in hex (base in hex stops distribution of fuel in TF; assumes base to supply)
 30. Tweak to allow refuel in TF if tankers present even if below safe endurance level
 31. Fix case where TF endurance may be 0 causing TF not to refuel other ships present

32. Tweak to force ships with no fuel to try to get some from TF
33. Fix sub transport not always loading supply; these subs should lose some ammo when taking on supply (subs with dedicated cargo space are exempt)
34. Fix AI supply distribution in Japan; ownership of bases being sent to not correctly check
35. Tweak exclude CVTF with no attack groups from closing with enemy CVTF
36. Tweak DL on enemy CVTF to be 3+ to trigger CV reaction; was non-zero DL
37. Fix CVTF reported reacting to enemy CVTF more than once per phase
38. Fix the overflow in base list due to unexpected AV
39. Fix to show max torpedo in air hq if not a fragment
40. Fix where tf mission can be wrongly changed due to incorrect ship count in TF
41. Fix plane upgrade at national base not checking base supply level
42. Tweak to use number of attack planes rather than groups for CV closure
43. Fix position in aircraft database list not being restored
44. Tweak speed run-in to be consistent for missions where mission speed is set
45. Change to randomize the ship experience due to firing flak, with distinct between combat and non-combat surface ships
 46. Fix for only ships actually firing AAA count to count towards experience
 47. [allow AI to use replenish air groups on land]
 48. Fix for ports with no potential to show 0 naval support/ shore parties
 49. Fix to show balloon hit message in night phase air phase
 50. Fix to ensure sub-units' parent is not inactive (no parent is active while subunits in play)
 51. Tweak Minelay mission does not lay mines at home destination if withdrawing after combat
 52. Tweak Escort TF with minelayers defaults to 'do not lay mines'
 53. Tweak Don't override ESCORT mission of human TF if in a friendly base
 54. Tweak Don't auto load mines unless in MINE mission (limited device pool can be drained)
 55. Fix underway replenishment not working if total rearm cost too big
 56. Fix fort construction incrementing when viewing base (build 99%+). Handle 100% in normal construction
 57. Fix mark ship loading complete when supplies exceed capacity
 58. Fix unloading rate from amphib TF in docked ports

V1.01.24– December 25, 2014 (Game version shown as 1.7.11.24)

1. **Seventh Update** – This release is a comprehensive release updating all previous versions to v1.01.24
2. **Code Changes**
 - Fixed**
 58. Display of AF/Port icon between player saves based on player's intel
 59. Return mines loaded on ship to pool when ship is upgraded. Otherwise, they are lost when weapon list updated
 60. Reported cargo/troop safety values incorrect when no cargo/troop space
 61. Allow smaller 'reserve' space for small groups on ships
 62. Preserve some more data when swapping fragment and parent to prevent lost of parent
 63. Correct attacking plane count before final post-air combat
 64. Pilot promotion may have occurred in error sometimes
 65. Raid detect message sometimes dropped of the combat report
 66. Some TFs did not auto-refuel when at base. TF with Support ships loaded with supply generally
 67. Some pilot-leader connections were being corrupted

68. Movement bug with following units due to incorrect move indicator. Seems to fix a few other move issues due to the incorrect indicator
69. Wrong ship sometimes reported in Ops report for TF movement which causes some damage
70. Escorts being assigned to auto-convoy TFs when not in the AC ship pool
71. Status (static,restricted,etc) filter of ground reinforcement/withdraw not working with the date sort
72. ASW groups not allowed to attack sometimes
73. Fragment size not set sometimes at time of the fragment/parent swap. This was causing HQ/LCU to jump to reinforcement queue
74. Bug in bomber intercept if too many rounds of fighter v fighter combat
75. Required Aviation Support is NOT capped at 250 for the human player. This was removed at start of AE but crept back in sometime during updates
76. Removed the fragment/parent swap during a TF unload as it could often orphan the fragment.

77. Clear patrol levels if the patrol levels are not valid after a aircraft upgrade
78. Additional victory conditions for post 44/45 apply only to game-time of over 3 years (ie not short scenario). This was fixed in a previous patch but only for one of the VCs, not the full set
79. Certain sequence of actions allowed enemy LCUs to be visible at enemy base
80. Enabled 'z' to speed up all animations; was commented out in a few animation replays
81. Bug caused F/FB to sometimes bomb at low altitude
82. Aircraft factory upgrade not always happening on time resulting in short span upgrades not occurring properly.
83. Bug in Industry 'failed' indication not showing properly sometimes
84. Location check at scenario load to include small map scenarios
85. Bug in air supply to fragments in a non-friendly base hex
86. Using way-points defeats some TF missions (eg bombardment) as the TF destination was being set to homebase before execution of the mission – ie was returning to base immediately
87. Error in Strategic map display
88. Additional and stockpile options were not turned off when base was captured
89. Correct LCUs that were being changed to a base (type 6) resulting in 2 bases showing on mouse over
90. Army experience being gained when not 100% prepared as per manual; changed to allow chance to gain experience if >75% prepare and < 50% national exp level
91. Army experience being gain while unit was not on map or was in a ship. Fix 33 added to alleviate the incorrect experience gaining happening while in reinforcement queue
92. Increased road path when using STRATEGIC_MOVE to allow unit to remain on RR – caused unit to jump “off-rail” and move overland
93. Captured base sometimes set to a incorrect HQ if LCU had a bad HQ
94. Excessive accident messages on unload from TF reported
95. Reworked editor sub-unit merging as some devices could drop off the unit list when merged causing smaller size unit than expected
96. Corrected possible TOE error in scenario data load for inactive units
97. Air transport by seaplane to enemy bases was being allowed; a commando type unit can however be allowed to do this.
98. Possible CTD if sinking ship's load was a group
99. Limit the number of devices built from resources per unit during LCU replacements; this was causing an over production for that turn
100. Retain day/night setting when creating group fragments
101. Adjusted supply and fuel values in base list not to overrun the space
102. CT_APc removed from Minesweeping TF; CT_AM removed from Local Sweeping TF, but added YMS to Sweep TF in line with manual and code
103. Auto-rebuild (1/3 of TOE) of Chinese ground unit devices is limited to Squad types as the rule relates to the abundance of manpower and is not covered by replacement pool. Normal rebuilding of destroyed units is not affected by this.
104. Carrier capable and trained text not showing together on Group screen
105. Handle any blank re-name changes by ignoring them
106. Possible CTD when air fragments combine
107. Unloading TF can freeze a LCU onto a ship under some conditions
108. AI not behaving if main HQs missing (affects small map mainly)
109. AI using AGC for normal land units – removed from TF if not needed
110. Soviet activation message not in Ops report

111. Correct off/on-map movement of LCU - not always behaving correctly due to the hex range
112. Clear Soviet air balance if not activated. Possible incorrect base switching
113. Sub attack against docked TF not happening for port size <3
114. Unit type changing unexpectedly
115. Torpedo replacement on plane sometimes is missed
116. Double handling of overstacked supply requirements
117. Fixed alternate weapons for port attacks
118. Corrected weapon system damage to show after combat on ships in port rather than wait till sometime in the ship repair cycle.
119. Ship tonnage over 32K could cause repairs to fail
120. Display message for group on ship could cause crash
121. Allow upgrade of group when "withdraw" is off
122. Patrol sub TF doesn't return to base if it doesn't have home base
123. Setting TF name to max 25 characters wiped out TF
124. Corrected display of some weapons in a/c display
125. "Set Objective" will allow some prepare points to remain based on unit experience
126. Check torpedo supply available before deciding alternate torpedo load
127. Allow ship-based groups to draw reserve upto 3
128. Some display issues with weapon filters and missions for aircraft data
129. Issue where a weapon slot having multiple filters could lose some weapons
130. Forming TF in from base showed incorrect TF
131. Zero length TF name caused corruption to name
132. TF icon could show wrong side if TF from each side present
133. Parent LCU swapping not always working if fragment off-map
134. Error in rebuilding of editor sub-units not clearing original parent device numbers first
135. Split groups sometimes not counted as one for overloaded AF check
136. Burma Road not open if Rangoon is captured
137. Para unit not moving by seaplane
138. Partial weapon load not kicking in if ops needed exceeded ship's ops level and ammo load exceeded 1000
139. Fixed discrepancy in base AV on some lists
140. Protect against fragments being linked to other fragments for LCUs (as in un/loading on transports). Can lead to loss of ability to merge with unit's parent.
141. ASW combat could result against 'phantom' TF when one TF had been eliminated in an earlier combat round
142. Fixed groups could fly too far if escorting transports
143. Single plane filling of group not counting previous clicks.
144. Non-port base trying to build port (type = primary AF is NOT a port)
145. Fixed non-base disbanding of LCUs
146. Fixed transfer name box for veteran pilots missing
147. Overfilled TOE of LCU could lose a number of devices when device upgraded
148. Corrected device upgrade sometimes skipping an upgrade
149. Disabled devices not being carried forward for reinforcements when Japanese production is on
150. Restricted filter on Unit list for 'change all on list ..' not working
151. Don't show TF to enemy player (in case it happens)
152. Troop/supply can unload from TF at an enemy 'dot' base, but once base captured, unloading is almost impossible. Treat 'dot' base as no base for unloading purposes

153. AI swapping aircraft to different nationalities on reinforcement
154. Pilot training HI expenditure was not set in some cases
155. Strategic movement type not carried to 'set all follow/march' units
156. Missing '*' next to AA on class upgrade display
157. Disbanding VS group when not returning wasn't merged
158. New scenario LCU move direction not always correct
159. Writeoff any active ships that are in enemy port base. Possible bug if ship repairing when base captured
160. CV groups should retain resize capability when moved back to ship. In general, any ship-based group which is carrier trained can be resized.
161. Possible overflow error when build list of ships
162. Change direction when set for direct move. Added description to March Direction on screen to help identify when direct move is set
163. Devices in TOE of less than 3 could cause subunits not to rebuild
164. TF destination (unload at) not allowing some TFs to return home
165. Direct move fix last patch broke scenario start move setup
166. Missing seaplane expenditure on repair attempts
167. Correct TF patrol issue when no destination hex
168. Bug in activating barge that could disband random TF (DCB)
169. Aligned unit type and suffix to correct 'strangeness'
170. Low endurance ships not always using fuel for small moves
171. Some ships with system damage excluded from autobuild TFs
172. Some liquid capacity not used on xAK type ships
173. Stop multiple combats where more than 500 units in a stack
174. Fixed LCU device repair bug
175. Setting same destination won't clear march distance
176. City attack not allowing 'cities' and 'ports' to be bombed. Just the first type found.
177. Made emergency mobilization forces arrive as delay 1 so get correctly setup
178. Moving units try to build non-base forts (using supply) which are zero'ed - wasted supply
179. Ignore empty convoys when checking for arrivals
180. Issue with '0' AV units continually retreating in combat
181. Adjust ship fuel after upgrade/conversion by adjusting ship/base fuel levels
182. Catered for only 2 ships in TF that becomes crippled
183. Flak factor could be randomly reduced when checking TF flak numbers
184. Flak calculation incorrect for land units
185. Ship-based groups could fly with torp if no torpedo slot on ship
186. Enemy base damage impacting ability to use paratroops
187. Tweaked Isolated units without supply can lose more devices
188. Fixed Retain extra data from fragment when parent restored from fragment
189. Fixed Auto-base capture not kicking in if non-combat friendly unit present
190. Fixed Group upgrade not performed if ANY fragment present on or off-map
191. Fixed retreat test for isolated units in supply phase
192. Protected use of 'unload at' destination when no destination is present that could cause TF to run off to some other destination
193. Correct display of port building % - out by factor of 10 on display
194. Port/AF attack only against bases
195. Correct barge rebuilding due to 1123n
196. Units could retreat from combat without triggering pursuit
197. CAP range not accounted for when flying with DTs in transport intercept

198. Show '0' port if ships sighted
199. Ships unable to repair should be able to go to crew-repairs (as long as no other limits)
200. AI issue with resource movement by TF
201. Port refuelling when lowest endurance ship in TF doesn't need fuel
202. Ships in port with full fuel should have full endurance
203. Fix AI over-diverting TFs to top off fuel (courtesy of Don)
204. Unloading unit attack mode not correct in some shock attacks
205. If base in hex belonged to enemy, the LCU display would still show some 'base' info (eg supply)
206. Damaged planes in reserve could interfere with normal plane repairs
207. LBA flying from small AFs sometimes
208. Setting patrol boundary could set destination on random TF.
209. Some errors in ship transfers due to tonnage limits
210. Error in setting Ground Reinforcements globally off by menu option
211. Cleared destination data on parent unit when rebuilding
212. Auto rebuilt Chinese squads are not affect by randomization. Other devices may have some randomly disrupted rather than lose the devices due to the randomization
213. Stop in-game update from wiping pilot HI cost
214. Forming TF in base with large ships does not undock TF.
215. Corrected replacement delay when rebuilding split air groups.
216. Tender causing resource TF not to finish loading
217. Fixed Potential to only service 150 mines if more than one ACM present
218. Fixed altitude reporting error when altitude less than 6000'.
219. Normally non-trained carrier group on a ship wont take replacements. Docked ship (in port >2 or in TF docked) should allow this.
220. Pilot losses caused be bombs (as in bombardments) to pilots was adjusting the Allied counts and not Japaense ones.

New

1. Show Port re-arm level on ship list screens at base. Does not account for tenders, just the port
2. On ship display, class ammo level will be in GREEN if weapon can be reloaded at base. Tenders not counted
3. When showing mine device on ship, show '!' next to mine ammo if can reload at base
4. Ability to transfer ship in TF screen directly (disband) to the base in the hex. Quick method to remove damaged ships from TF
5. New filter for "non-building" devices in Industry pool screen
6. New filter for "non-building" aircraft in Air Replacement pool screen
7. On base list, an indicator is shown next to port value if any friendly mines (*) or enemy mines (^) detected
8. New symbol setting of 19 for Commando/raider type unit. If there are extra icons in the 'button6..' image files, then these will be shown. If not, by default there are shown as standard parachute unit icons
9. Air/port damage and building is shown in base mouse over
10. On base list, an indicate 'b' is shown next to port/af that have building turned on
11. TF can be routed to stay within coastal hexes as much as possible
12. On Top Pilot screen show the 'ace' cut-off value if more than 1
13. Added option on group and LCU reinforcement screen to turn off replacements if game originally started with global replacements ON.

14. Current base can get supply returned to it when reserve planes returned which were originally supplied from another base
15. Unit type filter on Troop Loading screen
16. Report killed ground units if not in combat report
17. "In port" and "In TF" filters for forming/transferring new TFs
18. Set all ships to current repair mode in base Repair screen
19. Add a cargo factor for the 3-day supply when showing Amphib TF for troop loading. Removed additional cargo factor (x4) but kept 3-day supply when showing Amphib TF for troop loading
20. Extended class name to some of the screens that have a mouse-over on the ship name.
21. Show Electronics data in in-game database view
22. Ability to change combat/strat mode in Load TF screen
23. Indicate moving unit on Location column mouse-over on army unit list
24. Show Upgrade and Replacement option by LCU on army unit list
25. Added message when LCU can't march directly to a hex
26. Added ability to return supply-driven ships to the pool from ship list screen. Slight menu alignment changes.
27. Added reinforcement numbers for small craft to show as (x/y), where x is normal delay and y is delayed but built (no additional building costs)

Changed

1. AF of 8+ have AV support doubled for purposes of determining support for air operations (complements fix 18 above)
2. Permanently increased pilot array to 70K
3. Increased number of air combat rounds are a factor of total aircraft involved
4. Allowed submap to submap movement if land connected for land units. Should have been so as per Andrew Brown
5. Restored the 'space' key operation for AI games. Added Cntl-Z to act as the quick message delay toggle instead
6. Aircraft being grounded for maintenance factors in durability also. This will spread out the maintenance a bit more
7. Support device replacements won't decrease the overall experience of LCU units. This does not alter the overall EXP change due when any replacements are received.
8. For symbol type 19, the unit acts as if a parachute type. There should be a distinction between the two but could break current games.
9. Some LCU Prep points may be retained if unit is experienced
10. Treating planes under maintenance as Reserves when calculating planes on ship if group is at maximum size
11. Added DT_ASW to aircraft weapon display (can still be used as weapon, but not shown on screen)
12. Cancelling from 'Form new TF' will return to original TF rather than close the TF screen
13. Only allow a/c weapon upgrade if profiling on to protect incorrect data in old scenarios
14. Removed group type of CHUTAI from small unit check for overloaded AF check
15. Added any group with maximum size of <9 as small unit for overloaded AF check
16. Allow disabled planes in withdrawing groups to go to pool if base in mainland USA or Japan, rather than treated as losses
17. Mission run-in speed change. In some cases, TF can switch to mission speed for quick move in a phase (bombardment, near destination). The check for the distance to destination

was based solely on max phase move (ie 12 hex) not the actual mission speed. The check has been changed to use the mission speed rather than the max 12 hex.

18. Increased effect of same air hq and group leader (and removed raid leader affect) on raid coordination
19. Removed 'torpedo failed' message when no hits made by sub
20. Land based flak influenced by device's 'accuracy' value inline with naval flak
21. Split LCU Upgrade from Replacement so both can be used independently
22. Allow Crippled (ESCORT) TF to auto-disband into port once it reaches its Home base
23. Auto-disbanded Escort TF with heavy damage (>50 float or >70 system) in port 3+ go into Pierside repair
24. Adjusted air filter to right justify in order stop overruns on wide font
25. Suppressed build rate if device has to be built from production/resources
26. Restored original code that allowed LI,REF to produce when enemy LUC in hex
27. Partially restore original code that allowed HI to produce, but only if no enemy LCU or for port >3, no enemy TF in hex
28. Restored original downgrading of device for arriving Japanese LCU if unable to fully satisfy from pool before dropping by 75% (production on)
29. Allow overdue ship groups to withdraw from ship in base hex rather than move ashore
30. Tweak TF transfer screen for ships in TF
31. Allow carrier based groups to pick out of range city attack. Inline with port/af attack
32. Show on LCU screen if enemy in next hex and/or crossing river in movement
33. Check for enemy in hex only when moving into hex, allow move if own base present, or moving unit stronger than enemy AV, or no enemy combat units, or friendly combat units present – was interfering with AI
34. Reverse base checking order for supply movement every 3rd turn. High numbered bases sometimes missed out on supply if in a nest of low numbered bases.
35. Allow AI to return to the supply pool some small ships. This also corrects the player returning small ships to the pool and having to pay Shipyard building points again.
36. Upgrading ships with any cargo will attempt to offload it while in port (ie not part of TF) so can start upgrade.
37. Units with static squad/engineer devices can't retreat. This is inline with the design but did not work if there were none left in the unit.
38. Re-arranged air transport intercept for messages
39. Naval bombardment sometimes stopped short range ships from firing if longer range ones present
40. Changed Allow inactive pilots to be selected if group 100% training
41. Maxed out ship ops on refueling
42. Add right-click to 'Refuel ships in list' for ammo rather than fuel
43. Replenish from port with 'no refuel option' will attempt to replenish ammo only
44. Global replacement OFF now includes upgrades for reinforcements
45. Mark as “loaded” for ships that cannot load troops in Fast Transport TF – was stopping load process from ending
46. LCU don't start to move until unpacked (use to be that this only applied to units starting a STRATEGIC_MOVE)
47. Limit return fire from LCU in defend/bombard stance when being bombarded only.
48. Add option to activate pilots in a group
49. Modified ACM to use the ship's endurance/fuel rather than port fuel
50. Undocked TF in home base was not expending any endurance, although it does in a non-home base. Such TFs will randomly expend a small amount of endurance.

51. Added air groups filter to loading TF screen, and made items not selectable if filter is off
52. When checking for low ASW ammo, ignore ships with NO ASW weapons as distinct from having no ammo available.
53. Handle case where top HQ is also a Command Hq attached to another Command Hq. Not really expected.

Notes

1. The main HQs (slots 1-27 and 100-134 for Japanese and Allied respectively) in a scenario should not change player or HQ, even if not in play. These original HQs are used by the AI routines so changing or deleting them can put the AI off. Changing other elements should be okay.

2. Clarification to weapon filters for aircraft:

PM_CITY_ATTACK	1	// used for city attacks
PM_NAVAL_ATTACK	2	// used for naval attacks
PM_NAVAL_ATTACK2	4	// alternate for naval attack (like torp replacement)
PM_LAND_ATTACK	8	// used for land (ground) attack
PM_PORT_ATTACK	16	// used for port attack
PM_AF_ATTACK	32	// used for AF attack
PM_ASW_ATTACK	64	// used for ASW attack

Dropped any reference to secondary values for land and AF as they served no special use.

3. New symbol 19 (Commando/raider) was added in build 1112. This acts like symbol 13 in games started before 1123.

In newer games, parachute symbol (13) units can drop from planes, and commando symbol (19) units can be moved by submarine. Both types can be moved by seaplane to an enemy base.

If there is no specific art for units with symbol 19, then it defaults to the symbol 13 art. The art is in "Button6_AUS.bmp" files; the next block at the end of current file.

Clarification changes

1. Some clarification and changes in regard to use of the Soviet Motherland bases. These bases are those defined as having an original Soviet hex ownership of SOV_UNION (90), MONGOLIA(91) or TANNU_TUVA(92).
 - a. Allied non-Soviet groups can't transfer to Soviet Motherland bases
 - b. Allied non-Soviet LCUs can't move into Soviet Motherland hexes
 - c. Allied non-Soviet LCUs can be landed by ship or air at Soviet Motherland bases after Soviets are activated, but can't move
 - d. Allied non-Soviet TFs or ships can't replenish from Soviet Motherland ports, even if disbanded in port.
 - e. Allied merchant ships assigned to Soviet Hqs will become Soviet ships permanently
 - f. Re-assigning base command of Soviet Motherland bases needs to also be Soviet

V1.01. 08r9 – January 21, 2012

1. **Sixth Official Update** – This release is a comprehensive release updating all previous versions to v1.01.08r9
2. **Code Changes**
 - Fixed**

1. Possible LCU or Task Force being lost if not set-up properly at scenario start.
2. Travel delay for East Coast and off-map movement for group leaders.
3. Fragment disbanding when loaded on ship.
4. Refuelling of barges from carried fuel cargo.
5. Changing TF mission not checking TF size
6. Changing of group arrival base at scenario start due to initial base ownership, rather than who owns base when the group is due to arrive.
7. Ships in lists were refuelled when viewing the list on screen.
8. Empty group showing after group transfer from ship.
9. Event on a non-base hex appeared as a base.
10. Over-flow issue with 'fuel required' at a base.
11. Background screen of a larger underlying screen was left behind when a smaller screen was shown and map was moved.(base screen on industry management screen)
12. Showing enemy unit count in a non-detected hex.
13. Soviet activation being on at start of scenario was not allowing Japanese air attacks against Soviet locations.
14. Error in TF list screen for guns' ammo.
15. Aerial mine-laying mission being left out of the bomber interception check.
16. Error in unescorted bomber withdraw alert.
17. Ship-based groups in port or on docked TF being able to be transferred from damaged ships.
18. Attack bomber not being set to strafe correctly sometimes.
19. Extended the save game load checks to include checking the fuel/oil/resource/supply load does not exceed ship capacity.
20. Recon/search flights were being shown with escort/sweeps in same hex.
21. Supply/fuel/oil/resource totals didn't always agree across various screens.
22. Secondary Chinese home base incorrect - was CHENGTING should have been CHENGTU
23. Zone to zone movement when a direct connection is not available (off-map boxes to Aden/Abadan prior to Med opening)
24. Added protection to stop connecting invalid destination zones that leads to above.
25. ARD repair not working correctly
26. Auto dock being allowed at port 0-2; should not be.
27. Error that could stop Heavy bombers from picking a base to attack
28. ASW experience sometimes incorrectly modified in sub combat.
29. Defensive subs not working properly
30. Subs might not upgrade due to patrols.
31. Fixed a follow TF error.

32. Ship repair estimate error.
33. Radar detection for land units being overridden by 'visual' spotting.
34. Weather setting for non-base LCUs not being correctly set for all units in the same hex.
35. Suppress restoration of the Combat Event report in PBEM games due to Japanese info being available to Allied player
36. Airborne radar impact on Air Search lost.
37. Search arcs being generated in reverse sequence.
38. Wrong pilot losing skill points (for flying wrong type of plane) when transferred to Pilot Reserve on the 'Request Veteran' screen.
39. Change to protect AI from generating errors from bad data in scenario file.
40. Top Pilot list treated TRACOM as if a Japanese group.
41. Underflow issue with large naval support numbers.
42. Amphibious HQ not always loading on AGC. If no Amphibious HQ, then a land or naval HQ will try to load on the AGC.
43. Loading groups not showing up in the load lists on 'Load Troops' screen.
44. Swapping of fragment and parent was not transferring some items.
45. Transport of devices by non-float planes to dot base (no AF) not being allowed.
46. Plane fatigue not being restored by standing down CV groups.
47. CTD when withdrawing ship at a non-base off-map location.
48. Sub mine numbers not always being cleared when tube/mines are removed when not in a port
49. Units in wrong mode for Amphibious TF. Ensure only correct mode units loaded
50. Group fragments on ships not combining.
51. Escorts changing to bombing mission if its' secondary was a bombing one.
52. CTD caused by search plane being killed.
53. Fix to not allow component LCU to be rebuilt if parent already reformed.
54. Fix to flak from ships in port being used as if in a TF.
55. Fix to suppress groups that have been lost due to a ship class change.
56. Fix to not auto-disband TF with routing parameters.
57. TFs getting stuck in off-map mode.
58. Industry Management screen showing incorrect N/MSY build points.
59. Withdraw ship button missing on ship screen.
60. Rebuilt LCUs changing PP on subsequent displays.
61. 'Buy with supply' ships remaining at 1 day delay.
62. Error in Kamikaze determination in Flak Attack.
63. Kamikaze training not affecting low naval bombing.
64. Transfer of pilot to group of different type lost too many skill points.

65. Fix to remove ships under repair/conversion from AV support total.
66. No ground attack against enemy land units in friendly base hex.
67. Fix to allow float planes to transport troops to coastal bases.
68. Arriving LCU units were building more than needed devices if not enough in device pool.
69. Wrong Allied device being returned to pool on device upgrade.
70. Altitude not correct on some dive bomber attacks in AAA.
71. Auto convoy returning resource/oil to home base when not required to.
72. CTD when checking groups on withdrawing ships.
73. Packing time and operational mode moved to editor components of parent LCU.
74. Leader of delayed group being continually re-assigned.
75. First HQ of either side not being selected.
76. Fix to stop return cargo for CS or AC when home base and current base are the same.
77. Set TF to use off-map if destination is off-map and TF not moving off-map.
78. Fix to force ships to arrive at national base if original location is not valid to form TF; stop ships arriving at 'land-locked' base.
79. Fix for non-mine device being in special mine slot [#9] for sub mine-laying.
80. Fix to group leader-pilot losing connection to a being a pilot.
81. Fix to Occupying empty bases gets incorrect HQ. New HQ will be the theatre HQ of base doing capture, or first LCU in hex.
82. Japanese production was over-producing upgraded devices for LCUs.
83. Sub-unit LCUs not having the withdrawal delay decremented.
84. Updated off-map checks for home base.
85. Fixed data corruption due to code overflow.
86. Not all TRACOM pilots showed in lists.
87. Retreat from TF surface combat only if actual combat occurred.
88. AI code changing human-controlled LCU weapon devices.
89. Empty fragments stop editor sub-units from recombining.
90. Some leaders that moved between units retained their move lock-out so didn't show in free leader list.
91. Group's upgrade path lost on splitting group.
92. Fix to recombining devices of editor component subunit to handle mismatched devices.
93. Add production resources to pool if scenario player's production on, else add to normal device pools.
94. Preserve highest leader when recombining subunits.
95. In loading scenario, pilots not added to General Reserve (group 0). (Pilots can't be put directly into TRACOM by editor, as group 30000 can't be assigned there. It can set by using 'wtiploadae' tool.)
96. Using off-map movement, it was possible to route TFs with large ships to river ports.

97. On-map TF hex list behaves like other TF hex lists
98. TOE upgrades happening too soon due to the upgrade delay being set to 9999 which ended up as no delay.(Existing games not affected but new games will not have these TOE upgrades)
99. Detached groups wouldn't re-attach to parent group.
100. Loop in upgrade of LCU devices.
101. Error in limiting CD fire.
102. Occasional drop out of base selection, disappearance of mouse over.
103. Building VM units corrupted TOE of GHQ and Kwantung HQ.
104. Old convoy units could show up in Destroyed LCU list.
105. Fix to LCU withdraw date not being cleared when unit killed; fixed so that destroyed LCUs can't be reformed if originally due to withdraw.
106. Build rate of supply-generated ships was '0'; should have been '1'.
107. Disbanded LCUs don't count for rebuild check.
108. Auto-upgrade of squad/engineer devices when LCU takes upgrades; incorrectly changed earlier in beta.
109. Error in initial settings of manpower at start of scenario
110. Seaplane support from minor damaged disbanded ship.
111. Administration stacking info on group screen not correct.
112. Return CS cargo of fuel or supply didn't always get returned. Expected only oil or resources being returned. TF could stay loading/waiting.
113. Naval retreat after combat which could force TF to retreat "off-map"
114. TFs not moving in hex subject to minefields; seemed to have been broken by an earlier fix.
115. Wrong screen show when returning BACK from Group screen to groups-in-base list screen.
116. Error in MP and ARM points for some squad-type devices.
117. Not all devices being shown in the device/industry/resource pool.
118. Air group detachments not on map dropped from parent group.
119. Trainee replacement pool not being reduced.
120. Missing devices from Japan pool when device is upgraded and more are needed to be built.
121. Moonlight and Turn were mixed together on top line of some screens.
122. Mines were not being removed from sub properly if TF wasn't docked.
123. Wrong altitude being used sometimes, impacting raid, co-ordination and low level intercepts.
124. Lock-up during air/land combat due to overflow.
125. Carry over replacement delay on LCU recombining.
126. Error in movement of fuel and determination of excess resources.
127. Auto-upgrade of squad devices when LCU taking replacements causes an upgrade.

128. Fragments were taking settings from the parent group, rather than group being created from.
129. AA rockets not showing up in some of the class/ship weapon lists.
130. Unable to get plane replacement on smaller groups.
131. Some reported altitudes are 100' off the correct value.
132. Large LCU killed off due to overflow issue.
133. Display issue with ship reinforce screen
134. Escorts not being marked as used in some cases causing multiple sweeps.
135. Strategic move set while packing caused move of only one hex.
136. Dedicated training group lost ability to add trainee pilots.
137. A LCU movement flag was not always being cleared which could cause a move to suddenly be cancelled.
138. Additional place list sort when loading a save to correct map errors.
139. Reordered the map place display list to restore possible missing LCUs.
140. Converted too many old devices from pool.
141. TOE upgrades could lose devices as counts were sometimes replaced, rather than added.
142. On turn 1, a mid-turn Allied save can be read by Japan by skipping the password. Only applicable on that one save.
143. Carrier trained status not transferred when recombining split groups.
144. Ship due upgrade count could have a number but nothing in due lists. (Upgrade ship was under repair. Combination of Ships under repair and Ships due upgrade shows those which are being repaired that might jump into an upgrade at same time)
145. Wrong pilot reserve being accessed when no pilots in replacement pool.
146. For TOE upgrade include some non-device items such as Torpedo Ordnance, HQ type/radius change, etc.
147. Missing weapons on in-game ship database.
148. CTD caused by TF endurance going below 0.
149. Low skill pilots could start with high individual skill
150. CTD caused by overflow of refuelling arrays if large number of ships in TFs in same hex.
151. Possible TF unloading issue when no squads are present.
152. Mine-laying mission didn't 'return by same path' if way-points set.
153. Refuelling ship from port didn't check for available ops points
154. Incorrect calculation for number of planes at base; earlier patch bug .
155. Error in calculation of engines for airfield stacking; revealed by previous tweak.
156. Manage repair error for minimum conversions incorrect from 1108p2; not allowing change from Pier-side.
157. Overflow of pilot array corrupting map locations.

158. Radar range on air detection was overstated by a factor of 2 or 3. Wrong mixture of ft, yards, NM, miles.
159. Bug in repair estimates could add random cargo capacity to ships.
160. Don't allow moving LCUs to be loaded on ships
161. Groups at off-map locations (base or TF) not performing Training missions
162. City attack industry not set when flights were split off from main attack.
163. Access to random variable causing combat replay issues
164. Manage ship repairs not showing weapon damage repair capability properly.
165. 'Active' filter not showing green initially for group and reserve pilot lists.
166. Planes with torpedo as primary weapon unable to be selected for port mining.
167. Force a delay on LCU & groups due as reinforcements but arrive early at enemy base
168. Adjust search arcs range for drop tanks if applicable
169. Bug in off-map TF calculation
170. Set 'All opMode' to MOVE changed static units
171. CTD due to too many groups in base
172. Non-transport TF are trying to un/load
173. Added special case of base/shipyard size to weapon repair estimate as in line with actual shipyard repairs
174. Fragment that lost its parent could vanish, rather than stay on map
175. Industry totals on Industry menu
176. Missing search patrol level on night mission
177. Bug not letting land based groups see all plane upgrades
178. Industry Management not expanding (1)x0 size industry
179. Carry over withdraw type to editor subunits
180. Fast Transport not updating cargo/troop capacity in creation of TF screen
181. Auto Convoy TF should retain their Home Base as a supply hub base
182. Auto Convoy TF home base is not supply hub base
183. Error with groups not showing on ships in TF transfer screen
184. Group re-size to consider total planes in group rather than maximum group size when considering operational capacity on ship
185. Force map centre on false sightings to help with map sequencing
186. Restored fully repaired factory needed before R&D starts
187. Removed incorrect DL addition for TF launched air patrols
188. Not all dead group fragments being removed is stopping upgrade, rebuilding, etc.
189. Correct 'from zone' for TF starting at off-map base for way-points
190. 'Aux' overstated on enemy TF mouse over
191. LCU mouse over being cut short for large number of enemy units

192. No planes, no torpedo ordnance available
193. Player's ACS TFs could be re-directed by AI
194. Suppress AR from being operational if AR has any repair delays
195. Mouse over on Pilot List sometimes gave wrong info
196. Retained original delay on LCU if enemy still holds base at scenario start; random delay time could cause unit to return to national base
197. Restored LCU image on small land unit screen (like reinforcements)
198. Allow more ships to show in TF transfer screen
199. Soviet release did not always free Japanese to attack
200. TOE device upgrade not always occurring
201. AI could reassign human TK task force for pickup oil/fuel purposes
202. Base movement of off-map groups overriding restricted HQ check
203. Fixed Industry Management screen not checking if base is active before adding RES and OIL pools; affect small map scenarios
204. Suppress option for Withdraw on Intel Screen if not enabled
205. Some level bomber switches in user upgrades not costing PPs
206. Revamped the ability to keep pilot from being release on the group screen. Corrects rank sort error
207. Army list screen had some overlapping text
208. Expanding of AF showed strange %
209. Player upgrade aircraft showing wrong PPs
210. Repair of Air HQ devices with Replacements denied
211. LCU replacements could cause 'free' upgrade sometimes
212. Low level altitude penalty using wrong altitude
213. Defender pilot not always getting fatigue from high altitude penalty
214. Fatigue on groups at range 0 - error exposed in 1108q9
215. Railway move of groups at heavily damaged AFs not always working
216. LCU not showing on map
217. Expanding '0' factories
218. Possible negative max limit for pilots
219. Sync bug due to AUTO_UPGRADE option test for subs
220. Possible 'anchored ships' screen pops up on group list
221. Off-loading parent LCU sometimes disappeared leaving orphaned fragment
222. Removed limit of non-zero port for repairs - left over from WITP and stops use of repair ships in port 0
223. Arrival ship list sort not working if ship due to arrive in a TF
224. Error in industry menu for yard points - reporting HI need instead

- 225. Air-borne radar not checked in night raid detection; include moon and radar in check
- 226. Air-borne radar not being passed to split-off flights, affects night combat
- 227. Search direction not passed to 'Set all' groups
- 228. Lock scroll box on sunk ship list when showing a ship
- 229. Wrong nationality test on group arrival if no base set resulting in delayed arrival
- 230. NFs don't always have AIR SEARCH radar; assume NF with air radar is SEARCH.
Problem lies with incorrect data for radar device. If NF can have both air and ground radar, then air should be listed after ground radar.
- 231. HQ not swapping with fragment sometimes
- 232. Error in class of re-spawned midget sub
- 233. Auto upgrade of TOE device when LCU upgrade off.
- 234. Misplaced TF icon not matching map location
- 235. Group arriving at a ship still had delay of 1 stopping getting of pilots
- 236. Large number of groups could cause CTD in air attack
- 237. Missing troop level in non-base hex
- 238. Patrol air missions from ships took incorrect endurance from TF - relief CAP increased endurance used
- 239. Retain Escort mission if too many ships in new TF mission - causes issues to some code if wrong number of ships present
- 240. Incorrect TF# used after surface combat (caused sync but wrong ships used endurance)
- 241. Cargo capacity for resources not fully used
- 242. Naval groups on delayed ships shown on lists
- 243. No pilot replacement selection from trainee
- 244. Releasing one veteran pilot causes needed pilot count to go to zero rather than be reduced by one
- 245. CS would not necessarily return to the correct destination when way-points used
- 246. CS not being docked at home base causes confusion for return trip
- 247. LCU leader being lost on landing fragment swap
- 248. Multiple LCU sub-units being in same TF being merged on landing
- 249. Ships building at captured enemy base could be cancelled incorrectly
- 250.** Invasion LCU auto-bombardment exhausting supply. Auto-bombarding based on available supply so LCUs lacking supply wont.

New feature

1. Added plane type filter to Pilot List screens.
2. Added a destroyed LCU screen and ability to reform LCU (at 1% TOE for non-Chinese or 5% for Chinese) using Political Points.
3. Added a Nationality filter to ground reinforcement/withdrawal screens.

4. Added display of the path of a group's upgrades on the user selected upgrade screen; (+) against upgrade indicates the old original group path upgrade.
5. Added an option to retain the user over-ridden group upgrade when manually upgrading only.
6. Added future group size changes to the mouse-over box on group screen.
7. Added option to refuel all ships in port from Anchored Ships list.
8. Added '*' to base name if supplied from the western Allied supply base (on Auto Convoy screen).
9. Added column for fuel required to Auto Convoy screen; '+' next to value indicates ships in port
10. Added ship class filter to ship list (on Auto Convoy screen).
11. Added Endurance and AA to ship (on Auto Convoy screen).
12. Added switch to show Supply/Fuel required or Days Left (on Auto Convoy screen).
13. Added quick ability to change repair/production state from the actual base-in-hex Industry screen.
14. Added quick ability to change repair/production state from the Industry Management screen.
15. Added direction switches on the search arcs.
16. Added to TF mouse-over to show off-map destination details.
17. Added to base mouse-over garrison info if applicable.
18. Added the target prepared for to the Load/Adjust Troops screen to ease LCU selection for amphibious forces.
19. Added new button on base screen to show TFs home-based at the base.
20. Added the current victory level if not a draw to the Intelligence screen.
21. Added filter to show enemy bases on the List Base screen.
22. Added on Army screen: show a '+' next to under-strength devices that are in pool, a '=' next to device if upgrade possible from pool.
23. Added filter for active/inactive ship upgrades on lists.
24. Added mission being trained for on group screen if primary is not TRAINING.
25. Added the group admin & stack data on the hex list screen if applicable, rather than just when overloaded. Overloaded shows in RED.
26. Added number of building 'supply-generated ships' shown on ship reinforcement screen in brackets.
27. Added option to stockpile some devices in the Device Pool. LCUs won't be able to use them for upgrades or replacements.
28. Added '***' to LCU view for weapon not allowing split units to combine.
29. Added option on Save for PBEM to change the player's password. It is only shown when ending the player's turn.
30. Added on load of an email save if it is from in-turn or the end-of-turn.

31. Added to army lists, experience, morale, fatigue, disruption, TOE upgrade delay.
32. Added to ship with mine device, an '*' printed in Ammo column if there are devices in the pool; acts as a quick check if mines could be loaded.
33. Added Total line of LCU details in mouse-over for multi-unit hex.
34. Added ability to stockpile supply, fuel, resource and oil at base. By stockpiling, no other bases can draw off them.
35. Added ability to cancel loading of a CS task-force.
36. Added filter to Industry Menu to show all base industry not meeting minimum requirements - potential failure to produce.
37. Added to LCU Withdraw List: * at end of name means withdrawn unit loses devices; on LCU screen "out of theater" means loses devices.
38. Added Hot-key '5' will show the supply path from the selected base where the number shows the lessening effect of supply. Changed to show the supply path as yellow dots in a PBEM rather than actual supply numbers.
39. Added Auto-conversion option to the in-game preferences. (PBEM assumes on for both players - Japanese player can turn it off/on so it applies for synchronization.)
40. After 6 months, an expired pooled device (squad or engineer type) will slowly convert to the upgraded version; if Japan, obsolete devices will revert to the raw materials.
41. Added message on base screen if Burma Road is open (on Rangoon and Tsuyung)
42. Added: Right-click adds/subtracts 5000 supply from base additional needs.
43. Added: Allied groups can see air upgrades from related nationalities if PDU is on: CW group sees Australian, NZ, Can, Brit; IND group sees Brit; USMC & USN can trade planes.
44. Added Mine count on TF list.
45. Added: 'Get xx pilots' will appear to allow over-fill once group has pilot operational level.
46. Added group or pilot statistics to the group list screen.
47. Added option to release or retire low/high experienced named pilots (1, 5, 10 at a time)
48. New option to load tenders in port from the ship list screen
49. Show speed mode in TF list.
50. Added a "load tender" button to ship screen to complement use of seaplane supply.
51. On Army list screen, 'soft' value of %TOE strength and unit fortification level with 'p' to show unit is building them (LCUs in hex only).
52. Added to Base List screen a stockpiling switch.
53. Added to Base list additional info for enemy base - AF, port, estimated ships and a/c.
54. Added mouse-over on device pool upgrade date with * shows upgrade detail.
55. Added mouse-over on bases/TF/LCUs will show range from the current hex (one with all white sides)
56. Added Upgrade delay to TOE on 'View TOE' mouse over on LCU screen
57. Added Coding of static/restricted group headquarters (like for LCU)
58. Added TF screen shows endurance to target, and back to base

59. Added Additional info to groups in hex mouse-over
60. Added Indicator to LCU type on ground lists for air drop capable units 'p'
61. Added Ship due upgrade time filters to the Ship List screens
62. Added Restriction filter to army lists - filter by [S], [R], (R) or None
63. Added Industry filter to Intel's Resource/Industry screen
64. Added Stacking limit check to army lists - RED location for over-stacked
65. Added Show current stacking level if maximum stack value applies to player on mouse-over
66. Added Political Cost to withdraw group screen
67. Added Option to stop upgrades in LCU
68. Added Stacking limit on top line of game screen if present
69. Added Day/night filter to air group list
70. Added Mouse-over on keep/upgrade factory will show the next air/device and when it is due
71. Added nationality and air type to Destroyed Group screen; revised rebuild costs
72. Added codes to HQs on unit lists(c Corps, y Army, m Amph, n Naval, a Air)
73. Added ability to set combat mode on the Army list screens
74. Added type of HQ, op and combat modes to LCU mouse-over in base panel
75. Added device type filter to the Resource/Industry/Device Pool screen
- 76.** Highlighted the HI Required numbers for Engine and Aircraft Factories as these are shown for a month rather than a turn as with other figures (shows in green)

Changed

1. Removed supply requirement from returning reserve planes to the pool.
2. Removed devices from LCU that don't belong to same side as the LCU during the land replacement phase.
3. Changed base fuel requirement to cover fuel needed to totally refuel disbanded ships.
4. Changed to allow HQ units (below the base slots) to upgrade their devices; only LCU's above the base slots were upgraded.
5. Changed to show any static device in LCU on the army screen, even if none currently present.
6. Changed to the army reinforcement screen to show the LCU arrival base in RED if enemy-held at the time.
7. Changed Auto Convoy to determine supply path based on supplying base location (on Auto Convoy screen).
8. Changed Auto Convoy to skip enemy-held main supply base (on Auto Convoy screen).
9. Changed base screen to use appropriate main supply base (on Auto Convoy screen).
10. Changed to suppress Soviet bases until activated (on Auto Convoy screen).

11. Changed Group patrol levels increase/decrease more consistent across all types with left-click by 10% and right-click by 30%.
12. Changes to group screen: updated group mouse-over, retain target (if appropriate) when swapping between Port/AF/Ground missions, check if within range before changing all in base.
13. Changed night missions on the group lists will show in BLACK to make them easier to find
14. Changed display of search arcs - sectors sharing AM/PM search show as Black (Naval) or White (ASW).
15. Changed switching groups between night/day to try to retain mission if possible for ease of play.
16. Change to remove Cold Zone from off-map bases.
17. Change to add 'destroyed by flak' count to the combat report.
18. Change to offset the original nation hex (from hot-key 4) so it can be read when a base is present.
19. Change to allowed Allies to control their industry as it can be stop/start via Industry Management screen but doesn't show up on base industry screen.
20. Change to indicate 'failed to produce' on base industry screen.
21. Removed ability to send pilot 'home for 180 days' as not desired or useful.
22. Change to minimize size of some text on Industry Management fields.
23. Change to keep at least one R&D point available between updates; protect against R&D being wiped out by data updates.
24. Change to verify ship and class devices match before determining damaged weapons. Force unmatched ship/class devices to conform when ship in friendly base.
25. Show 'combat load' method on LCU when viewing ship screen.
26. Change to not allow off-map TF to return to home base if that is already destination; mucks up the transit times.
27. Change to use the millions format (x.xxM) for large totals on Industry Management screen.
28. Change to restore of report files from save.
29. Change to preserve the withdrawal date on split sub-groups.
30. Change to pilot experience hit based on category rather specific air type.
31. Change to off-map checks to better handle the TF's 'Return to ...' buttons.
32. Changed Re-enabled limited on-map routing for off-map TFs.
33. Removed TF disbanding limit on loaded resource/oil.
34. Changed Night missions on lists using BLUE rather than BLACK.
35. Change to adjusted off-map entry point for way-points.
36. Restored image files for centre windows.
37. Change to vary DL for base created TFs; use same DL for TF split.
38. Changed TOE update to fix land replacements.

39. Change to allow 'independent' commands to change without cost to another
40. Changed Ship display of ARD shows lift capacity.
41. Changed Deferred device upgrade of LCUs with fragments existing; causes errors in devices when swapping to parent or merging with other fragments/parent
42. Changed No TF unloads if 'do not unload' set regardless of status of ship cargo handling.
43. Change to the maximum air rank for group leader.
44. Change to increase ship list from 1000 to 1300 per port/tf .
45. Removed endurance limit on PTs that limited attacks.
46. Change to off-map TF refuelling to use only TFs in same hex with same time to base.
47. Change to the land device upgrade and replacement phases to better control devices.
48. Change to suppress LCU devices that have no TOE number and are not present (ready or disabled, and won't take any replacements) in LCU
49. Changed TF mission change for Amphibious and Transport limited based on transport capacity used, not on troops only.
50. Standardize ship-based group upgrade/replacement when in a base.
51. Change to LCU replacement/upgrade to handle duplicate/out of order devices in LCU.
52. Change to LCU rebuilds requiring same Op Mode and March parameters for all subunits.
53. Removed same march direction restriction from rebuilding LCUs.
54. Change to alignment of some fields on the Aircraft & Engine pool screen.
55. Change to the Save game screen to reflect the correct background as to WHO is saving it.
56. Changed Ships that are still outfitting for more than one day can't be put into TF; one day delay could be put into Escort TF.
57. Group stacking on base with AF 6+ gains a 1/3 lowering of the "Aircraft Stack Level" for 4E planes.
58. Stopping industry lowers base's resource requirement. Several screens showing supply/fuel/oil/resource will be color-coded if being stockpiled.
59. Changed Replaced top 3 skills on group pilot screen with line of skill averages.
60. Change to the location column value on TF list.
61. Tweaked TF list to standardize locations.
62. Allow CW nationality aircraft to be swapped between CW nations (Australia, NZ, Can, and Brit).
63. Changed the 'turret hit' from animation to show what weapon mount it is.
64. Tweak to suppress some 'get pilot' buttons if not applicable.
65. Change to make current TOE upgrade delay show as -1 on LCU list so it can sort.
66. Changed Show upgrade screen defaults to 'allow upgrade ships'.
67. Removed Right-click from group PILOT keyword as PLANES is now on screen.
68. Tweak to message delays - space bar will toggle on/off the general message delay

69. Tweak to mouse over on land units; unit number is in [], and if too many to list, "plus xx more LCUs" will be added to display. Leave room for "Total" line.
70. Change to add more info on mouse over on groups in hex and land/naval list.
71. Change to add ammo levels to the mouse over on the TF-ship transfer screen.
72. Restricted HQ indicator changed from (R) to (R) for temp and [R] for perm attached.
73. Change to add "Tonnage" to map task force mouse over.
74. Default cloud setting to OFF during orders. Can be toggled ON/OFF during this. Last setting applies to turn.
75. Tweak to mouse over with lists; shows withdraw, upgrade dates for ships, LCUs in addition to group.
76. Made 'Attached to' name GREY when unit is STATIC ATTACHED to it; no visible indicator was previously shown.
77. Change to add a nationality filter to device pool screen.
78. Try to preserve target on group transfer between bases
79. Change to group reinforcement/withdraw lists for ship-based groups in queue
80. Change to color-coded R&D devices on the Industry screen
81. Allow R&D factory change before starting production if R&D option ON
82. Production can be turned off but R&D will still happen
83. Show island stacking limit on mouse over
84. On Army screen for HQs show ship/air/ground assigned buttons
85. Suppress Japanese industry icons for Allied player as not relevant
86. Suppressed port icon in lower base panel if not applicable
87. Some screen changes to Manage Repair and Ship List screens
88. On Destroyed LCU screen, show the potential TOE AV if unit has not been rebuilt yet; add filter to suppress 'no recall'
89. Changed (S) to [S] for HQ attachment to indicate permanent to align with [R]
90. TF list pop-up shows more detailed info for 'load' controls when in a base
91. The Restriction filter for (R) will include units attached to Restricted HQ
92. Show next re-size for groups in lists
93. Allow more pilots if group is scheduled to re-size within 6 months
94. Change Group display on ship to show 77 (88) x AIRTYPE (99) where 77 is # ready planes, 88 is # not ready, 99 is group maximum size
95. Tweak Global list button for setting build rates (Japan only)
96. Show naval/merchant yard points on ship availability screen, and allow filter by yard type to set classes using that particular yard points (Japan only)
97. Changed 'Night ops' on group screen to BLUE to match group lists
98. Change to add pool totals on mouse over for a/c and engines on IM
99. Change to add R&D % on mouse over for RD a/c and engines on IM

100. Change to add unit stacking cost on screen
101. Allow restricted groups to be loaded on ships from off-map bases
102. Limit off-map movement of restricted groups by ship to sea-locked base only
103. Skip ACS loading if not at destination base
104. Allow skills for pilot release in addition to Exp
105. Allow option to retain pilot in group list before releasing pilots
106. Allow Army list filters to be passed to Draw Army screen for 'next/prev' army
107. Allow rail move between connected off-map bases (CANADA and EC)
108. Allow off-map movement for '0' ready groups
109. Allow upgrade exchange between FB/LLB/DB at a PP cost - CAS type intermix
110. Added reason for inability to recombine units on OOB org screen
111. Changed Location of Show TOE button on LCU screen
112. Enabled LCU on ship to be seen on 'prev/next' from army list
113. Allow 'prev/next' buttons on LCUs on ships in a TF hex
114. Show group returning info even if withdrawal OFF
115. List base fire damage in player's Ops report
- 116.** Use Manchuko hex ownership to determine garrison instead of 'computer zone'

Tweak

1. Tweaked Auto Convoy supply.
2. Tweaked TF unloading.
3. Tweaked air attacks on small craft (barge, PT, landing craft) to stop large bombers from attacking at high altitude.
4. Tweaked distribution of supplies to units unloading from ships.
5. Tweaked turn cycle from 3 to 4; art contains 1-4 images
6. Standardized skill selection and mission profile for skill improvement; experience generated updates could revert to primary mission
7. Limit the 'On Map Routing' button on the TF screen to the on-map entry hex to minimize TF routing errors
8. Tweaked several pilot screens to retain current menu position when performing pilot assignments.
9. Changed to forming of new TF to pre-set destination. Current base/hex will be the default destination, unless it is formed from another TF when that TF's will be used.
10. Tweaked to allow port mining for AI.
11. Tweaked small map AI supply base to use closest main base with enough supply rather than just the first one. Stops AI from creating supply TF going from one end of map to the other.
12. Tweak to fuel requirements of bases' with HI to force more fuel to be routed there.

13. Tweak to make the attack bomber strafe/bomb more obvious in animation.
14. Tweak to cap the count of the number of landing phases a TF can perform.
15. Changed to resource requirement/stockpile from 5-day to 2-day. Added earlier in patch to help with resource distribution.
16. Change to align weapon and TOE for units before taking replacements.
17. Change to exclude TBs from high dive bombing accuracy.
18. Change to set the base of reformed LCUs that can't arrive as usual location
19. Changed Play news of naval combat only if major combat ships involved
20. Change to adjusted base air stacks during turn due to missions, movement, etc.
21. Tweaked recombine of editor units into parent unit with mismatched weapons.
22. Tweaked to how much excess resource/supply/etc is moved to/from base each turn
23. Change to Naval bombardment to use the minimum range setting of TF when determining best target. If unit can't hit back at range, then "less" chance of being target.
24. Tweaked to AI Auto TF Build to exclude over-sized ships based on destination.
25. Tweaked Lowered excess resource/oil threshold from 10 days to 5 days.
26. Tweak to delete more killed/captured pilots when at pilot maximum limit.
27. Tweaked Moved the combat and ops reports on the screen to the left to allow for longer lines.
28. Tweaked TOE upgrade in order for it to retain any the same weapons even if they have moved slot.
29. Tweak to increase required oil/resource by a fraction of the load capacity of any TFs in hex wanting a load.
30. Tweak so stockpiling resource/oil creates a small 'need' for such.
31. Change to stop ability to overfill fragments.
32. Tweak to LCU rebuilt in order to retain current TOE weapons.
33. Tweak to clear more pilots when at pilot limits
34. Tweaked Air attacks at 10K were not being adjusted for misses when checking each bomb dropped. [A miss after a hit should end the 'stick' or increase the odds of any further bombs in same 'stick' of missing.]
35. Tweak to rebuilding of LCU from editor sub-components that will attempt to upgrade devices in order to match common device.
36. Tweak to disable ability to turn off Light Industry as it is a permanent industry, like resources (per Andrew Brown).
37. Tweaked Computer player TOE upgrades are slightly randomized.
38. Removed Torpedo Ordnance from land unit's TOE/list so that device is not treated as a device; tallies are stored elsewhere so it is redundant once scenario is loaded.(was causing some strange occurrences)
39. Tweak to exclude spoilage on excess supply/fuel at SPS level for bases in first week of scenario.

40. Tweak to randomize unit detection affecting base DL
41. Change to turn on normal message delay at end of turn cycle (except for continuous play).
42. Tweak to move flak attack on air transports to AFTER any CAP intercepts.
43. Change to TF refuelling when a ship in TF is below 70% fuel; just limit refuel to the ship(s) below 70%.
44. Tweak: Added more detail to 'refitting' messages on ships and limited repair changes after a upgrade.
45. Change to seaplane support/supply for search and strike to behave similarly.
46. When ship with no air ordnance left, CAP is limited and no search/ASW can be performed.
47. Tweaked: Inactive pilots (delay = 1) should be treated as if active for fatigue recovery.
48. Don't allow ships without free ops points at start of cycle from replenishing at sea.
49. Changed Cloud drawing during order phase enabled.
50. Removed DB diving attack on ships only; was introduced at start of these patches
51. Changed Made sure group secondary mission gets reset when primary mission changed from NAV_ATTACK.
52. Tweaked Added depth check on DC in ASW combat
53. Tweak to Land combat: Made support devices less likely targets (basically every 10 counts as 1 for target purposes)[Took forever to get hits on combat devices if unit has large support base, like CHI LCUs]
54. Tweak to Land combat: Infantry/Armour/CD LCUs with no current AV are treated like Art for stacking purposes (not made to bear brunt of attack if other AV units present).[Many CHI units end up with much ranged devices but nothing to defend with. But took no loss against the ranged devices in assault]
55. Changed Enabled combat reporting of non-air attack aircraft losses.
56. Tweaked Port repairs to consider port damage
57. Changed Arrival base of rebuilt restricted groups may change HQ
58. Tweaked Rebuilding destroyed units: non-Chinese LCU will release/change restriction at a cost, and can change HQ to a higher HQ
59. Tweaked Suppress need for a Convoy army leader
60. Tweaked River crossing for total hex control
61. Tweaked Allow ships to refuel small amount from port without excessive Ops expenditure
62. Tweak Limit Ops expenditure for docked TFs to those ships actually doing something
63. Change Account for port damage on adjacent hex supply/resource transfer
64. Changed Updated RD totals to reflect actual R&D available for a/c and engines
65. Tweak Added some burning fires on land bombing screen for affect
66. Tweak Allow CS TF to leave base when not enough fuel if destination has fuel
67. Tweak Disbanding/withdrawing groups with no national home base will release static attachment. Higher PP cost to reform some static/restricted destroyed groups; some can't be reformed

68. Tweak LCU arrival base when no national base. Some restricted LCU will change to temporary restriction when rebuilt from destroyed list.
69. Tweak Lowered upper altitude limit for AI DBs
70. Tweak Made new stacking levels from 'pwhex' override the default island stack size if present
71. Tweak Added monsoon effect to aircraft support affecting AF (0-4) service level
72. Tweak Restore original over-fill % when limited pilot condition removed
73. Tweak Bomber co-ordination at night depends on skill, moon and air radar; complements above fix to CAP
74. Tweak Independent group co-ordination failing
75. Tweak Lower DL on base industry FOW

V1.01.06i – October 24, 2010

1. **Fifth Official Update** – This release is a comprehensive release updating all previous versions to v1.01.06i
2. **Code Changes**
 - 2.1. Fix land radar check that was not always accounting for radar detection.
 - 2.2. Fix attack bomber so that it will bomb and strafe using appropriate skills.
 - 2.3. Fix barge TF refuelling from cargo that would sometimes lock up game.
3. **Scenario Data Changes – Classes**
 - 3.1. 0013 Repulse- remove extraneous armor value of 1 from Wpn-9
 - 3.2. 0100 'Q' Class – correct the ammo value from 1 to 36 for Wpn-6
 - 3.3. 0102 'R' Class – correct the ammo value from 1 to 36 for Wpn-6
 - 3.4. 0103 'S' Class – correct the ammo value from 1 to 36 for Wpn-6
 - 3.5. 0105 'T' Class – correct the ammo value from 1 to 36 for Wpn-6
 - 3.6. 0126 'E' Class – replace device 1514 (4.5" gun) with device 1522 (4" gun)
 - 3.7. 0127 'E' Class – replace device 1514 (4.5" gun) with device 1522 (4" gun)
 - 3.8. 0128 'E' Class – replace device 1514 (4.5" gun) with device 1522 (4" gun)
 - 3.9. 0129 'E' Class – replace device 1514 (4.5" gun) with device 1522 (4" gun)
 - 3.10. 0130 'E' Class – replace device 1514 (4.5" gun) with device 1522 (4" gun)
 - 3.11. 0131 'E' Class – replace device 1514 (4.5" gun) with device 1522 (4" gun)
 - 3.12. 0452 Porter – change Num from 3 to 2 on Wpn-5
 - 3.13. 0555 Argonaut – replace device 1647 (Mk 12 mine) with device 1646 (Mk 10 mine)
 - 3.14. 0694 Independence – Change Air Capacity from 30 to 33 (per Air Team)
 - 3.15. 0695 Independence – Change Air Capacity from 30 to 33 (per Air Team)
 - 3.16. 0765 Yarrow – replace device 1650 (Mk XVII mine) with device 1651 (VH Mk II mine)
 - 3.17. 1122 Takao – change incorrect Tower Armor from 75 to 16
 - 3.18. 1285 Shimushu – adjust 3" A/S Mortar ammo from 60 to 16, Wpn-9
 - 3.19. 1286 Shimushu – adjust 3" A/S Mortar ammo from 60 to 16, Wpn-9
 - 3.20. 1287 Shimushu – adjust 3" A/S Mortar ammo from 60 to 16, Wpn-9
 - 3.21. 1288 Shimushu – adjust 3" A/S Mortar ammo from 60 to 16, Wpn-9

- 3.22. 1293 Etorofu – adjust 3” A/S Mortar ammo from 60 to 16, Wpn-9
- 3.23. 1294 Etorofu – adjust 3” A/S Mortar ammo from 60 to 16, Wpn-9
- 3.24. 1295 Etorofu – adjust 3” A/S Mortar ammo from 60 to 16, Wpn-9
- 3.25. 1296 Etorofu – adjust 3” A/S Mortar ammo from 60 to 16, Wpn-9
- 3.26. 1302 Mikura – adjust 3” A/S Mortar ammo from 24 to 14, Wpn-7
- 3.27. 1303 Mikura – adjust 3” A/S Mortar ammo from 24 to 14, Wpn-7
- 3.28. 1304 Mikura – adjust 3” A/S Mortar ammo from 24 to 14, Wpn-7
- 3.29. 1312 Ukuru – adjust 3” A/S Mortar ammo from 24 to 14, Wpn-7
- 3.30. 1313 Ukuru – adjust 3” A/S Mortar ammo from 24 to 14, Wpn-7
- 3.31. 1326 Tomozuru – add device 1699 (DC) to Wpn 5 (2, 2, Center, 6)
- 3.32. 1424 Kamikaze – remove T-13 radar, Wpn-13
- 3.33. 1425 Kamikaze – replace device 1703 (T-22 radar) with device 1701 (T-13 radar)
- 3.34. 1429 Kamikaze – remove T-13 radar, Wpn-11
- 3.35. 1304 Kamikaze – replace device 1703 (T-22 radar) with device 1701 (T-13 radar)
- 3.36. 0542 – 0673 Allied Submarines – Change Wpn lists for Split (paired) Tubes
- 3.37. 1902 – 1990 Japan Submarines – Change Wpn lists for Split (paired) Tubes

4. Scenario Data Changes – SHIPS

- 4.1. 0341 Hishu – change class from 1393 to 1382
- 4.2. 0342 Kiku – change class from 1393 to 1382
- 4.3. 0343 Susuki – change class from 1393 to 1382
- 4.4. 0345 Tsuta – change class from 1393 to 1382
- 4.5. 0346 Yomogi – change class from 1393 to 1382
- 4.6. 0733 Ikunta – correct the spelling to Ikuta Maru (delete the ‘n’)
- 4.7. 3345 Ingraham – delete this entry – it is duplicate ship – real Ingraham is already at 3559
- 4.8. 4407 Ipswich – correct the spelling to Ipswich (delete the ‘t’)
- 4.9. 9827 Triomphant – correct the spelling from La to Le Triomphant
- 4.10. 3009 Bunker Hill - change Delay from 430719 to 430919
- 4.11. 3010 Intrepid - change Delay from 431227 to 431214.
- 4.12. 3011 Franklin - change Delay from 440525 to 440511
- 4.13. 3016 Boxer - change Delay from 450615 to 450723
- 4.14. 3021 Yorktown II - change Delay from 430728 to 430712.
- 4.15. 3022 Hornet II - change Delay from 440301 to 440220
- 4.16. 3028 Monterey - change Delay from 431019 to 430928
- 4.17. 3031 Bataan - change Delay from 440211 to 440308
- 4.18. 3032 San Jacinto - change Delay from 440217 to 440404
- 4.19. 3033 Lexington II - change Delay from 430728 to 430725
- 4.20. 3037 Indefatigable – change arrival location from 688 Colombo to 815 Aden
- 4.21. 3039 Implacable – change arrival location from 688 Colombo to 815 Aden
- 4.22. 3113 Unicorn – change arrival location from 692 Trincomalee to 815 Aden
- 4.23. 3701 Van Galen – change arrival location from 688 Colombo to 817 Mombasa
- 4.24. 4072 Manxman – change arrival location from 688 Colombo to 816 Cape Town
- 4.25. 4253 Adamant – change arrival location from 688 Colombo to 816 Cape Town
- 4.26. 4254 Maidstone – change arrival location from 688 Colombo to 815 Aden
- 4.27. 4257 Wolfe – change arrival location from 692 Trincomalee to 815 Aden
- 4.28. 4258 Woolwich – change arrival location from 688 Colombo to 815 Aden
- 4.29. 4259 Tyne – change arrival location from 688 Colombo to 816 Cape Town

5. Scenario Data Changes – Aircraft

- 5.1. [157] B-25C Mitchell: Upgrade path set to self.

- 5.2. [175] A-20G Boston: Tag changed to Attack Bomber.
- 5.3. [318] F-6C Mustang: Adjusted to P-51C standard.
- 5.4. [339] P-400 Airacobra: slots adjusted to line up for both normal and extended range.
- 5.5. [370] B-25J: Wpn 11 Num set to 6.
- 5.6. [378] Il-2m3: Armor set to 2.
- 5.7. [379] Il-10: Armor set to 2.
- 5.8. [610] A6M3a Zero: Wpn slots adjusted to line up for both normal and extended range.
- 5.9. [649] D4Y1 Judy: Drop tanks devices removed; drop ranges set to 0.
- 5.10. [650] D4Y2 Judy: Drop tanks devices removed; drop ranges set to 0.
- 5.11. [651] D4Y3 Judy: Drop tanks devices removed; drop ranges set to 0.
- 5.12. [652] D4Y4 Judy: Drop tanks devices removed; drop ranges set to 0.
- 5.13. [709] L2D2 Tabby speed set to 220/161 st.mph.
- 5.14. [768] Ki-44 Tojo: Engine changed to Nakajima Ha-34.
- 5.15. [769] Ki-44-IIa Tojo: Engine changed to Nakajima Ha-34.
- 5.16. [770] Ki-44-IIb Tojo: Engine changed to Nakajima Ha-34.
- 5.17. [771] Ki-44-IIc Tojo: Engine changed to Nakajima Ha-34.
- 5.18. All transfer ranges slightly increased.
- 5.19. Facing of forward armament of all multi-engined level bombers set to Front.

6. Scenario Data Changes – Air Groups

- 6.1. [0068] Maizuru Ku T-1: Spelling corrected from “Maizura”.
- 6.2. [1718] VF-7: A/C changed to F6F-5.
- 6.3. [1720] VB-7: A/C changed to SB2C-3s.
- 6.4. [1736] VB-10: A/C changed to SB2C-1Cs
- 6.5. [1737] VT-10: A/C changed to TBF-1.
- 6.6. [1741] VB-11: A/C changed to SB2C-1.
- 6.7. [1742] VT-11: A/C changed to TBF-1.
- 6.8. [1746] VB-12: A/C changed Ä to SB2C-4.
- 6.9. [1747] VT-12: A/C change to TBM-3.
- 6.10. [1751] VB-13: A/C changed to SB2C-3.
- 6.11. [1752] VT-13: A/C changed to TBF-1.
- 6.12. [1756] VB-14: A/C changed to SB2C-1.
- 6.13. [1757] VT-14: A/C changed to TBF-1.
- 6.14. [1761] VB-16: A/C changed to SBD-5.
- 6.15. [1766] VB-17: A/C changed to SB2C-1Cs.
- 6.16. [1785] VF-80: A/C changed to F6F-5.
- 6.17. [1787] VB-80: A/C changed to SB2C-3.
- 6.18. [1795] VF-82: A/C changed to F6F-5.
- 6.19. [1797] VB-82: A/C changed to SB2C-4.
- 6.20. [1798] VT-82: A/C changed to TBM-3.
- 6.21. [1801] VBF-83: A/C changed to F6F-5.
- 6.22. [1802] VB-83: A/C changed to SB2C-4.
- 6.23. [1803] VT-83: A/C changed to TBM-3.
- 6.24. [1805] VF-84: Renamed VF-89.
- 6.25. [1806] VBF-84: Renamed VBF-89; a/c changed F4U-4.
- 6.26. [1807] VB-84: Renamed VB-89; a/c changed to SB2C-5.
- 6.27. [1808] VT-84: Renamed VT-89.
- 6.28. [1810] VF-85: A/C changed to F4U-1D.

- 6.29. [1812] VB-85: A/C changed to SB2C-4.
- 6.30. [1813] VT-85: A/C changed to TBM-3.
- 6.31. [1815] VF-86: Renamed VF-150.
- 6.32. [1816] VBF-86: Renamed VBF-150.
- 6.33. [1817] VB-86: Renamed VB-150; a/c changed to SB2C-5.
- 6.34. [1818] VT-86; Renamed VT-150; a/c changed to TBM-3.
- 6.35. [1821] VBF-93: A/C changed to F4U-4.
- 6.36. [1822] VB-93: A/C changed to SB2C-5.
- 6.37. [1823] VT-93: A/C changed to TBM-3.
- 6.38. [1831] VF-22: A/C changed to F6F-3; max a/c set to 12, resizing to 24 11/43.
- 6.39. [1832] VT-22: Max a/c set to 18, resizing to 9 11/43.
- 6.40. [1834] VF-23: A/C changed to F6F-3; max a/c set to 12, resizing to 24 11/43..
- 6.41. [1835] VT-23: Max a/c set to 18, resizing to 9 11/43..
- 6.42. [1837] VF-24: Max a/c set to 12, resizing to 24 11/43..
- 6.43. [1838] VT-24: Max a/c set to 18, resizing to 9 11/43.
- 6.44. [1840] VF-25: Max a/c set to 12, resizing to 24 11/43.
- 6.45. [1841] VT-25; Max a/c set to 18, resizing to 9 11/43.
- 6.46. [1843] VF-26: Renamed VF-30; max a/c set to 12, resizing to 24 11/43.
- 6.47. [1844] VT-26: Renamed VT-30; max a/c set to 18.
- 6.48. [1846] VF-27: Renamed VF-31.
- 6.49. [1847] VT-27: Renamed VT-31.
- 6.50. [1849] VF-28: Renamed VF-32.
- 6.51. [1850] VT-28: Renamed VT-32.
- 6.52. [1852] VF-29: Renamed VF-50.
- 6.53. [1853] VT-29: Renamed VT-50
- 6.54. [1855] VF 30: Renamed VF-51.
- 6.55. [1856] VT-30: Renamed VT-51.
- 6.56. [3131] No.80 Sqn RAAF: Rename deleted.
- 6.57. [3223] No.139 Sqn RAF: Dakota III included in upgrade path.
- 6.58. [3592] 7th BG/11th BS: Renames 19th BG/28th BS 420314. Withdraw date 421018.
- 6.59. [3613] 19th BG/28th BS: Deleted.
- 6.60. Missing USN carrier squadron resize data resubmitted.
- 6.61. Minor changes to USN carrier squadron ready strengths.
- 6.62. FEAF Pursuit Squadrons no longer permanently restricted; XP reduced; withdraw date 420506.
- 6.63. Pilots: Historical pilots added to AVG, 24th PG & 35th PG.

7. Scenario Data Changes – Devices

- 7.1. 0872 BA - 10 Set Rep rate to 12 and change end date to 6/42
- 7.2. 0873 BA - 6 Set Rep rate to 6
- 7.3. 0874 BA-64 Set Rep rate to 6
- 7.4. 0875 BT - 7 Change end date to 4/42
- 7.5. 0876 T-26S Change end date to 4/42
- 7.6. 0877 T-38 Set Rep rate to 8 and change end date to 6/42
- 7.7. 0952 Aus Inf Section Accelerate to 2/42
- 7.8. 1001 British Inf Section Reduce to 12 per month
- 7.9. 1002 British Inf Section 43 Reduce to 12 per month
- 7.10. 1032 6 pounder A/T Gn Derlay start until 12/42
- 7.11. 1072 25 Pounder Increase Production to 28 per month

- 7.12. 1098 Sexton Rename to Priest SP Arty
- 7.13. 1301 Chinese Inf Section Increase to 350 per month
- 7.14. 1302 Chinese Inf Section Increase to 350 per month
- 7.15. 1303 Chinese Inf Section Increase to 350 per month
- 7.16. 1149, 1155, 1156 Change upgrade paths for devices 1149, 1155 and 1156 to point to themselves
- 7.17. 5618, 5619 Uncheck "convoy" for LCU Units 5618 and 5619 (bases forces on the Pensacola Convoy at start)
- 7.18. 1133 Rename device 1133 to "3in M3 AA Gun". Change build rate to 20 with an end date of 4206. No pool. Use 1134 weapon stats (range=4, acc=34, pen=100, effect=13, ceiling=29800, anti-armor=80, anti-soft=12, load=10)
- 7.19. 1134 Rename device 1134 to "3in M1918 AA Gun." Change upgrade path to 1133. Build rate zero. No pool. Reduce accuracy to 20. All other stats stay the same.
- 7.20. 1137 Increase build rate of device 1137 ("90mm M2 DP Gun") to 80.
- 7.21. 1152 Change availability dates for device 1152 ("37mm M3 AT Gun") to 4112-4412. Increase the build rate to 30.
- 7.22. 1153 Change the availability date for device 1153 ("57mm M1A3 AT Gun") to 4412. Increase the build rate to 60. Increase "Anti-soft" value to 9.
- 7.23. 6753 For LCU 6753 "ETO Reinforcements" in Weapons slot #12 add device 1153 ("57mm M1A3 AT Gun") with a number "500".
- 7.24. 1183 Change the "available" date of LCU 1183 "M10 Wolverine TD" to 4206

8. Scenario Data Changes – Location

- 8.1. 2705 CMF Inf Div Copy TOE and move to 2687 remove upgrade option
- 8.2. 2706 AIF Jungle Div Add Pioneer Bn to TOE for 6/43 upgrade
- 8.3. 2711 CMF Jungle TOE Wpn 2 reduce to 20 Bren Sections, Wpn 9 reduce to 24 x 25 pounder
- 8.4. 2795 NZ Base Force Change Delay from 9999 to 360
- 8.5. 4976 Rename Tachiarai
- 8.6. 7042 1132nd Name
- 8.7. 6299 Terrace Base Force Confirm Location
- 8.8. 5669 2nd USMC Air Wing Change Nationality
- 8.9. 5002 - 5009 Numbered USN Base Force Wpn 6 change to device 1190
- 8.10. 5011 Cebu USN BF Wpn 6 change to device 1190
- 8.11. 5012 Bataan USN BF Wpn 6 change to device 1190
- 8.12. 5035 Mare USN BF Wpn 6 change to device 1191
- 8.13. 5055 101st USN Base Force Wpn 6 change to device 1191
- 8.14. 5618 114th USAAF BF Wpn 5 change to device 1190
- 8.15. 5619 115th USAAF BF Wpn 5 change to device 1190
- 8.16. 5991 2/6th Cdo Bn Set Disband Date to 6/43
- 8.17. 5996 2/9th Cdo Bn Set Disband Date to 6/43
- 8.18. 6001 2/1st Pioneer Bn Set Disband Date to 1/43
- 8.19. 6002 2/1st Pioneer Bn Set Disband Date to 1/43
- 8.20. 6003 2/1st Pioneer Bn Set Disband Date to 1/43
- 8.21. 6013 1st Aus Div Set to new non upgradable TOE 2687
- 8.22. 6021 2nd Aus Div Set to new non upgradable TOE 2687

- 8.23. 6031 4th Aus Div Set Rename to 11th Aus Div - 1/1/44
- 8.24. 6444 44th Indian Bde Increase xp to 30
- 8.25. 6452 46th Indian Bde Increase xp to 30
- 8.26. 6453 45th Indian Bde Increase xp to 30
- 8.27. 6580 5th Para bde Arrival date 20/07/45 start location Madras not Aden
- 8.28. 6604 6th Airborne Div Rename to 1st Airborne Div
- 8.29. 6687 4th British Bde Remove Battery of A/T Guns
- 8.30. 6688 5th British Bde Remove Battery of A/T Guns
- 8.31. 6689 6th British Bde Remove Battery of A/T Guns
- 8.32. 6733 100th Indian Bde Arrival Date 1/1/42
- 8.33. 6734 99th Indian Bde Arrival Date 1/1/42 move to Tricomalee (692)
- 8.34. 6740 44th para Div Change to Cdo 43
- 8.35. 6740 44th para Div Change to Cdo 43
- 8.36. 6742 44th para Div Change to Cdo 43
- 8.37. 6743 44th para Div Change to Cdo 43
- 8.38. 7984 Adjust support and Squads for 2nd NZ Div
- 8.39. 7985 Adjust support and Squads for 2nd NZ Div
- 8.40. 7986 Adjust support and Squads for 2nd NZ Div

9. Scenario Data Changes – Scope

- 9.1. Naval and Air related changes apply to scenarios 1, 2, 6, 7, 8, 9
- 9.2. Device and Location changes apply to scenarios 1, 2, 6, 7, 8, 9, 10

v1.01.06g – July 21, 2010

- **Fourth Official Update** – This release is a comprehensive release updating all previous versions to v1.01.06g.
- **Code Changes**
 1. Fixed LCU type issue to address fragments explosion problem.
 2. Fixed Underflow issue with supply on ships.
 3. Adjusted position of 2 fields on plane upgrade path screen.
 4. Global change affecting "All ... on ship in hex" also changing random groups.
 5. Fixed issue with CS convoys.
 6. Fixed repair message in menu.
 7. Fixed TF meet and merge issue.
 8. Corrected issue with unload of return cargo for CS Convoys.

9. Corrected issue with unloading Barge TFs at non-base hexes.
10. **Interface Improvement:** Prevented display of Repair Ship repair option on ship screen when no Repair ship is available.
11. Changed the "flying" message for transport supply/troops to show the adjusted plane number.
12. Fixed the special ordnance slots to stop incorrect reports.
13. Fixed base screen showing when picking from group or TF list; mouse moved and changed underlying hex location.
14. Fixed some carrier groups can't withdraw plus typo stopping CV groups from withdrawing.
15. **Interface Improvement:** Allowed direct specification of CS Convoy outbound and return cargos.
16. Correct standoff error for TFs moving to disputed bases and already past last waypoint.
17. Fixed issue with refueling from barges that can lead to loop.
18. Fixed some sort positions were incorrect for wide screen resulting in sort menu failures.
19. Changed Pilot 'captured' to 'MIA' to allow chance to be recovered.
20. Fixed 'Leading Pilots' to show last plane type pilot flew when attained a kill.
21. Fix to prevent AI TFs from refueling that would take them past heavy CD bases.
22. Adjustment to text on air group screen.
23. Adjustment to button on TF create screen.
24. Allow parent on ship and fragment on land to swap if in same hex.
25. Fixed wrong pilot experience being used to avoid balloon attacks.
26. **Interface Improvement:** Added a new minimum range to the naval bombardment mission. This is normally the minimum range of all Naval or DP guns on the ships in the TF and indicates the closest distance that a TF needs to close with the shore to fire all it's normal guns. Also tweaked Naval Bombardment

27. **Gameplay Change:** Changed supply loss due to AF/Port hits to be relative to the effectiveness of the device hitting the base.
28. Fixed base of a scuttled ship in the Sunk Ship report
29. Added a check on number of planes in an AI TF to determine if it should return to base for replenishment.
30. Added additional refueling check for intermediate refueling under Auto Sub ops when rebasing to a new home port.
31. **Gameplay Change:** Changed Fast transport reaction to air threat.
32. Fixed possible air group reinforcement deadlock; if there are no planes in the pool for the group, none being produced and aircraft is no longer available, then let group arrive with no planes.
33. Fixed an overflow of the mouse message which could wipe out display of bases on the map.
34. Positioning of last TF accessed in "All TF" list was not carried forward on the list.
35. Fixed the endless manual replenishment of CV groups from VR groups when out of range of bases. [Check was originally looking just for any replenishment group with the right type of aircraft in range, but it drew the planes from the pool only. So if no pool, no manual pull off CVE].
36. Fixed incorrect units show up outside of the bounds in a small map scenario.
37. Fixed getting land replacements, even for device mismatches.
38. Fixed splitting of air groups to check for any fragments in air reinforcement queue before allowing.
39. Fix to allow group fragments to disband in most cases (like parent not in play anymore).
40. Fix to the situation where Allied aircraft don't appear in animations due to the Allied aircraft bitmap '0' not defined.
41. Fixed AI offmap repairs for small maps.
42. **Gameplay Change:** Capped the maximum Detection Level. The maximum is 10, but this can be increased a few points before being brought back to 10.

43. Added protection against groups dropping into some of the old AI controlled zone code. This was done previously for army/base/TFs.
44. **Gameplay Change:** Change to visual sighting rules for aircraft. This will limit the pre-CAP AAA phase for Allied air attacks to what was originally intended.
45. **Gameplay Change:** Change to Naval Bombardment mission so it tends to engage Fortress unit in the target hex more often.
46. **Gameplay Change:** Change to DP guns firing in AAA mode; effect has been slightly lowered when engaged in AAA combat. This complements the decrease of AAA guns when used in Naval Bombardment mode.
47. Added hooks for revolving ship art similar to aircraft.
48. Tweaked Japanese ramming attacks as it was ending up too high (a certainty) for 1945 attacks. Message has been changed slightly.
49. Tweaked center-mounted weapons on LBA/patrol aircraft when in A2A mode
50. Fixed Australian and NZ force activation due to Japanese invasions.
51. Change to cater for non-standard mixed groups on CVs. It was creating groups with '0' max size.
52. Added new command switch to suppress the introduction video "-skipVideo".
53. Fixed Air search radar on aircraft not always being counted if the device # is > 255.
54. Fixed the wrong LCU weapon being used during an invasion. This was producing the error like "Sound detector penetrates ship's side".
55. Tweaked Invasion fire/counter-fire to speed it up some.
56. Fixed the last carrier resize was not always working. Resize not always handled correctly if change was past due.
57. Fixed TF Picking up wrong LCU after a parent/fragment swapped; leading to TFs going off to enemy bases.
58. Fixed Groups unloading in port failing sometimes.
59. Fixed Rockets from ships to be classed as bombardment device.
60. **Gameplay Change:** Tweaked/Added possible unit fatigue if naval bombardment fails to cause hits; dependent on modified (by fort/terrain) 'effect' of the device.

61. **Gameplay Change:** Discard saved waypoints on follow/meet of TFs .
62. **Gameplay Change:** Replenish fuel at base for Tankers.
63. Fixed Carrier 're-size to fit' was not changing group's size; introduced by previous fix to 'last re-size'.
64. **Gameplay Change:** Changed To alleviate re-size issues, players can set the ship's group size as part of the 'resize to ship' option.
65. Added Option NOT to use rotating images -fixedArt
66. Fixed - not all reported ships partake in reply fire during landings.
67. Changed Limit the expenditure of AAA weapons during bombardments.
68. Changed New TFs created with same DL as original.
69. Fixed resize bug shown by earlier fix.
70. Killed LCU unit when ship is scuttled.
71. Added army loss points to un-rescued devices.
72. Fixed 'Dead' fragments could sometimes become 'live'.
73. Allow 'orphaned' LCU fragments to be disbanded.
74. Fixed Refuel bug.
75. **Interface Improvement:** Added Show all patrol zones for player.
76. Corrected reattaching subgroups to parent group.
77. Added check to catch cases where ships and LCUs are on wrong side.
78. Changed LCU fragment swapping to avert possible errors when LCUs killed.
79. Fix graphics left behind by air groups for HQ.
80. Fix Error in conversion/upgrade time.

V1.01.02a – February 28, 2010

- **Third Official Update** – This release is comprehensive, thus updating all previous

versions to v1.01.02a.

- **Code Changes**

1. Fixed - Only show army units of the current player; in base hex it was possible to get the units from the owner of the base to show.
2. Fixed - Cross-assignment of land units grabbing air/sea leaders.
3. Fixed - Jumbled line on Industry Management Screen when sorting.
4. Fixed - City attack not working when using 'Commander Discretion'.
5. Correction - Allow reforming groups to use the HQ nationality if normal group national bases are not available.
6. Correction - Wrong location variable used in checking for Soviet airgroups, causing random carrier groups to appear Soviet for missions
7. Corrected inconsistency in low-level altitude determination.
8. Fixed - Don't show 'manage repairs' if no ships can be repaired. Otherwise the repair screen can be shown with a phantom ship.
9. **Gameplay Change:** Changed Allow Seaplane tenders with organic air groups to fly day patrols even if disbanded in a port 1-3. The port restriction is not in affect for the AI.
10. Changed - Suppress 'Done' on change of command screen until change is choosen – caused Political Points leak.
11. Changed - When PGM is used, it will be reported as "missile". The actual name of the device will appear on the combat report under the plane's weapons.
12. Fixed - When planes aborted missions, the mines and missiles did not get returned to the pool as 'unexpended'.
13. Adjust repair and conversion time when a ship is concurrently undergoing both Temp AP conversion and regular Upgrade/Conversion.
14. Corrected TF selection display on TF screen when in "in this hex" mode.
15. Suppress Upgrade Yes/No option when repair controls are expanded on Ship Screen to prevent overwrite.
16. Corrected distance calculation for TFs that arrive at off map bases and then return to onmap bases.

17. Corrected mis-spelling "Withdrawalls".
18. Prevented improper destination/follow setting for off map TF from teleporting the TF onto the map.
19. Prevent overflow in capacity calculations during TF Load Allocation, add cross load capacity shortfall and load safety factor messages.
20. **Gameplay Change:** Torpedo accuracy reduced a bit in general and a bit more against escorts.
21. **Gameplay Change:** ASW bombing experience effects altered to increase effects of ASW aircraft over time.
22. **Major Interface Improvement:** Added wide-screen, high resolution support.
23. Fix for AI not repairing captured industry.
24. Fixed TOE not upgrading devices which was causing units not to get replacements due to mismatch.
25. Fixed units in strat mode not waiting for packing up when following.
26. Fixed reducing TOE delay when delay is invalid (9999).
27. Fixed convoy units with invalid delay.
28. Fixed units not able to get replacements when device does not match TOE.
29. Made add supply button literal based, the unit will try to get only the amount listed.
30. Fixed partisan check, some units not being counted at base due to faulty 'on ship' check.
31. **Gameplay Change:** Changed Fast transports were using a different 'coast hex' check to every other instance. This stopped places surrounded by water hexsides from showing.
32. Fixed issues affecting fast transport pickups.
33. Tweaked Ship bombardment affecting port base.
34. Fixed - Don't allow transport ships to be removed from TF in the "Verify Load" if only one ship or not in a friendly base. Detaching ship in this case causes it to disappear from game.
35. Changed - Suppress some of the 'leader reassigned' messages.

36. Fixed - Variable reinforcement was incorrectly setting leader delay if the delay changed to before game started.
37. Fixed - Changed blanks in Air Unit Organization to use 'unknown' so sorting doesn't mangle lines in list.
38. Fixed - Choose TF leader screen was displaying some details on map rather than in text box.
39. Changed - Clear 'followed by' data from TF being dropped - TF following a removed TF attaches itself to the new TF# if used in same turn.
40. Fixed - Change of ship (prev/next) in the ship lists is not setting global original repair values for that ship.
41. **Gameplay Change:** Add PB to list of ships eligible for Auto Convoy.
42. Fixed issue to ensure Jeep carriers don't count towards a/c operational in TF.
43. Improved AI use of CVE.
44. Fixed Loop in viewing TF list.
45. Fixed issue causing wrong nationality of TF leader.
46. Fixed issues where CV sunk in same phase as planes land, they might not divert.
47. Tweaked AI replenishment TFs to stop them from switching back and forth between different TFs.
48. **Interface Improvement:** Added a mouse over on aircraft upgrades giving clues as to why upgrade is not possible.
49. **Interface Improvement;** Added a P next to the withdraw data (Withdraw by dd/mm/yy *P) on the Group screen. This indicates a most likely permanent loss of the group when withdrawn.
50. **Gameplay Change:** Change to river assault – reversion to original rule - when crossing a river into a hex all units entering should shock attack in the turn they cross, unless 1/3 of the unmodified AV of the defenders has already crossed from that hex side in a previous turn.
51. Rationalized supply draw rules.
52. Reset movement direction and miles if enemy in the way.
53. Put in tracking for all bases, a bit is set to indicate which industry slot failed to produce due to lack of some industry required material.

54. Replaced Supply Required column with Failed in Industry Management screen as there are no supply requirements for industry.
55. Put in Stop and Start industry repairs and reset add supply to zero in base list screen.
56. Fixed land unit recombine from editor - not using upgraded devices.
57. Fixed Issue with ship weapon repairs.
58. Placed cap on pilot training cycles so strange experience levels are suppressed

The following items were also included in the three hot fixes for patch 02

59. Resolved supply/fuel/resource/oil overflow issues causing loss of same.
60. Fixed issue that was preventing some bases from being resupplied.
61. **Gameplay Change:** Added terrain and fort effects against artillery attacks.
62. **Gameplay Change:** Artillery when used offensively use 2x amount of supplies.
63. Fixed save not reading properly issue.
64. Fixed overflow issue with air skills going backwards .
65. Fixed some display issues caused by Transfer Ships.
66. Fixed CTD issue with Clouds.
67. Fixed issue displaying LCUs at enemy base.
68. Fixed issue with groups that are on withdrawn ships.
69. Adjust ASW/Escort/Submarine attack issue.
70. Fixed group totals were not correct always during Air Phase.
71. Fixed overflow that was stopping new ships in TF from a Base screen.
72. Fixed ASW combat to stop multiple popouts from opening which could cause CTD when drawing map.
73. Changed cloud drawing to eliminate cases where it could be trying to draw invalid locations.
74. Fixed Surface TF wants to fight.

75. Fixed Task Force Loading/Unload Check.
76. Fixed "Sunk by".
77. Allow para-troops to drop on damaged enemy bases.
78. Fixed Group withdraw check where group does not return but still had a withdraw date; could allow 'gaining' of PPs.
79. Fixed Returning groups on delayed ships not correctly account for.
80. Fixed No bonus PPs if withdrawing on the actual withdraw date.
81. Fixed patrol levels when complement less than 10.
82. Fix aerial mining missions not working.
83. Fixed issue causing ships to carry wrong land unit.
84. Fixed AVD AVP Problem.
85. Fixed Industry Management Screen - was allowing free expansion of industry.
86. **Gameplay Change:** Submarine reaction range toned down for human players and historical difficulty AI players.
87. **Gameplay Change:** LCU given fort and concealment protection based on terrain from air to ground bombs. Protection will reduce casualties a lot and disruption a bit.
88. Minor adjustment to upgrade land devices.
89. **Gameplay Change:** Changed disbands to must be in national home base and can not be permanently restricted then disband is free (no vp cost), in all other situations it is not allowed.
90. Fixed bug wherein resources and oil were still being deleted/not produced above 999,999. There is no production cap for resources however there is still a production cap for oil.
91. **Interface Improvement:** Added supply and fuel spoilage limit to base screen if there is a limit (af + port < 9).
92. Fixed bug in checking AI cbt TFs (CV,NGFS,SAG) for damage and or lack of a/c and if severe enough TF will RTB.

Additional Changes for Patch 03

93. Fix to withdrawals due to incomplete scenario data, for example convoys.
94. Splitting air groups will preserve the permanent withdraw status of the group.
95. Fixed Transport type TF to better handle a hex destination that does not permit amphibious operations.
96. Fixed Blank out map screen when game exits.
97. Corrected Exchange of leader when sub-groups created/combined.
98. **Reporting Improvement:** Dated reports go into an archive directory if command '-archive' is added to quick start shortcut.
99. Submarines will now fire a more appropriate number of torpedoes at various targets.
100. Protect combat summary from invalid casualty numbers.
101. **Gameplay Change:** ASW increased depth charge accuracy so that ports and bases are more dangerous for submarines.
102. Cleaned up detachments and parents on small map scenario.
103. **Gameplay Change:** Included seaplane tenders from a TF in same hex when checking for support.
104. Changes to improve Coastal Gunnery effects.

v1.00.95 - December 7, 2009

- **Second Official Update** – This release is comprehensive and updates ALL previous versions to the v1.00.95 level.

IMPORTANT: Please also read the new “Interface Addendum” and the “Pilot Management Addendum” which have been added to your Documentation shortcut sub-folder and can also be found in your /Manuals installation sub-directory. These two documents contain very important information on improvements and changes in these areas.

- **Code Changes**

1. **Interface Improvement:** New Screen for Industrial Management
2. **Gameplay Change:** Air transport mission was using all ready planes. Now the number of available planes for the mission will be adjusted by the rest/training percent as on other missions.
3. Excess aircraft now returned to the aircraft pool, if possible, when a group downsizes
4. Reduced maximum ranks for USAAF groups’ pilots. Also allows more leaders to show in change command list
5. **Gameplay Change:** Torpedo training for groups is now dependent on the ‘Use Bombs’ flag rather than the altitude setting
6. **Gameplay Change:** Full base screen now show the consistent over-stacked AF indicator ‘*’
7. Pilots who are captured or killed were still being counted in some group totals. They are now removed from group’s pilot count, but still available for ‘Top pilots’.
8. **Interface Improvement:** The buttons in the lower panel of the main screen have been improved. With the mouse over the icons on the far left, the number of groups, task forces or LCUs at the base is shown. Added a previous page button when there are more than 26 of those items (i.e. more than 2 ‘pages’) present in the hex. The tooltips sometimes were corrupted when other screens were displayed on the map and the bottom panel was still active. This has been corrected.
9. It is now possible to repair planes in excess of the group’s size
10. **Gameplay Change:** Adjustments made to air skill in training and combat. Skill training is incremental. Points are accumulated and once a certain level is reached, a point is added to the skill. The cutover level is the current skill level; so as the skill level increases, it takes more accumulated points to reach the next level. Combat gains points faster than training, and combat is required to reach 70+ skill levels. Experience levels behave similarly with the one exception. If the Experience level is higher than the best skill by more than 5, a skill based on the group’s mission gains the accumulated points instead.

11. AI improvement to include more checking of TFs for lack of aircraft, sorties, damage, ammo and return to base if required
12. AI Aircraft production will now stop based on comparison with on map aircraft totals
- 13. Gameplay Change:** Malaria effects adjusted
14. Fixed bug preventing port construction in certain cases
15. Fixed bug preventing combat engineers from building
16. AI improvement refining settings for LCU attack levels
17. Corrected unit TOE loading bug
18. Correct bug setting default morale and experience when not provided by editor
19. AI additional checks for level bomber base sizes
20. Numerous supply tracing improvements
21. Numerous supply/resource movement improvements
22. Corrected several land unit fragment bugs.
23. Adjustments to TF merge function. TFs may fail to merge if the “meeting” TF arrives at the destination of the “met” TF before the “met” TF does. Also adjust meeting process to reduce chances that the meeting will not take place until one or the other TF reaches the “met” TF destination. Also correct a problem TF could “merge” with a TF that no longer exists under certain rare circumstances.
24. Corrected bug preventing formation of TFs at level-0 port. This was due to lack of docks at a level 0 port and the standard practice of creating TFs as docked to facilitate fueling/arming/loading of ships in the TF. Newly formed TFs will continue to be docked if the port has the dock space for them, but will auto-undock when adding a ship to the TF causes it to exceed the port capacity.
25. Adjustments to naval retreat determination. TFs retreating after combat will now be less likely to retreat to hexes containing other enemy forces and be more likely to retreat toward a friendly base.
- 26. Interface Improvement:** Change to the “set all ...” buttons on ship based air units: it is possible to set aircraft or type in (a) the hex or (b) a TF. Or if the ship is disbanded in port, (c) ships in port (disbanded).
- 27. Interface Improvement:** Implement search arc drawing on map
28. Corrected torpedo rearming bug. Correct restrictions that prevented partial rearming, ensure partial rearming is in full mount increments, and adjust ops usage according.
29. Fixed naval support availability bug. Naval Support in HQ units that were actually at a base were incorrectly excluded from Naval Support totals at that base. This was due to an error in calculation of Naval Support availability over HQ Command radius.

30. Corrected LCU fragment TF load issues. A TF set to load a land unit at one location could improperly interact with fragments of the same parent that were at other locations and had been previously loaded by either the TF or one of the ships currently in the TF or, if the load required multiple days, when unloading of other fragments of the same unit caused an automatic switch of a fragment to the prime unit.
31. Corrected bug to allow repair of damaged devices even if ship has no other damage. Previously repair of all system/floatation/engine damage would terminate repair of a ship that also had a damaged device (weapon, radar, etc). Damaged weapons will now prevent full repair of systems damage and may “create” small amounts of system damage to keep the ship eligible for repairs. Note that this may have the affect of small amounts Systems damage being not repairable at a location where it normally would be repairable if that location can not also repair the damaged devices(s).
- 32. Interface Improvement:** Changed Allied aircraft replacement display to show nation of aircraft
33. Corrected several menu bugs
34. Corrected TF pick up bug. Multiple small errors could prevent successful pick up of land units by TFs.
- 35. Interface Improvement:** Add “undo” for ships being transferred during ship transfer. Previous undo only functioned properly for ships being transferred into the selected TF. Provided undo for ships transferred out of the selected TF.
36. Corrected bug causing ships to move in excess of maximum speed when in a TF that is following another TF that is beyond the player-set follow distance.
37. Change ship based aircraft repairs to be by plane, instead of by group
- 38. Interface Improvement:** Made air group screen larger to reduce clutter
- 39. Gameplay Change:** Adjustments to supply consumption by land units
40. Change to AI shock attack determination
41. Improve AI awareness of intel on nearby enemy LCU
- 42. Gameplay Change:** Changes to AI LCU upgrades on “Historical” level
- 43. Gameplay Change:** Changes to AI production on “Historical” level
44. Improvements to save file process to reduce chance for file corruption, especially by deleting the old save before writing the new one
- 45. Interface Improvement:** Auto set the filter to skip over Soviet ships if not active
46. Improvements to refueling calculations and processes. Ships are more likely to fuel from bulk oil supplies on oilers/tankers. Also adjusted the refueling and rearming sources for the “from port” and “at sea” variations.
 - Replenish from Port will now use the available fuel/supply at the port and on all

replenishment ships disbanded into the port. For those disbanded into the port, only the fuel/supply cargo of fuel ships, ammo ships, and tenders will be used. Tenders must be of the appropriate type for the ship being replenished. Note that port facilities are used in preference and ships in the port are only used if the port is not able to completely replenish the ships in the TF.

- Replenishment at Sea when the TF is in the same hex as a friendly base will now use all ships in TFs in the same hex but will no longer use ships disbanded into a port in the hex.

47. Interface Improvement: Add new map icons to highlight certain events

48. Gameplay Change: Allow ship withdrawals at any on map level-9 port and some smaller ports with no enemy nearby. Ships can always be withdrawn from any off-map port or from any TF that is currently off map. Ships that are not badly damaged can be withdrawn from some on-map ports or from TFs in certain on-map regions. For on map, ship may not be on fire, total damage may not exceed 99 and no individual damage type (system, floatation, engine) may exceed 50. Ships may not be withdrawn from any on-map location where the enemy has air superiority. The intent is to prevent withdrawal as a method of saving a ship that stands a good chance of being lost or further damaged. On map withdrawal ports are set based on the historical exit locations for ships leaving the Pacific:

1. Any level 9 port.
 2. National home ports of the United States, Canada, India, Australia, and New Zealand (with no port level requirement)
 3. Any level 7 or larger port on the US or Canadian West Coast.
 4. Any level 7 or larger Indian port East of Ceylon (including Ceylon itself)
 5. Any level 7 or larger port in South Eastern Australia, plus Perth.
 6. Any level 7 or larger port in New Zealand.
49. Changes to ship sunk FoW. When a ship is being falsely reported as sunk in place of another ship actually sunk, the data for the two ships could be mixed. Depending on circumstance, this might result in one or even both ships being reported as sunk.
50. Corrections to calculations of AA, ASW, Gun and Torp ammo for display on TF and TF list screens. The calculation will continue to show the remaining ASW capability (i.e. only ships with ammo remaining) but the percentage of ASW ammo remaining is now based on full load for all ships in the TF.
51. Resupply capacity for bases added to editor
52. Fix for disbanding of Command HQs to prevent inadvertent release of restricted units
53. Adjustment to AI unit planning level based on AI difficulty
54. Ensure minefields are created for proper player when a single TF lays multiple types of mines. Player of minefield properly set when first mine type laid by a given

minelayer but a similar check was missing when the TF contained minelayer(s) with two different types of mines.

- 55. Gameplay Change:** Change to partisan effects. Only port and AF are damaged and 10% loss of supply and fuel, and 1 VP and no supply movement into or through hex for owning player, if partisans attack and cause damage.
- 56. Gameplay Change:** Movement rates for clear and desert changed to 25 for mechanized units
- 57. Gameplay Change:** Land combat effects toned down
58. Ensure AI captures empty bases
- 59. Gameplay Change:** Allowed groups on disbanded ships to do training missions to save from moving them ashore. Training from disbanded ships does not increase the pilot mission count.
60. Changed the autosave file name to pwae_#<scenario number>_<game date>.pws in order to help identification of saves
- 61. Gameplay Change:** Improvements to Pilot Management System (see separate “mini-manual”)
- 62. Gameplay Change:** Placed limits on glide bombing altitudes. A TD/DB/FB/F group must be at 10-20K altitude to perform glide bombing, otherwise it is a normal level bombing attack. Groups were at maximum altitude and conducting glide bombs attack, sometimes without engaging CAP or flak.
63. Changes in order to standardize inactive Soviet group’s training options;
- 64. Interface Improvement:** Added pilot select mode (auto/manual) to group lists (see Pilot Management for more details). The number of pilots on the group lists is RED if less than the number of ready planes in the group, indicating a shortage of pilots. This shortage may be filled automatically or manually for a mission based on the pilot select mode.
65. Corrected issues with group destruction on scuttled or sunk ships and groups on withdrawing ships
- 66. Gameplay Change:** More superstructure and fewer deck hits in Naval Combat at close range
- 67. Gameplay Change:** Greater weighing of crew experience in surface combat
- 68. Gameplay Change:** Limited radar directed fire, increasing over time
- 69. Gameplay Change:** Revised weather and spotting, resulting in fewer surface combats at 1000 yards
- 70. Gameplay Change:** PT Boats less likely to attack in daylight
- 71. Gameplay Change:** Submarines less likely to be hit in deep water, more likely to be hit in ports and rivers

72. **Gameplay Change:** Submarine captain ratings have more influence on Submarine performance
73. Torpedo hits on escorts not showing in combat report bug fixed
74. **Gameplay Change:** Aerial ASW less powerful in early war
75. Pilots still flying planes from sunken ships were treated as losses, resulting in any diverted fragments having planes but no pilots. Pilots still flying planes are now ignored for sinking ship purposes until their plane lands.
76. Group transfers in off-map bases from a ship in the base hex to the base itself were being delayed '4' days. There should be no delay.
77. Scenario Design: Aircraft can be added to convoys, which will be added to pool when the convoy disbands.
78. **Gameplay Change:** The kamikaze activation range has been changed from 15 to 20 hexes. The range was not changed when the game scale was changed.
79. Fixed bug when displaying search arcs at a base
80. Fixed Escape key on Industry Management screen
81. Fixed oil and resource in totals on Industry Management screen
82. **Interface Improvement:** Add an extra line to the Industry Management to show total shut down industry on Industry Management screen
83. **Interface Improvement:** Add base select to Industry Management
84. **Gameplay Change:** Any seaplane, rest/training and/or fragment group counts as ONE group for Admin stacking purposes; the presence of all three in a base counted as 3 groups for Admin
85. Fixed a loop that can sometimes happen when a ship upgrade changes air groups
86. Fixed set of secondary mission on a Training mission for some fighter-types; NF and FF being affected by old stock code that cleared the secondary mission.
87. Fixed an intermittent issue with tool tips not showing for random bases/LCUs/TFs.
88. Fixed an issue with tool tips being offset from actual hex when forming new taskforces
89. Added the saving of preferences on save; the preferences on PBEM saves occurred on the end of turn save only. Preferences are now restored as saved for the player at the time.
90. Changed air supply mission to use a friendly base as destination, if both a base and LCUs are present in the hex; it was sometimes giving the supply to the first unit only
91. Fixed air supply drops to a hex containing both friendly and enemy units; often the mission was canceled because the enemy LCU was selected as the first unit in the

- hex.
92. Adjusted TF refueling to prevent ops expenditure of ships that do not need fuel.
 93. Prevent very low grade TF commanders from returning single ship TFs to port to rearm when rearming not needed.
 94. Fixed the supply cap and monsoon effects on supply
 95. **Gameplay Change:** Removed the wastage of resources/oil/fuel during overland movement.
 96. **Gameplay Change:** Prevent supplies moving from a Soviet base to a Chinese base when Soviets are inactive.
 97. Tweaked resupply task force to Japanese bases.
 98. Fixed a HQ/Chinese unit respawning bug.
 99. Restricted permanently disband/withdrawing air groups from being able to the the “Trainer” option in the type of pilots to use.
 100. Restrict the options available to pilot movement in permanently disband/withdrawing air groups; mainly restricted to making them active or in-active within the group.
 101. Fixed error in splitting air groups caused detachments not-in-play still attached to parent group - stops divide ability
 102. Fixed an issue where some autosaves could reset game options.
 103. Disabled the ability to make a group a temporary on-map Trainer.
 104. On-map Trainers will have a higher chance of OpsLoss for low EXP and/or high FATIGUE pilots.
 105. Made some adjustments to Kamikaze effectiveness.

- **Naval Data Changes**

1. Added cargo capacity to AVs, AVDs, AVPs, and CSs.

Class

Scen 001, 002, 006 (007, 008, 009)

0021 – Australia – correct weapon facing

0418 – Helena – correct tower armor from 0 to 125

0767, 0769 – Chevreuil – correct endurance and fuel

0770, 0771 – Duguay Trouin – correct weapon facing

0772, 0773 – L’Adroit – correct endurance and fuel

0774, 0775 – Fantasque – correct endurance and fuel

0776 – La Galissonniere – correct endurance and fuel

0776 – La Galissonniere – correct weapon facing

1013 – Yubari – correct weapon #4 turret armor
1102 – Furutaka – correct weapon facing
1107 – Aoba – correct weapon facing
1112, 1113, 1114, 1115 – Myoko – correct weapon facing
1730 – Yamato – correct weapon turrets
2025 – Kongo Maru – correct weapon facing
2202 – ARD 3000 Ton – add Japanese small ARD class
2903 – Gnevnyi – correct weapon facing
2915 – MK Cargo – correct weapon facing
2918 – KT LST – correct weapon facing

Ship

Scen 001, 002, 006 (007, 008, 009) changelog
All – update weapons from class to reflect weapon facing corrections
0999 – Dublon ARD; add small ARD to Truk
3550 – Laffey; correct entry date to 420430
3580 – Frankford; correct entry date to 430430
4317 – Thornton; add Clemson AVD at PH
4361 – Henry A. Wiley; correct entry date to 440930
5222 – Rixey; rename to Bowie
5223 – Hercules; rename to Highlands
5251 – Pinkney; rename to Pickens
9253 – Madras City; correct entry date to 420228
9728 – Indus; delete duplicate ship entry
9837-9849 – Soviet Fleet; correct ship name spelling
11316 – AFDB-2; change arrival location to # 524 Seattle
11364 – BYMS-2055; correct entry date to 430228
11365 – BYMS-2059; correct entry date to 430228
14070 – Ha232; correct entry date to 460228

Scen 006 and 009 ONLY

0002 – Kaga; adjust fuel to 3220, adjust t-sorties to 30, adjust sorties to 445
0003 – Hiryu; adjust fuel to 2475, adjust t-sorties to 27, adjust sorties to 295
0004 – Soryu; adjust fuel to 2265, adjust t-sorties to 27, adjust sorties to 295
0005 – Shokaku; adjust fuel to 2350, adjust t-sorties to 30, adjust sorties to 370
0006 – Zuikaku; adjust fuel to 2350, adjust t-sorties to 30, adjust sorties to 370
0017 – Akagi; adjust fuel to 3812, adjust t-sorties to 30, adjust sorties to 445
0043 – Hiei; adjust fuel to 4175
0044 – Kirishima; adjust fuel to 4175
0067 – Tone; adjust fuel to 1775
0068 – Chikuma; adjust fuel to 1775
0118 – Abukuma; adjust fuel to 833
0146 – Akigumo; adjust fuel to 265
0168 – Kagero; adjust fuel to 265
0176 – Isokaze; adjust fuel to 265
0177 – Shiranui; adjust fuel to 265

- **Air Data Changes**

[60] Beaufighter TF X: Wpn 4, 9, 19 facing set to EXT.
[177] B-339-23: Name set to B-339-23.
[178] B-339-23 (PR): Name set to B-339-23 (PR).
[336] P-39N1 Airacobra: Wpn 3, 13 set to 4x.30 Browning MG.
[337] P-39N1 Airacobra: Wpn 3, 13 set to 4x.30 Browning MG.
[365] Stearman 75M: Nationality set to U.S.Army.
[451] PB2Y-3R: Deleted.
[476] R5C-1: Month/Year set to 7/43; Build Rate set to 4.
[480] SBC-4 Helldiver: Wpn 3 set to 1000 lb GP Bomb; wpn 11 set to 1x.50 Browning MG; wpn 13 set to 500 lb GP Bomb.

[1923] No.1835 Sqn FAA: Delay set to 0.
[1924] No.1836 Sqn FAA: Delay set to 0.
[1929] No.1841 Sqn FAA: Delay set to 0.
[1930] No.1842 Sqn FAA: Delay set to 0.
[2587] VMF-211: Location set to [584] Pearl Harbor.
[2642] VMF(P)-321: Deleted.
[2652] VMO(P)-351: Deleted.
[2668] VMF(N)-511: Deleted.
[2669] VMF(P)-511: Deleted.
[2671] VMO(P)-512: Deleted.
[2673] VMO(P)-513: Deleted.
[2675] VMO(P)-514: Deleted.
[2827] VR-2: Deleted.
[2828] VR-4: Deleted.
[2829] VR-5: Deleted.
[2830] VR-13: Deleted.
[5028] 262nd Sentai: Air Class set to [793] Ki-49-Ia Helen.

USN patrol-type squadrons 4301 resize to 15 deleted.
USMC squadrons 4301 resize to 24 set to 4410.
USMC squadron upgrade paths reworked.

Gameplay Change: Units with a/c MAX strength six or greater now able to split into three subunits.

- **Map/Base Changes**

1. Garrison levels in China have been increased for both the Japanese and the Chinese. New level for the Japanese is about 5,000 AV. For non-occupied China, about 1,400 AV.
2. Garrison levels in Japan have been significantly increased for the Allies.
3. Garrison levels in India and the Philippines have been increased for the Japanese.

4. Garrison levels have also been adjusted in other locations, with some areas having small increases.
5. The inland "Chinchow" base in Manchukuo was a Port. It is now corrected to be an Airfield.
6. The starting fuel level for Los Angeles has been increased.
7. The Adak Island base in Alaska has had its port level decreased from 2 to 1.
8. Anchorage in Alaska now generates a small amount of resources.
9. The Dutch Harbor base in Alaska has had its port level decreased from 4 to 3.
10. The Kiska Island base in Alaska has had its port level decreased from 1 to 0.
11. Nukufetau has had its port level decreased from 1 to 0.
12. Pago Pago has had its port level decreased from 3 to 2.
13. The Christmas Island base no longer generates resources. The Christmas Island (IO) base does instead.
14. "Ahmadabad" has been renamed to "Ahmedabad".
15. The generation of Daily supplies at Chinese bases has been distributed to more bases, rather than being concentrated in a small number of locations. Overall, Chinese supply point generation has increased, to about the same level of supplies as in the original War in the Pacific game (it was a bit lower before).
16. Australia now generates a greater supply point surplus than before - about 5,000 points per day as opposed to about 4,000. Fuel requirements remain the same.
17. The "Terrace" base has been "moved" to a more accurate location - hex 200,41 instead of hex 200,40 - and the road and railway networks in the area changed to match

v1.00.84e Hotfix – September 15, 2009

- **Code Changes**

1. Corrected an array boundary issue causing occasional crashes.
2. Removed the invalid ship file update from the data update process. This change is in accordance with the documentation for 1.00.84. Games that were already “updated” their data from previous versions to 1.00.84 will unfortunately already have the bad ship file data, but this hot fix allows games that have not yet been updated to safely update. Please note that this issue did not affect new games started with 1.00.84.

v1.00.84 – September 9, 2009

- **First Official Update**

MorePerformanceImprovementsforallsystems.especiallythosewithmulti- core processors.Seethe“ PerformanceSwitches” sectionabove.

- **Upgrading an Existing Game**

When you load an older save file, the following improvement/changes will automatically be incorporated into your game.

1. Code Changes
2. Device Changes
3. Aircraft Changes
4. TO&E Changes (these will only take effect when a unit gets to its next TO&E upgrade point)
5. Ship Class Changes (these will only take effect when a ship gets to its next upgrade point)
6. Map changes

The following improvements/changes will only be immediately available if you start a new game. Some will be applied as noted above when a unit reaches its next upgrade point.

1. Air Group changes
2. Ship changes
3. Base Data changes
4. Unit Location changes
5. AI Script changes

If you are playing a PBEM game, make sure both players upgrade at the same time or you will see out of sync issues and other possible errors appearing in your game.

- **New Scenarios**

1. **New Scenarios #7, 8 and 9: “Quiet China”** variants. These are identical to scenarios #1, 2 and 6, but with a chance to the AI to make China a “dormant” theater. These are intended for players who do not wish to concern themselves with operations in China. By playing these variants, you can effectively ignore China without having any significant effect on the rest of the war. **Important note:** You will still see some initial activity in China in these scenarios, for the first few weeks, as the AI makes adjustments to its local positions, but it should become dormant soon and not embark in major strategic offensives.
2. **New Scenario #10: “Ironman”** variant. This is a scenario intended for play against the Japanese AI. This is for players who want the most challenging experience possible against the AI, but be aware that this adds forces to the Japanese AI's roster that are beyond the historical roster of forces the Japanese had available at the start of the war. Still, for those who want the ultimate challenge, try fighting this “beefed up” Japan. For those who want a tougher AI fight without any ahistorical forces, give

Scenario #2 a try.

- **Code Changes**

- 3. Interface Improvement:** A button has been added to the LCU list screen to allow global operation mode setting.
- 4. Interface Improvement:** Buttons added in the Base list screen to allow global build set for port, airfield, and fort independently.
5. A problem with aircraft side art being drawn on the map has been prevented by ensuring the icon pointer can never get too large and point off into the aircraft art.
6. Cross loading of Motorized support as if it were regular support was preventing some Task Forces from finishing loading. Fixed.
7. Improper use of data for base "0" by an undocked TF that is loading from a base has been fixed.
8. Land units that were aboard ships were being landed without proper supply levels. Also supply was not being transferred during unit merge or prime unit swap. Fixed.
9. The conditions for dash-in/dash-out by Bombardment, Surface Combat, Fast Transport and Mine laying TFs include a check intended for AI forces being used for human controlled forces as well. Fixed.
10. When a TF was in a large region of enemy air superiority it may not have properly found a "safe" location to retreat to, setting and resetting a retreat for each hex moved. The selection of retreat path algorithm has changed to reduce the chances of a TF retreating too far away from its destination.
11. In the Naval Database, some AA weapons were being listed as ASW weapons. Fixed.
12. Naval Support Squads in Command HQs were not being used. Fixed.
13. The transfer of loaded ships between transport and amphibious TFs is now prevented.
- 14. New Feature: Threat Tolerance.** The ability for players to specify differing threat tolerance levels has been added (on the Task Force Routing screen). The new function allows the player to specify a TF's Tolerance for detected enemy threats that could cause the TF to auto-retreat.
Tolerance has four levels:
 - a. Normal: No offsets to retreat calculation.
 - b. Low: Lower threat tolerance = higher chance of retreat from detected threats.
 - c. High: Higher threat tolerance = lower chance of retreat from detected threats.
 - d. Absolute: Absolute threat tolerance = TF will never retreat from detected threats.
15. TFs set to FULL speed do not actually go FULL speed. Fixed.
16. TF post-battle retreat logic has been altered. More intelligent one-hex retreat after battle, considering destination and home port distance, and the presence of enemy

TFs in possible retreat hexes, has been added.

17. Damaged subs were attacking enemy TFs. Fixed.
18. In some cases, having an unusual set of options and random target assignments for a sub patrol TF could result in the TF not routing and the game to crash. Fixed.
19. Mine laying TFs were not mining their home ports. Fixed.
20. The "Transfer to base" function within "Transfer Ships" did not check the nationality of base in the hex and was allowing the transfer of ships from one side to a base of the other side. Fixed.
21. When a ship was to be upgraded, the program was forcing the ship into Pierside Repair if the total damage (upgrade plus pre-existing) was high enough. However the existing repair method was not being checked, so ships in other repair modes (Shipyard or Repair Ship) were being blindly moved into Pierside Repair. Fixed.
22. A "No additional repair possible" message was being generated when a ship assigned to Repair Ship repairs could still be repaired by repair ship,s but the Repair ship(s) were out of ops for the turn. Fixed.
23. Changing the repair mode of a ship, then cancelling the change would result in the clearing of the minimum conversion delay value for that ship. Fixed.
24. Transferring ships under repair in a Shipyard to Readiness was allowing them to be selected for Task Forces immediately, instead of after the specified delay. Fixed.
25. For Japanese Cargo -> Troop Conversions, ship details changed but the changes did not appear when forming Task Forces, when ships are listed in the ship selection screen for Task Force (TF) formation. Fixed.
- 26. Gameplay Change:** If the minimum specified shipyard size for a ship upgrade is smaller than the minimum shipyard size able to be used by that ship, then the ship can upgrade using "pierside" repair for the upgrade, as long as the ship is at a base with a shipyard at least as large as the size specified for the upgrade, and as long as the upgrade does not apply flotation or engine damage. If flotation or engine damage is applied by an upgrade, then the ship MUST be placed in a shipyard for the upgrade.
27. Fixed a range calculation error for TFs moving directly off map, to do with the interaction of the on-map and off-map portions of range calculation. With the direct off map movement BOTH were adding in the entry-zone to off-map portion - one as proper movement and one as improper "return to home port".
28. The calculation for the allocation of remaining fuel operations when a port had large amounts of fuel, and the operations limit was reached before refueling was completed, would overflow the ship fuel value resulting in a negative endurance value. Fixed.
29. A following TF may teleport to the location of the followed TF when the followed TF reaches its destination. Fixed.

30. The “Rearm from tender” process was using the wrong variable in checking what ships can rearm from an AG. Also for non-DDs from an AD. Fixed.
- 31. Gameplay Change:** Adjustments have been made to the routine steaming damage function to make it more difficult to keep PTs at sea for long periods. It was modified to accumulate considerable damage for PTs under extended steaming and also increase chances for major events (breakdowns, running aground or on reef, etc).
- 32. Gameplay Change:** The React range for PT boat TFs has been restricted so that it may not be set higher than 1 hex.
- 33. Gameplay Change:** To avoid high losses, PT TF's will now mostly evade/decline combat with enemy combat TFs during daylight hours.
- 34. Interface Improvement:** When TFs are loading units, any units that are in the wrong mode for loading, instead of not showing up at all in the list, will show up on the "Load Troops" list as grayed out (not selectable) and with text indicating a reason why the unit cannot be loaded.
35. The buttons for step through the TF's in a hex were not working properly. Fixed.
36. In some cases, Sub TFs were leaving station with too little fuel to get home. Adjusted the conditions for automatic leaving of patrol zone to refuel. Also found and fixed several AI interactions with TFs en route to home base, and some more exposed by the fact that the home port was out of fuel.
37. In some circumstances, US Subs were rebasing to San Francisco when Manila fell. Fixed.
- 38. Gameplay Change:** The TF selection routine for combat has been adjusted so that surface groups more frequently are chosen by other surface groups for naval combat.
- 39. Gameplay Change:** The role of ship experience in surface combat has been increased.
- 40. Gameplay Change:** The Withdraw for ships that have a withdrawal pending is now always available whenever the ship is in an appropriate port, regardless of the time before the withdrawal is due.
41. Ship nationality and current location has been added to the Ship Transfer detail display.
42. TFs can now load the last few points of supply and fuel from a base if there are no requirements for them at the base.
43. Ships that were not supposed to be able to be transferred into a docked TF, due to tonnage limits, were displayed as not able to be transferred, but could be transferred anyway. Fixed.
44. It was possible that some reaction values and other data were not being cleared from an old TF record when a new TF was formed using the same TF data slot. Fixed.
- 45. Gameplay Change:** The damage cut-off point for Submarines returning to patrol was

- too high, resulting in subs returning to patrol with fairly high amounts of damage. The cut-off points have been reduced to the following: 10 points of system damage; no float damage; 10 points of engine damage with no points of major engine damage; no fires.
- 46. Gameplay Change:** The way that surface radar is used in naval combat has been modified as follows: Visual confirmation is now required before ships will open fire, meaning that ships must close to visual range first. Also, in situations where range is increasing, if it goes beyond visual range (factoring in Detection Level) fire ceases.
 - 47. Gameplay Change:** Early war surface radars now must pass an “effectiveness” check to ensure that the radar worked correctly and that the information from the radar was assimilated through the TF chain of command and ultimately resulted in useful changes of orders being issued to the TF in a timely manner.
 - 48. Gameplay Change:** Local Minesweeping TFs no longer require that destination be set to their home port to operate in that port. These TFs will now operate in their home port if just the Home Port value is set.
 - 49. Gameplay Change:** Local Minesweeping TFs will now consume fuel and be exposed to operational damage even if they do not find mines. This makes the operation of these TFs consistent with ordinary Minesweeping TFs.
 50. A submarine in a mine laying TF with mines already loaded in place of torpedoe tubes, and which was then ordered to rearm, would falsely reduce the mine pool by the number of mines already loaded. Fixed.
 - 51. Gameplay Change:** ACMs maintaining friendly minefields will now consume fuel and suffer operations damage.
 52. The routine that checks to see if a ship has loaded all of a land unit that it can did not properly account for cross load costs. This could give the impression that a unit could load completely, when in fact it could not due to cross load penalties. This, in turn, prevented the switchover from loading troops to loading supplies. Fixed.
 53. Adjusted Speed in the Reinforcement Ship Display to show true speed, without regard to lack of fuel due to ships newly constructed on-map arriving without fuel on board.
 54. Pilots sent to be instructors were sometimes disappearing from the game. Fixed.
 55. Pilots undergoing training off-map were getting skill increases, but the increases weren't being displayed until they returned from a mission. Skills are now updated at the end of each turn even if the pilot has not flown a mission.
 - 56. Gameplay Change:** Experience gain for training pilots is now slower.
 57. Pilots not yet in the game were being allocated to new air groups. Fixed.
 - 58. Gameplay Change:** When fragments are created by the transfer of air units to a new base, the fragments will automatically transfer to the new base by rail if that is possible.

59. Automatic LRCAP should now not occur for human players.
- 60. Gameplay Change:** Off-map movement of air units without ready planes is now allowed.
61. Corrected the transfer of pilots to Training Command – some were being released back to pool or to other groups.
62. Added checks to ensure pilots were correctly assigned to planes in the same group, and in reverse.
63. Fixed the nationality filter on the air group list screen. It was not checking the setting for replacements and upgrades.
64. Fixed activation of dormant air groups on a ship class upgrade – VBF units were showing up ahead of time.
65. Fixed the error caused by clicking on a base/TF/anchor/etc symbol while setting search arcs on the map.
66. Units with Aviation support devices can now repair aircraft at off-map bases.
67. Changed the float plane count on the “Task Force” mouse over to show total float planes.
68. Fixed air naval attack missions that would sometimes attack bases rather than rest as a secondary mission.
69. Fixed the faulty check on Air Operational Loss that was adding non-combat losses to air-to-air instead of Operational Loss.
70. Fixed the aircraft replacement build intervals which were finishing a month too early.
- 71. Gameplay Change:** Seaplanes are no longer counted against the aircraft stacking level when in a coastal base.
- 72. Gameplay Change:** Command level headquarter units now behave like an Air HQ for the purpose of determining the over-stacking limits of airfields. The effect radius of a command HQ extends out to twice the command radius, but only applies half the affect when the distance to the base is more than the command radius.
- 73. Interface Improvement:** The air skill changes for pilots are shown in GREEN for the last played turn, and ORANGE for monthly changes.
- 74. Interface Improvement:** Added a button to the air group screen to get the maximum number replacement planes if possible. A number of groups come back without planes so this option is important for player controlled replacements.
- 75. Gameplay Change:** The default British arrival base has changed to Aden, and then United Kingdom.
76. The AI now has the ability to request additional supply for bases, based on the need of units fighting close by.

77. **Gameplay Change:** When calculating the bonus for land unit planning for a target, the land unit and its HQs (corps and command) must be planning for same target to get the full HQ bonuses.
78. For the AI - Better checking for ensuring that an advance base is friendly when building AI TFs has been added.
79. Fixed a problem where AI land units were attacking the same turn after unloading in an enemy hex.
80. The text "Defending Units" would sometimes not appear in combat reports and all units on both sides end up listed together under "Attacking Units". Fixed.
81. An adjustment has been made to the attack level settings for AI land units. The AI will now be a bit less aggressive.
82. **Gameplay Change:** Fixed a loophole for units in reserve mode during combat. A check is made before combat commences to ensure the defender has at least 25% of its total assault value in a mode other than reserve. For example, if the attacker has an Assault Value of 100, the defender must have a total of at least 25 Assault Value not in reserve mode, otherwise the game will automatically switch units to combat mode until the 25% minimum is reached – starting with combat units and then non-combat units.
83. A problem was found that was causing early Soviet activation, even though the Manchukuo garrison requirement was being met by the Japanese.
84. After a fort level is reduced, the fort construction percentage will now be reset to 0.
85. The ability to change screen size has been limited, as this causes graphic corruption on the screen.
86. Fixed various instances where an underlying scroll box was still active and showed up on top of a LCU, group, or other screen.
87. When there were 20 devices to be displayed on the LCU reinforcement screen the list overran the display window. Fixed.
88. Fixed the ‘replacements off’ option on the Land Unit list.
89. An issue with loading LCU fragments was fixed.
90. A bug with replacements that could wipe out a unit’s TOE in some cases was fixed.
91. A problem with the land Follow command was fixed.
92. Due to variable reinforcement or updated scenario files, certain LCUs were being destroyed that were due to arrive on map very soon. Fixed.
93. Pilot attrition during training has been reduced to 2%.
94. An issue where some Base 0(0) ports were not building has been fixed.
95. **ew command line switches added for the program to improve performance.**

Please see the “Performance Switches” section at the start of this readme file.

- All listed data changes are for scenarios 1.2.6.7.8 and 9.

- **Air Data Changes**

1. Walrus II: Weapon 1/11 changed to Vickers K MG.
2. Audax I: Weapon 3/13 value set to 4/2, Weapon 10 value set to 1.
3. Blenheim IF: Weapon 4/14 remove AI MK III radar, add 4x40 lb/2x40 lb.
4. Blenheim VD: Month/Year set to 10/42.
5. Hurricane IIB: Month/Year set to 1/42.
6. Sunderland III: Top Turret added, weapon 2/12 2x.303 Browning MG.
7. CW-21B Demon: Climb set to 2700.
8. Hurricane IIB: Built rate set to 12.
9. S.23 Empire: Month/Year set to 2/42; end month/End year set to 3/42; built rate set to 1.
10. Hudson I: Climb set to 1280.
11. Spitfire VIII: Rng Max/Ext/Normal set to 490/380/310; weapon 3/4 set to centreline/external.
12. Sunderland C.III: Weapon 1/11 changed to ASV II.
13. Seagull V: Weapon 1 changed to Vickers K MG.
14. Hurricane XIIb: Climb set to 2245.
15. Stranraer: Name corrected to “Stranraer”.
16. Walrus II: Weapon 1 changed to Vickers K MG.
17. B-17D Flying Fortress: End Year set to 41.
18. B-26 Marauder: Replacement rate set to 15.
19. B-29-1 Superfort: Weapon 5/15 number set to 2.
20. B-29-25 Superfort: Weapon 5/15 number set to 2.
21. B-29B Superfort: Weapon 1/11 number set to 2.
22. P-36A: “Amphibian” untagged.
23. P-51H Mustang: Rng Max DT set to 1990.
24. F4F-3 Wildcat: Weapon 9/19 2x58 gal DT External.
25. F4F-3P Wildcat: Weapon 9/19 2x58 gal DT External.

26. F4F-4 Wildcat: Replacement rate set to 45.
27. F7F-2N Tigercat: "Carrier Capable" untagged.
28. F7F-3P Tigercat: "Carrier Capable" untagged.
29. PB2Y-3 Coronado: Weapon 5 set to 1.
30. PBJ-1H Mitchell: End Year set to 45.
31. R4D-5 Skytrain: Build rate set to 5.
32. SOC-1 Seagull: Float Capable untagged.
33. SO3C-2 Seamew: Manouver set to 17/13/9/5/1.
34. A6M3 Zero: Rng Max DT set to 1065.
35. G4M1 Betty: Weapon 15 set to Internal.
36. G4M2 Betty: Weapon 15 set to Internal.
37. G4M2a Betty: Weapon 15 set to Internal.
38. G4M3a Betty: Weapon 15 set to Internal.
39. P1Y3 Francis: Weapon 9/19 2x220gal DT External.
40. Ki-44 Tojo: Weapon 9/19 2x130 gal DT External; upgrade to Ki-44IIa Tojo.
41. Ki-45KA1a Nick: Manouver set to 21/21/21/16/11.
42. Ki-45KA1b Nick: Manouver set to 21/21/21/16/11.
43. Ki-45KA1c Nick: Manouver set to 20/20/20/15/10.
44. Ki-45KA1d Nick: Manouver set to 20/20/20/15/10.
45. Ki-84r Frank: Rng Max DT set to 1060.
46. Ki-102a Randy: Weapon 9/19 2x200 gal DT External.
47. Mogami-2: Withdraw set to 0.
48. 43rd Shinbu-tai: Error in designation corrected.
49. 53rd Shinbu-tai: Error in designation corrected.
50. 63rd Shinbu-tai: Error in designation corrected.
51. 73rd Shinbu-tai: Error in designation corrected.
52. 83rd Shinbu-tai: Error in designation corrected.
53. 93rd Shinbu-tai.: Error in designation corrected.
54. No.1790 Sqn FAA: Air Class/Upgrade 00 set to Firefly NF.1.
55. VRF-3B: Ready a/c set to 24.

56. VP-23 Det 1: HQ set to USN Forwd AirCenPac.
57. VP-23 Det 2: HQ set to USN Forwd AirCenPac.
58. VMF-211: HQ set to USN Forwd AirCenPac.
59. No.44 Sqn RAF: Nationality set to British.
60. No.211 Sqn RAF: Reserve set to 8.
61. No.232 Sqn RAF: Reserve set to 14.
62. No.258 Sqn RAF: Reserve set to 14.
63. 30th BG/27th BS: Upgrade 00/02 set to -> B-24D1 -> B-24J.
64. 27th BG/91st BS: Error in designation corrected.
65. 307th BG/371st BS: Error in designation corrected.
66. 307th BG/372nd BS: Error in designation corrected.
67. 308th BG/373rd BS: Error in designation corrected.
68. 333th BG/507th BS: Error in designation corrected.
69. 407th BG/633rd BS: Ready set to 12; error in designation corrected.
70. 266th Sentai: Reserve set to 12.
71. Chuyo-2: Location set to Chuyo.
72. Kaiyo-2: Location set to Kaiyo.
73. Some air unit and pilot XP values tweaked.

- **Land Data Changes**

1. Properly assign their TO&E device to the Corps HQs "Alaska Defense Cmd", "III US Corps" and "IX US Corps".
2. The Japanese "80th Infantry Rgt" has the wrong device in slot 2. Fixed.
3. Australian LCU "2/1 NAOU Det." Arrival date changed to May 1942.
4. British AA units "1st HK&S Heavy" and "2nd HK&S Heavy" should be present at the start of the Campaign game(s). Fixed.
5. A large number of LCUs were equipped with radars that pointed to the "old" (unused) device slots, instead of the new radar device slots for AE. These have all been fixed.
6. TO&E entries 2514 ("Samoan Marine") and 2515 ("Samoan 42 Marine Bn") made static by the addition of a static device.
7. Removed the duplicate 2nd Hyderabad Base Force.
8. Remove the duplicate 109th RAF and RN Base Forces.

9. Remove the 5th British Div as it is properly outside the scope of game (it arrived as restricted unit at Mombasa)

- **Naval Data Changes**

1. Bangor Diesel classes 0171 and 0172 - corrected armament slot # for 2pdr gun.
2. Pennsylvania class 0314 - corrected upgrade Year from 54 to 45.
3. New Jersey class 0383 - corrected duplicate 20mm armament entry.
4. Momi class 1392 - added conversion delay.
5. Shokaku class 1826 - changed the Belt Armor from 215 to 165.
6. Taiho class 1846 - corrected the armament from 12.7cm 1674, to 10cm 1678.
7. Std-CT TK class 2122 - corrected armament slot # for Type-93 AAMG.
8. Akashi class 2168 - changed Durability from 1 to 31.
9. Shirataka class 2179 - corrected armament slot # for Type-93 mine.
10. C2 Arcturus class 2534 - corrected '42 upgrade Type from AKA to AK.
11. Ship Tade - corrected the Class from 1393 to 1392.
12. Corrected the spelling of: Akasisan Maru, Ansyu Maru, Kunitu Maru, Ramillies.
13. Tyrrell - corrected the Class to 2436 Tolland.
14. Oregon City - corrected the Class from 405 to 406.
15. Kamekaze class 1422 to 1425 – correct the upgrade slot #s.
16. Akitsiki class 1492 – correct the endurance
17. various xAPs – reduce endurance and increase fuel

- **Device Changes**

1. SCR-270 radar - changed the introduction Year/Month from 4312 to 4112. Load cost changed to 40.
2. CPS-1 radar – Load cost changed to 40.
3. 12cm AA (1684) - added PEN, EFF, A-Soft and A-Armor data.
4. Camera (1853) - change EFF from 0 to 4.
5. 40lb GP Bomb (1886) added.
6. 75mm Cannon (1913) - changed Side from “A” to “J”.
7. Add new STATIC NW Frontier device (same stats as Indian 41 Rifle Section) with a Rate of 2 per month until 12/42, upgrading to device 919 “Nepalese Section”.
8. Added new “Nepalese Section” with the same stats as the Indian 42 Rifle Section, a

Rate of 1 per month from 6/42 to 12/43.

9. 150mm CD Gun (998) made STATIC.

- **Base Data Changes**

1. Maebashi factory number 18 correctly set to produce “Ki-44-IIa Tojo” instead of “Ki-43-1c Oscar”.
2. “Chichi-jima” (111,74) and “Haha-jima” (110,75) have their Airfield SPS values reduced to 0 to match the updated terrain types for these islands.
3. Truk now has a size 4 Repair Shipyard.
4. Perth now has a size 3 Repair Shipyard.
5. San Luis Obispo now has a size 2 port.
6. Bataan port size has been increased from 1 to 2.
7. A number of remote Soviet bases did not have local supply generation, which leads to them eventually running out of supplies. Sufficient local supply generation has been added to these bases to ensure that they do not run out. In addition, excess resources and oil has been disabled to prevent these from building up to huge stockpiles. The affected bases are “Anadyr” (158,30), “Magadan” (138,32), “Petropavlovsk” (141,44), “Alexandrovsk” (126,41), “Okha” (128,37).
8. The daily supply and fuel point levels for the United Kingdom off-map base have both been reduced to 100 points per day, from their previous levels of 5,000 and 500 respectively.

- **Map Changes**

1. The terrain for the Japanese islands of “Chichi-jima” and “Haha-jima” changed to “Forest + Rough”.
2. A missing segment of railway has been added connecting Diamond Harbour with Calcutta.
3. A number of minor map data inaccuracies (terrain data not matching terrain as painted on the map) have been corrected.

- **Editor Changes**

1. A new 64-bit Editor has been included for those who are running on 64-bit systems. Check the Start menu folder for the shortcut.
2. A Back button has been added for cycling through units.
3. Fixed air group totals.
4. Fixed display problem for scenario view.
5. Fixed a compatibility problem for list view controls for Vista machines.

v1.00.80 – July 31, 2009

- **Hotfix Beta**
 - Resolves interface lag issues on some dual core / quad core systems. Improves performance overall on most systems.
 - Fixes an issue that could cause TFs moving at cruise speed and full speed to move the same distance
 - Fixes an issue with the Guadalcanal scenario where some Allied units were restricted that should not have been

v1.00.79 – July 20, 2009

- **Initial Release**