

帝国 (Empire) V5.0a Aug 2026

It's best to have a separate installation of AE with its Empire artwork and extended map or super extended map and latest patch, plus my admin files. The game-play rules here take priority over the text documents if there is a conflict.

Install the correct Scn files depending on your map. There is a lot of new, additional art. Unzip the files in your Scn folder. Depending on the map you are using, put the ship and plane art in the relevant folders and overwrite.

Install the Scn files into the main Scn folder, they are 46-51.

Install the appropriate map or download mine

Scn 42 and 43* are for the extended and generally earlier modded maps.

Scn 44 and 45* are for the very extended new map 2022. New PWHEX file is only for this super extended map.

***Scn 43 and 45 have CV Saratoga at PH to make a more challenging start for the allies. But for taking the challenge you get the Bunker Hill and Essex CVs, approx. 1-3 months earlier.**

Scn 50 and 51 V1.0 "Age of Steel": In these scenarios, we build upon the original Empire mod and see an absence of the development of naval aviation, but with low treaty restrictions following a worldwide slump in the price of steel. This leads to a fairly prolonged arms race in battleships and battlecruisers, with Japan and the UK focusing on developing heavier 18-inch guns and the USA, slower to act with heavy restrictions from Congress but retaining an interest in more guns per ship.

Admin files if required or use yours...

Put the admin dll pwhex etc files in the main folder (these files are subject to revision soon) New PWHEX file (in separate zip) is only for this super extended map.

... That's it, and you're ready to go! This mod is not intended to be played against the AI. The AI has no script written for this mod.

This is a (heavily) modified version based on the RA mod scenario 8.0 designed principally by John III. The main body of work in its origin is accredited to him, and I have made very large modifications and additions to suit this work's objective.

Take a good look around the map; the starting setup has been modified a lot as well.

Historical context Scn 42,43,44, and 45.

We are in a world of lower economic naval progression. Slower industrial development and the very weak Washington Treaty allowed all ships under 14 inches gunned or with less than 4 main guns over 14 inch to be scrapped only by 1940... and allowed BB/BC under construction to continue (Yoshino, Tosa, Amagi, Akagi, Kaga, Lexington, Saratoga, Constellation, Constitution) or allow conversion of the same classes already started to CV. So navies were still focused on surface actions as the slow build-up went on through the 1930s. Many BB/BC ships are obsolete as war looms. Nations prepared for the London Treaty, scheduled for late 1939, never saw the light of day.

In mid-October 1941, British spies in Tokyo report that Japan, bolstered by the thought of Moscow's imminent fall and general collapse in Russian morale, is about to seize assets of the British Empire. Also, they have found that Germany is sharing its advanced technology with Japan on the basis that Japan first acts against British and Dutch interests.

London learns the first strike on the Malaysian peninsula is imminent. The attack is expected to take the form of amphibious landings and a land campaign toward Singapore and the DEI and later towards India. Britain prepares to take on Japan to protect its interests in the region.

At this stage, little thought is given to the growing area of naval aviation, and the expected short-lived conflict is likely to be decided ultimately by surface-to-surface combatants. Britain deploys two of its newest battleships and a modernised battlecruiser to defend the peninsula along with supporting assets. Despite asking America for assistance, America decided on a vigorous policy of neutrality, especially as Germany passively supported the development of the Japanese war machine. America, whose Air Force is still modernising, does not wish to enter into an immediate conflict with Japan, even by accident. Therefore, it is in the process of withdrawing its principal forces to Manila and Pearl Harbour; they even sold one old CVE to Australia in October 1941. In late November, however, America sent some further reinforcement to the Philippines. Some of these units are still in transit as the war opens. While hoping for a conflict to be avoided for a couple of years, America ordered the rapid advancement of the proposed expansion of the carrier fleet.

Although Japan is preparing to modernise towards a more air-focused fleet, significant efforts are being made to increase the number of surface combatants with a keen interest in the hybrid-style scout ships of several classes. As the war starts, Japan will have to radically modify its plans accordingly, which will provide a very interesting challenge. The game assumes that the second two Yamato class are already under partial conversion to fleet carriers as the Yamato II class is accelerated to take their place in the battle line. These are the last two semi-hybrid battleships Japan will ever build and were already under construction in December 1941.

The Allies fail, though, to break the code that plans for an attack on both targets.

Japan was not ready for war (cancelling in November the scrapping of several elderly ships needed as escorts), but the opportunity to carve up the British Empire led the Empire of Japan to war. They still have many obsolete planes, and the new, more modern types are only just starting to be hurriedly produced, but Japan has a large ship-building capacity. They still place their faith in surface units to support the campaign against Malaya and the British Empire, but at the same time risk their most modern aircraft and best pilots towards the risky strike against America at Pearl Harbour, inspired by the recent British attack at Taranto. Both episodes are to open simultaneously, bought

forward by the daring British move to trigger Vichy French forces in China to change sides at the end of November 41. Two Vichy French submarines at sea escape and defect to Japan.

Japan feels supremely confident that with the collapse of the British Empire and the Dutch East Indies, America is likely to sue for peace after its wounding and destruction of allies. Japan will become the Empire of the Pacific.

The stage is set.



Historical Context for Scn 50+51 V2.0a “Age of Steel”.

The Treaties of 1925 and 1933 found agreement on cruisers and finally stopped the building of new battleships until 1938, when 2 Ships of up to 35,000 mt per nation could be built each year for the next 5 years with guns not exceeding 14”, but no older ships need to be scrapped. The USA, in recession, failed to complete these ships in time before the treaties were set aside for good and resumed these ships with 16-inch guns (Washington and North Carolina). And so interest in Naval aviation and aircraft development remains low, but two new carriers per nation in excess of 20,000 can be built from 1937, and experimental and lightships in commission remain. The final Treaty would be set aside entirely in 1939, but many Treaty Battleships had already been laid down, and Japan secretly laid down the first 20-inch gunned battleships. With newer aircraft appearing, New Carriers were rapidly laid down by all sides in 1939... *This is the Age of Steel!*

Ships out CV = Akagi, Kaga, Lexington, Saratoga and Wasp (Treaty allowed Conversions or Treaty ship).

Ships out BB = Nelson and Rodney, now N3 Class. Yamato and Musashi are now improved.

Japan Ships in = 4 X No.13 Class 18”, Akagi and Kaga (Amagi Class 16”), Improved Yamato class 20” x 2 close to completion and 2 to build. 2 X Hokkaido class 14” BC.

Allies Ships in = 4 x South Dakota Class 16 ”BB, Lexington and Saratoga as Constellation class 16” BC. 4 X N3 Class 18” BB, Aged BB - 4 x Iron Duke Class 13.5” BB plus Agincourt 12”.

Longer delays on treaty BB and new CV.

Game set up

Both sides in this game start with unprepared plans for war; the initial setup is quite different from stock, but you still get to bite the same cherry.

The acceleration towards war was accelerated by the success of the Axis in Russia, combined with the potential collapse of the British Empire. Both sides will have to cope with quite a large amount of obsolete equipment at the start, but this game also declares that technology will advance at a very rapid pace (for both sides) after the war commences. It further assumes that Germany does not declare war on America in early 1942 and that, therefore, America commits more resources to the conflict in the Pacific.

The games start, especially since a preference in my design is towards the two-day game system. But that is down to the players to decide.

Victory conditions - in addition to hard-coded game conditions

The fall of Tokyo before 1/11/45 (and without an Atomic bomb used on the same day) = Allied decisive.

If three cities from the options of Nagasaki, Kagoshima, Hiroshima, Kobe, Osaka, Yokohama, Fukuoka and Maesa to allied land forces before 1/9/45 = Auto Allied Decisive victory.

If 3 VP locations are taken after 1/9/45 and before 1/10/45, then the result is a Draw.

If the game moves past 1/10/45 with victory points less than 2.5/1 in the Allies' favour, the result is a draw unless Tokyo is taken.

Any Victory location that has a Nuclear bomb used up on it ceases to become a victory location.

If an atomic bomb is used on Tokyo, it loses its status as an automatic victory location.

A special note on Japanese Aircraft Engines.

Because the number of engine types available is hard-coded, the engines are just a general type by each manufacturer, showing the mixed nature of Japanese Industry – they do not always match historical variants, and in the game engine and game outcome, it makes no difference at all.

A note on Rapid Fire Guns = RF

Some guns are designated RF. This gun has a higher and later war guns, a much higher rate of fire compared to similar guns in its calibre, and also has a higher dud rate.

A note on Torpedo penetration

Torpedoes are also now rated for realistic penetration. This means some BB with belts 201-325mm will have some resistance or defeat smaller TT when they hit the belt armour. 325mm+ will have more, and 400mm+ will have belts capable of defeating all (allied) TT. The most powerful TT will still overcome any Belt. Play testing shows that around 60% of TTs do not hit the ship in the belt despite the given message in the playback (error in the stock game? But the mechanics do work). Ships hit outside the belt seem to suffer the full but variable effect of the TT.

A note on bomb and shell duds

Both shells over 75mm and all bombs (and rockets/suicide planes/ Kaiten) have a % dud chance, with a few weapons suffering more, where historical evidence suggests that should be the case.

Special turn-one rules and house rules (house rules are optional – if you do not want them, then play without!).

The first turn rules in this game are quite different from other mods and the stock scenarios.

Highly recommended to use 2-day turns.

No allied player may change the move of or create any task force on the map on turn one (including in a two-day turn option). Japan may create any new Amph and Transport TF and Strat loading on turn 1. Players, however, may alter the threat tolerance and the routing to the coast. This is to simulate the confusion between political and military masters in the early hours of the conflict. It will also allow for a fairly historical start in terms of the capabilities of what can be done. It will allow for a single large strike on Pearl Harbour and Manila.

Japan may alter the orders of any aircraft units on turn one, and you need to. This includes the Pearl Harbour attack and the possibility to use Army and Naval air units against Manila's port and airbases.

Japan may alter the orders of any ship or TF on turn one. This can include an alternate strike by KB at, say, Manilla.

British and Commonwealth air units only may alter their orders to anything the player wishes but may not move base. This is simulating the more prepared nature of Britain for the up-and-coming conflict.

American and American Allied air units, including the Chinese, may not move base but may alter their orders. Whatever they do, it must be matched by the same volume of training. So, for instance, CAP at 40% requires training at 40%. The naval attack is allowed but 40% must also be training. This simulates the unpreparedness and neutrality of US forces.

Examples

1703 - VB-3 Any **Manual**
Squadron - US Navy (36) **No resize allowed**
Attached to: **US Pacific Fleet**
Carrier Trained & Capable, Based at: Pearl Harbor
SE2U3 Vindicator - Dive Bomber



Group Mission:

- Airfield Attack
- Port Attack
- Naval Attack**
- Ground Attack
- Recon
- Naval Search
- ASW Patrol
- City Attack
- Training
- Stand down

Target: None
Cannot Select Target

Patrol levels

ASW	0		
Search	0		
Train	40		
Rest	0		

General

Aircraft

Serviceable:	18	Losses	
Maint'd / Damaged:	0/0	Ops/WOff:	0/0
In Reserve:	0	A2A/Flak:	0/0
		Ground:	0

Ready Pilots: 18(1) KIA: 0/0
Average Experience: 71 WIA: 0/0
Morale: 88 MIA: 0/0
Fatigue: 1
Kills: 0

From ...
Get New Pilot Get 17 Pilots **Any**

Request Veteran

Major Skills: Naval bombing, Defensive, Land bombing

Commander: **LCDR Leslie, MF**
Leadership: 62 - Inspiration: 70
Naval: 63 Land: 22 Air: 70
Admin: 52 Aggression: 69

Maximum Range [hexes/miles] 43 / 1720
Extended Radius [hexes/miles] 8 / 315
Normal Radius [hexes/miles] 7 / 255
Maximum Altitude [feet] 18,300
Speed (cruise/max) [mph] 152 / 243

Not using drop tanks

- Transfer to Base
- Disband Group
- No replacements
- Do Not Upgrade**
- Draw one Aircraft from Pool (20)
- Transfer to Ship
- Withdraw Group
- No upgrade possible

- Set All SE2U3 Vindicator s at this base
- Set All Dive Bombers at this base
- Flying Day Operations - Change to Night

Current Altitude: 10000

Maximum Range: 8

Set

Set

Show US Pacific Fleet Unit OOB

Location is group base

PILOTS AIRCRAFT DATA PLANES

Next Group Back Exit

2248 - VF-103 Any **Manual**
Squadron - US Navy (12) **No resize allowed**
Attached to: **US Pacific Fleet**
Carrier Trained & Capable, Based at: Pearl Harbor
F2A-2 Buffalo - Fighter



Group Mission:

- Airfield Attack
- Port Attack
- Naval Attack
- Ground Attack
- Sweep
- Escort**
- Training
- Stand down

Target: Commander Discretion
Select Target

Patrol levels

CAP	40		
LRcap	0		
Train	40		
Rest	0		

Current Altitude: 10000

Maximum Range: 7

Set

Set

Aircraft

Serviceable:	12	Losses	
Maint'd / Damaged:	0/0	Ops/WOff:	0/0
In Reserve:	0	A2A/Flak:	0/0
		Ground:	0

Ready Pilots: 12(0) KIA: 0/0
Average Experience: 57 WIA: 0/0
Morale: 57 MIA: 0/0
Fatigue: 2
Kills: 0

From ...
Get New Pilot Get 4 Pilots **Any**

Request Veteran

Major Skills: Strafing, Defensive, Air

Commander: **LTJG Madison A**
Leadership: 55 - Inspiration: 39
Naval: 41 Land: 30 Air: 46
Admin: 49 Aggression: 83

Maximum Range [hexes/miles] 19 / 730
Extended Radius [hexes/miles] 7 / 275
Normal Radius [hexes/miles] 6 / 220
Maximum Altitude [feet] 33,000
Speed (cruise/max) [mph] 157 / 323

- Transfer to Base
- Disband Group
- No replacements
- Do Not Upgrade**
- No replacements from pool (30)
- Transfer to Ship
- Withdraw Group
- No upgrade possible

- Set All F2A-2 Buffalos at this base
- Set All Fighters at this base
- Flying Day Operations - Change to Night

Current Altitude: 10000

Maximum Range: 7

Set

Set

Show US Pacific Fleet Unit OOB

Location is group base

PILOTS AIRCRAFT DATA PLANES

Next Group Back Exit

Political points for crossing national borders should be paid, except for Thailand, Burma, and Malaya. Allied units from India may enter Thailand, Burma and Malaya without penalty. Japanese units in Thailand and Burma may do likewise to enter India. Thai units may only enter Burma, Cambodia and Malaya.

Because the terrain in the DEI, Malaya, Burma, China, et cetera is fairly inhospitable, combined with the weather throughout most of the year, the following house rule is suggested. No more than one deliberate attack (two if playing two-day turns) in any single or combination of Mountain, jungle combinations or jungle rough, Forest Rough hex per turn in 1941 and 42. Two attacks per turn thereafter 1944 + (4 in two-day turns). No pursuit is allowed at any time in the same. Island attacks (no larger than one hex) are excluded from this rule. Shock attacks across rivers also excluded.

Sweeps should be conducted at the **second-highest** manoeuvre value.

Aircraft of Kamikaze variant K should only equip Kamikaze units or arriving training units that may convert to Kamikaze.

4E RECON and TR Planes- should only operate from AF size 4+

Some Aircraft are clearly designated at the end of their name, say, (CV). These aircraft may only be stationed on CVL, CV, and CVB as defined. So, for example, a plane designated CVL can only operate on CVL, CV and CVB. Submarines may only operate the type of aircraft they came into the game with; the exception is that the Japanese may upgrade to other SS types from the Glen.

Japanese ships may not carry reserve Float Plane replacements as this is considered in the revised advantageous loading.

The Japanese cannot accelerate aircraft. Realistic research and development should be on in this scenario. You do need to accelerate and research engines. Engines are generic types and not an exhaustive list as the hard code in the game does not allow it.

The Midway-class carriers may not pass the Panama Canal (they were too wide)

CVE Hosho air groups may not leave the Ship; it's a pure training CVE.

Monsun Gruppe Naval and air units – Before 1/1/44 - Should really only operate in the Indian Ocean and Southern Ocean areas around Australia and use only their historical bases as well and Rangoon, Singapore and Bangkok. They have two naval HQs, which are fixed arriving during the game; you should only use those until they are unviable. They also have one simulation off-map Refuelling base, "Milk Cow", this is for only U-boats and should not be used by Japan or attacked by the Allies.

Thai and GM German units may not be rebuilt. German units may station anywhere from 1/44.

German and Thai air units may only transfer in replacement-level pilots. They may not transfer out any pilots. This house rule is to stop teaching it's being used to train large numbers of Japanese pilots.

German/ Italian Captains may only be placed on German and Italian ships.

INA (Indian National Army) units may not board ships – they are intended to fight British Rule and inflame rebellion in India.

Settings

The game is built around the idea of **two-day turns**. Especially the first turn has been set up with two days in mind. It is recommended that two-day turns are used for several reasons. One is you will get through the game quicker, second, they will not be the infinite micromanagement that commanders simply could not have had, and also it will slow operational activity/attacks.

Realistic research and development should be **on (Critical)**

PDU on - But Thailand and German air units should only operate Thai planes built by Japan and not transfer out any pilots only take replacements.

Highly variable reinforcements - should be **on for more uncertainty or play off if you choose**.

Withdrawals - should be **off**. If **on** will boost the Japanese side.

Reliable allied torpedoes - should be **off**. Could be an if very novice allied player.

This mod is not intended to be played against the AI. The AI has no script written for this mod.



Tips for both sides

Japan

Starting positions and setup are changed somewhat from stock. Take a good look around the map the starting setup is modified a lot.

Remember you have ships near PH – running for Tokyo (loaded with FW200 parts and Mauser Cannon parts) and raiders, including a CB in the Indian Ocean.

Japan has some problems at the start. The naval fleet air arm can deal a large blow at Pearl Harbour or Manilla, but the other carriers need their Kate air groups updated. There will be an immediate shortage of modern aircraft and pilots after hostilities start, so use them with care. And it need not be said you will not see pilots again like those of the KB on Dec 7th. Some arriving aircraft carrier groups are not carrier trained, and others are completely missing. This is to show the disorganisation present in this arm of the Japanese military.

You have complete freedom to build the Navy you want, but you cannot build it all. There are a fair number of mothballed DD to bring back to service. You also have assets in the Indian Ocean, use them well.

Japan has more SS at the start, some are very obsolete. All submarines are now cheaper to build and have radar sooner. The allies also have more SS at the start, some obsolete and some new, which can make things quite tricky, esp. in the DEI. Later, you receive some U-boats, which will be more useful than most Japanese SS. They should only operate from the locations of the GM bases as per the optional rules.

Japanese ASW is weaker before 1944 but stronger afterwards than stock.

4 E Bombers are a bit stronger in terms of load, but the guns are not quite as good.

It's definitely worth also attacking the airfields at PH on Dec 7th as the allies will be very short of planes for some while. A second strike on turn 3 may, though, induce a lot of losses.

Here is a suggestion on strikes in order of priority

Pearl Harbour - Port and Airfields

Manila - Port

Clark Field - Air Field

Kwangchowwan - Port

Hong Kong - Port

There is a good opportunity to strike against Manila/Clark Field the same time as Pearl Harbour with your land-based air. Manila holds a part of the American submarine force, but at the same time, the airfields in the Philippines and indeed Pearl Harbour have a lot of aircraft, the most modern of which

will be in very short supply immediately after the destruction. This will save you some trouble later. It's a difficult balance.

In this vision, Japan pursues developing the idea of the long-range scout cruiser much further. These cruisers are primarily there to locate the enemy for the carriers. Japanese doctrine determined that carrier aircraft were only for offensive strikes themselves. The Tone-class cruisers may carry seven aircraft in this mod and have the first available radar.

There are many other new, difficult choices to be explored in the naval production system – you cannot build it all. There are a number of additional surface units added to the game, mainly of the more modern nature, arriving as the game progresses, but starting assets will get obsolete. There are also a few interesting convoy escort CVE.

The CL Yahagi class and the CLAA Agano. Both are excellent additions to any CV TF. There are also options to build a lower-grade CVs quicker... or wait until you can bring newer, modern types. It's a balancing act.

There are also a number of obsolete ships to be found jobs for. The two elderly CVE in Tokyo at the start represent ships that were about to be scrapped, as is the target ship and aged CLs and SS saved from scrapping at the last moment by the opening of the war.

Many of the land-based air units, especially the fighters, need upgrading. You also have to build a few bombers and more modern fighter aircraft for Thailand.

Pilot replacements and unit capacities for pilots are much reduced, esp. until the end of 1942. Then the volume is up but the quality drops off.

The very best Japanese home defence fighters arrive earlier than their engines. These engines need to be accelerated if you plan to get these fighters in on time. Upgrade paths for the most basic and dependable a/c are fairly easy and user-friendly, but the high-tech paths are limited and have to be started from scratch. It's best to set to upgrade (yes) and see what happens if you are not sure. Some aircraft move into T (free upgrade) versions before moving to new bomber types.

Task force Z (substantially reinforced) presents a large threat, especially if the Allied player can maintain air superiority over it. The Spitfire MKII is probably the best allied fighter at the start but there are very few.

Many of the Japanese land units have improved morale at the start to simulate victory fever. There are additional large anti-aircraft units (some are fixed in HI) raised as the Allied for engine bomber menace becomes apparent.

The heavy two-engine fighters may prove to be a reasonable defence against the four-engine bomber menace. Their larger cannons 37mm and upward, have been slightly upgraded on accuracy as have the Allies but this is more important to the Japanese. Production of the two engine fighters with slightly improved canon accuracy should now be viable.

The first jet fighter can make its appearance in the Summer/ Autumn of 1944. These are important home defence fighters but like some others arrive earlier than their engines. These engines need to be accelerated if you plan to get these fighters and some bombers in on time.

Many other later war airframes have also been advanced from stock, and new specialist variants have been added. Aircraft-heavy cannons (37MM and upwards) for both sides have been upgraded

Until probably late 42 to early 1943, the Empire may have no bounds provided you keep your CV safe. But you must prepare for the swift onslaught in return.

What should you expect from the PH effort?

Well...Typical PH returns are 0,1 or 2 US BB Sunk... Typically (plus a few other ships). If the Saratoga at PH option is chosen, she usually survives but with massive damage. Remember, the game does a good job, as even ships that were sunk were raised, and the loss of 2 BBs is about right. Using lower exp level Val, Kate and Jake on the airfields, you can usually bag around 40 - 130+ aircraft. Thats important in this mod as the USA is very short at the start.

Allies

Starting positions and setup are changed somewhat from stock. Take a good look around the map the starting setup is modified a lot.

Observations on starting damage at Pearl Harbour

Scn 46 V 5.0

Starting BB

Active Ships
at Pearl Harbor

All Ships

CVC/VL

CVE

BB/BC

CA/CL

DD

DE

APD

AP

AK

AO

TK

SS

Aux

Mine

Pat

LS

LC

Type	Name	Endurance	Speed	Ops	Cap	-Damage-				-Cargo-			Troops
						Sys	Flt	Eng	Fire	Sup	Fuel		
BB	Oldahoma	6900	21	0	2	0	0	0	0	0	0	none	
BB	Arizona	8000	21	0	2	0	0	0	0	0	0	none	
BB	Pennsylvania	8000	21	0	2	8	0	0	0	0	0	none	
BB	Idaho	9000	22	0	2	5	0	0	0	0	0	none	
BB	New Mexico	9000	22	0	2	5	0	0	0	0	0	none	
BB	Mississippi	9000	22	0	2	5	0	0	0	0	0	none	
BB	North Dakota	6600	21	0	0	0	0	0	0	0	0	none	
BB	Michigan	6600	21	0	0	0	0	0	0	0	0	none	
BB	Utah	6720	20	0	1	0	0	0	0	0	0	none	
BB	Florida	6720	20	0	1	0	0	0	0	0	0	none	
CL	Tillamook	9000	34	0	2	0	0	0	0	0	0	none	
DD	Bagley	6940	36	0	0	0	0	0	0	0	0	none	
DD	Blue	6940	36	0	0	0	0	0	0	0	0	none	
DD	Helm	6940	36	0	0	0	0	0	0	0	0	none	
DD	Mugford	6940	36	0	0	0	0	0	0	0	0	none	
DD	Ralph Talbot	6940	36	0	0	0	0	0	0	0	0	none	
DD	Henley	6940	36	0	0	0	0	0	0	0	0	none	

Pearl Harbor

Port Capacity:

7(5)

Port Damage:

0

Re-arm Level:

8260

Repair Shipyard

Capacity:

100,000

Used:

0

Ships in yards:

0

Ships in port:

141

Active Ships:

141

Ships under Repair:

0

Ships damaged:

4

Ships due upgrade:

131

Ships in list:

141

Supply:

120000

Supply Required:

16687

Fuel:

550000

Fuel Required:

For port ships:

2133

For TF ships:

90

Form New TF

Return type to pool

PT

Change HQ for ships on this list

Load Tenders on this list

Manage ships under repair

Re-fuel/arm ships on this list

Show ships under repair

Show Ships due upgrade

Allow upgrades for ships on this list

No upgrades for ships on this list

Back

Exit

2 BB Sunk

Active Ships at Pearl Harbor		All Ships	CV/CVL	CVE	BB/BC	CA/CL	DD	DE	APD	AP	AK	AO	TK	SS	Aux	Mine	Pat	LS	LC
Type	Name	Endurance	Speed	Ops	Cap	—Damage—				—Cargo—									
						Sys	Flt	Eng	Fire	Sup	Fuel	Troops							
BB	Oldahoma	6900	4	66	2	26	75	23	0	0	0	none	Pearl Harbor Port Capacity: 7(5) Port Damage: 36 Re-arm Level: 2975 Repair Shipyard Capacity: 50,000 Used: 0 Ships in yards: 0 Ships in port: 138 Active Ships: 138 Ships under Repair: 0 Ships damaged: 46 Ships due upgrade: 128 Ships in list: 138 Supply: 107649 Supply Required: 7561 Fuel: 549977 Fuel Required: For port ships: 2133 For TF ships: 1258 Form New TF						
BB	Arizona	8000	11	68	2	23	43	5	0	0	0	none							
BB	Pennsylvania	8000	3	68	2	57	72	43	0	0	0	none							
BB	Idaho	9000	18	84	2	16	14	3	0	0	0	none							
BB	New Mexico	9000	6	75	2	55	63	23	0	0	0	none							
BB	Mississippi	9000	14	82	2	65	34	3	0	0	0	none							
BB	Michigan	6800	14	56	0	95	31	5	0	0	0	none							
BB	Florida	6720	11	46	1	24	28	21	0	0	0	none							
CL	Tillamook	9000	24	35	2	22	28	0	0	0	0	none							
DD	Bagley	6940	36	40	0	0	0	0	0	0	0	none							
DD	Elue	6940	36	39	0	0	0	0	0	0	0	none							
DD	Helm	6940	36	39	0	0	0	0	0	0	0	none							
DD	Mugford	6940	36	40	0	0	0	0	0	0	0	none							
DD	Ralph Talbot	6940	36	38	0	0	0	0	0	0	0	none							
DD	Henley	6940	36	38	0	0	0	0	0	0	0	none							
DD	Patterson	6940	36	40	0	0	0	0	0	0	0	none							
DD	Jarvis	6940	36	39	0	0	0	0	0	0	0	none							
➡	Return type to pool	PT	➡	Load Tenders on this list	➡	Re-fuel/arm ships on this list													
➡	Change HQ for ships on this list	➡	Manage ships under repair	➡	Show Ships under repair														
➡	Allow upgrades for ships on this list	➡	No upgrades for ships on this list	➡	Show Ships due upgrade														
													➡	Back	➡	Exit			

Scn 47 1 CV PH - damage – Saratoga is only sunk about 20% of the time, V 5.0

Active Ships at Pearl Harbor		All Ships	CVCVL	CVE	BB/BC	CA/CL	DD	DE	APD	AP	AK	AO	TK	SS	Aux	Mine	Pat	LS	LC
Type	Name	Endurance	Speed	Ops	Cap	—Damage—				—Cargo—									
						Sys	Flt	Eng	Fire	Sup	Fuel	Troops							
CV	Saratoga	10300	33	0	78	0	0	0	0	0	0	none	Pearl Harbor						
BB	Oldahoma	6900	21	0	2	0	0	0	0	0	0	none	Port Capacity: 7(5)						
BB	Arizona	8000	21	0	2	0	0	0	0	0	0	none	Port Damage: 0						
BB	Pennsylvania	8000	21	0	2	8	0	0	0	0	0	none	Re-arm Level: 8260						
BB	Idaho	9000	22	0	2	5	0	0	0	0	0	none	Repair Shipyard						
BB	New Mexico	9000	22	0	2	5	0	0	0	0	0	none	Capacity: 100,000						
BB	Mississippi	9000	22	0	2	5	0	0	0	0	0	none	Used: 0						
BB	North Dakota	6600	21	0	0	0	0	0	0	0	0	none	Ships in yards: 0						
BB	Michigan	6600	21	0	0	0	0	0	0	0	0	none	Ships in port: 142						
BB	Utah	6720	20	0	1	0	0	0	0	0	0	none	Active Ships: 142						
BB	Florida	6720	20	0	1	0	0	0	0	0	0	none	Ships under Repair: 0						
CL	Tillamook	9000	34	0	2	0	0	0	0	0	0	none	Ships damaged: 4						
DD	Bagley	6940	36	0	0	0	0	0	0	0	0	none	Ships due upgrade: 132						
DD	Blue	6940	36	0	0	0	0	0	0	0	0	none	Ships in list: 142						
DD	Helm	6940	36	0	0	0	0	0	0	0	0	none	Supply: 120000						
DD	Mugford	6940	36	0	0	0	0	0	0	0	0	none	Supply Required: 17555						
DD	Ralph Talbot	6940	36	0	0	0	0	0	0	0	0	none	Fuel: 550000						
													Fuel Required:						
													For port ships: 2133						
													For TF ships: 190						
													Form New TF						
Return type to pool PT		Load Tenders on this list				Re-fuel/arm ships on this list													
Change HQ for ships on this list		Manage ships under repair				Show Ships under repair													
Allow upgrades for ships on this list		No upgrades for ships on this list				Show Ships due upgrade							Back Exit						

CV Saratoga sunk about 1 in 5 starts

Active Ships at Pearl Harbor															All Ships										CW/CVL	CVE	BB/BC	CA/CL	DD	DE	APD	AP	AK	AO	TK	SS	Aux	Mine	Pat	LS	LC
Type	Name	Endurance	Speed	Ops	Cap	—Damage—				—Cargo—			Pearl Harbor																												
						Sys	Flt	Eng	Fire	Sup	Fuel	Troops	Port Capacity: 7 (5)																												
BB	Oldahoma	8900	16	66	2	37	18	9	4	0	0	none	Port Damage: 50																												
BB	Arizona	8000	21	67	2	6	0	1	0	0	0	none	Re-arm Level: 2900																												
BB	Pennsylvania	8000	20	67	2	16	1	1	0	0	0	none	Repair Shipyard																												
BB	Idaho	9000	20	74	2	21	7	1	0	0	0	none	Capacity: 67,000																												
BB	New Mexico	9000	19	75	2	30	8	4	0	0	0	none	Used: 0																												
BB	Mississippi	9000	17	76	2	35	14	10	0	0	0	none	Ships in yards: 0																												
BB	North Dakota	6800	7	50	0	11	66	8	0	0	0	none	Ships in port: 141																												
BB	Michigan	6600	21	58	0	3	0	1	0	0	0	none	Active Ships: 141																												
BB	Utah	6720	13	42	1	23	34	3	0	0	0	none	Ships under Repair: 0																												
BB	Florida	6720	18	44	1	28	4	2	0	0	0	none	Ships damaged: 48																												
CL	Tillamook	9000	34	35	2	0	0	0	0	0	0	none	Ships due upgrade: 131																												
DD	Bagley	6940	36	39	0	0	0	0	0	0	0	none	Ships in list: 141																												
DD	Blue	6940	36	40	0	0	0	0	0	0	0	none	Supply: 107202																												
DD	Helm	6940	36	39	0	0	0	0	0	0	0	none	Supply Required: 7792																												
DD	Mugford	6940	36	40	0	0	0	0	0	0	0	none	Fuel: 549243																												
DD	Ralph Talbot	6940	36	40	0	0	0	0	0	0	0	none	Fuel Required:																												
DD	Henley	6940	36	39	0	0	0	0	0	0	0	none	For port ships: 2135																												
													For TF ships: 1132																												
													Form New TF																												
Return type to pool FT					Load Tenders on this list					Re-fuel/arm ships on this list																															
Change HQ for ships on this list					Manage ships under repair					Show Ships under repair																															
Allow upgrades for ships on this list					No upgrades for ships on this list					Show Ships due upgrade					Back Exit																										

Remember, there are German freighters running for Tokyo (loaded with FW200 and Mauser Cannon parts) and raiders, including a CB, Admiral Scheer and the CA Seydlitz, in the Indian Ocean.

The Allies' biggest problem is facing the fact that one US aircraft carrier is in Pearl Harbour at the start (scn43 and 45). The Air Force also has generally obsolete aircraft. Allied forces are generally fairly scattered and lack significant destroyer support. There are a fair number of mothballed DD to bring back to service.

TF Z, though, provides a unique opportunity for some (risky) first blood, provided air cover can be maintained over it against the expected airstrikes. There is also the opportunity to make another dangerous TF off the East Coast of Australia

There are more SS (and more interesting types) in this mod, some old and some new; this may make advancement into DEI more costly for Japan. Later, Japan receives a number of U-boats, which will be more dangerous than most Japanese SS. Under the optional rules, they can only operate from their realistic historical bases.

Japanese ASW was weaker before 1944 but stronger afterwards than stock.

4 E Bombers are a bit stronger in terms of loadout, but the guns are not quite as good.

The Allies have more airframes in terms of production than the stock version of RA and more advancement of airframe types to look forward to.

Most of the Essex fleet carriers are accelerated, and in 1944/5, the four Midway class carriers arrive, as well as a significant enhancement to supporting ships.

UK Carriers gain reasonable extra A/C capacity 1943+ as types arrive, allowing better deck parking.

Patrol aircraft will be in short supply until the mid-war period. At the opening of the conflict, many of the patrol aircraft were obsolete.

Russian morale and experience have been very substantially reduced. There is the potential for Japan to strike against Russia; Your supporting allies in the Dutch and the French are a little stronger than historically.

All in all, you have to make do and mend until probably mid-1943. Do not make any mistakes with your precious carrier reserves and more modern ships. You will need all of them later.

I hope you enjoy this scenario it took much more time than I expected, but it's something I always wanted to do. I have tried to make it as interesting for both sides as possible and hope that players for say a \$500 stake would play either side! Any tips or advice are welcome.

gingerdragon@btconnect.com

Thank you to everyone, and especially whose patch "modded" artwork has been used here, that have contributed over the years to continue to keep this game going.

Happy Gaming and best wishes, August 2026.

Michael H V Smith

Game design and tests August – December 2020 – October 2025: I started the year of the great COVID lockdown and time to do work like this. And it took much longer than I expected- *not planning to do another.*

Credits

This is a heavily modified scenario based on and inspired by Reluctant Admiral 8.0, by John 3rd.

My version 5.0 - not for commercial sale or gain. A **HUGE thanks to Viberpol** for enabling the last big update.

With big thanks to Dean Williamson, Jaco Van Deurzen and Andreas Garhoefer for the extensive play testing of 3 games into mid-1944. Thanks to Jansako for the pwhex file.

A big thanks to Dean for the long-term commitment! Thanks for the significant contributions from long-standing opponents for playtesting the original RA and empire from 1.1, Andreas Garhoefer and Jaco Van Deurzen. Then Kirk 23 for KM Raider art and Large Slow Target for some refinement ideas on several concepts. **Evoken and Dean (very especially)** for many tips and help, especially with aircraft load-outs! Dalibor for some extra ship art, thanks to Skyland for the information borrowed on the Thai army. Thanks for the Art and Data to Hrafnagud for several allied ships...And the wider WITP AE Community. If I owe you any credits, please let me know. Original RA Scenario Designers, who built a good solid foundation - Stanislav Bartoshevitch (FatR), Michael Benoit (NY59Giants), John R. Cochran, III (John 3rd), Juan Gomez (JuanG), Ben Kloosterman (BK), John (JWE), EJ (Sulu Sea) and John Young (Red Lancer). Ranger Joe for the modified Japanese Sub build micro fix. Evoken for a lot of technical help...Viberpol for late adds and corrections the plane art.

If you are missing from the credits, let me know, and I will add you in.

EMPIRE V5 - JAPANESE MAIN UPGRADE PATHS

JAPANESE AIRCRAFT- LISTED HERE ARE THE **FREE** UPGRADE PATHS.

K = Kamikaze version – only used in trainers or kamikaze units

NF= Night Fighter

ASW = Anti-Submarine Specialist

L= Transport

NAVY BOMBERS

B4Y2,B4Y2 (**ASW**).

B5N1,B5N2,B5N3 (**ASW**),B6N1,B6N2,B6N2A,B6N3, Toka II **K**.

B7A1,B7A2,B7A3,B7A3A.

C6N1,C6NI-S **NF**,C6N2,C6N3,C6N3A.

D3A1,D3A2,D4Y1,D4Y2,D4Y3,D4Y4,D4Y5,D4Y **K**.

D4Y1-C,D4Y2-C,D4Y2-S **NF**, D4Y **K**.

G3M2,G3M3,G3M4 **ASW**,P1Y1,P1Y2,P1Y2-S **NF**,P1Y3 Ohka, PIY3 **K**.

H6K2 H6K2-L,H6K4-**L**,H6K5,H6K6 (**ASW**).

HK4,HK4-L,HK5.

H8K1,H8K2,H8K2-L,H8K5 (**ASW**), H8K5-L,

G4M1,G4M2,G4M2A,G4M3A,G4M3E Ohka,G4M3-**K**.

M6A1,M6A2,M6A2A.

F1M2,F1M3,E15K2.

E15KI,E15K2.

E13A1,E13B,E16A1.

E9W Watanabe, E14YI Glen.

4 ENGINE BOMBERS - NAVY

G5N2,G5N3,G5N2-**L**,G6N3.

G8N1,G8N1-**L**,G9N1.

ARMY BOMBERS

KI21B, KI21IC, MC21, KI21IIA, KI21IIB, KI49IA, KI49IIB, KI49II-L, KI49IIB, KI49II KAI.

KI54B, KI54C, KI54D ASW, Q1W1 (ASW).

KI51, KI51B.

KI481B, KI48IIA, KI48IIB, KI48IIC, KI67IA, KI61A(T) KI61B, KI61109-I NF.

KI46I, KI46II, KI46III, KI46IV,

KI46IIIB, KI46IV NF.

4 ENGINE BOMBERS- ARMY

G5N3A, G8N1A, G9N1A.

KI91, KI91III

KI89/90, KI90T.

NAVY FIGHTERS

A6M1A, A6M2, A6M3B, A6M5, A6M5B, A6M5C, A6M7, A6M8, A6M8-J, A6M8-SNF, A6M K

A7M2, A7M3, A6M3-J-A7M4, A6M K.

A6M1, A6M2A, A6M3, A6M4, A6M4-J, A6M4a-J, A6M8, A6M8-J, A6M8-S NF, A6M K

A4-N, A5M4

KI152H, KI152I, KI152K

J2M2-J2M3-J2M5-J2M6-J2M6A, J2M8

R2Y3, R2Y3A.

N1K1-J-N1K2-J-N1K4-A, N1K5-A-N1K6-A

NIK1 REX- NIK2 REX- NIK2 REX R, NIK3 RUI.

KIKKA, KIKKA II, NAK F K.

J7W1, J7W2

J1N1C, JIN1S NF, JIN1 SA NF.

J8M1, J9M1.

KI94I, KI941A, KI94IB, KI94IC.

ARMY FIGHTERS

KI43A, KI43B, KI43C, KI43IIA, KI43IIB, KI43IIIA, KI43IIIB, KI43IIIC, KI43IV, KI43IVC, KI43V, KI43VA, KI43-K.

KI44I, KI44IIA, KI44IIB, KI44IIC, KI44III, KI44IV, KI44K.

KI64,KI64II,KI64IIC.

KI45A,KI45B,KI45C,KI83,KI83B.

KI61A,KI61B,KI61C,KI61D,KI61IHK,KI100I,KI100II,KI100IIA,KI100III.

KI201 KAMINARI,KI201 KARYU,R2Y2 KUMO,R2Y2A KUMO

KI102A,KI102B,KI102C **NF**.

KI84 KO,KI84 OT,KI84 HEI,KI84II,KI106A,KI113.

KI93IA,KI93IB.

KI102A,KI102B,KI102B **NF**.

427 - Spec Attk II Hikota Hikotai - IJ Navy (48) Attached to: Combined Fleet [S] Ohka K Type V - Jet Fighter		Maximum Range(hexes/miles) 8 / 300 Extended Radius(hexes/miles) 4 / 150 Normal Radius(hexes/miles) 4 / 150 Maximum Altitude 12000 Durability: 29
Aircraft Serviceable: 48 Aircraft Unserviceable: 0 Aircraft in Reserve: 70		
DEFAULT LOAD: MXY7 Ohka II HVY x1 C Torpedo		
ENGINES: Jumo 003- Early Jet x4		
⬅ Back ➡ Exit		



LIST OF UPDATES AND EVOLUTION FROM THE VERY START; 2020 - 2025

UPDATES AND PLAY BALANCE v1.6 = SCN 42/43

- Moved several of the S boats and other SS with reliable torpedoes back to Pearl Harbour and added a couple of earlier arrivals. This is in case a Japanese player wants to engage a game of hanging around Pearl Harbour. Especially tempting on a one-day turn system. Will encourage the KB to leave the area generally.
- SCN 42 – No carriers at PH , 4 US Carriers are instead steaming toward PH on Dec 7th. 2 CV per TF by design.
- SCN 43 – 3 Carriers at PH – total surprise.
- Corrected several ship air groups and added some that were missing. Made most early FP a little higher maintenance and some other aircraft.
- Slightly improved the morale of American fighters at Pearl Harbour, moved out some of the BB. Slightly decreased the number of damaged aircraft, slightly improve the experience of some units. Again this is mainly aimed at reducing the chances of the second Japanese strike. Slightly amended aircraft arrival dates here and there for both sides.
- Moved the Fighter groups and some others from disbanded CV at PH to the base itself.
- Corrected and enhanced the B36 strategic bomber in light of new research.
- Advanced the build opportunity for the following key ships; Shinano, Kii, Oyama Iwao, and Kodama Gentaro - to make it a little bit more tempting to try and build them. Amended one or two other potential arrivals to better reflect the ideology of the scn. Added two more Obsolete class BBs.
- Rationalised outfitting and stats for a number of the hypothetical Japanese ships. Improved the AMC a little to make them more viable. Added a little armour to the tower of the Myoko class CA, revised armour on some other ships as well.
- **Dutch and Australian** -Slightly improved Dutch and Australian land, sea, and air forces.
- Added a little bit more supply and some fuel to outlying allied bases, improved one or two bases, improved one or two forts. Reduced a few bases to reflect the mod and slow the pace.
- **India National Army** Slightly increased the size of the Indian national army (INA) in Japan's support, slightly improved its arrival.
- Slightly improved shipyards in Hong Kong and Singapore principally to make Japan fight to hold them.
- Improved the arrival of the Japanese Amph Brigades to make them a bit more viable and some chance of Japanese Amph ops in mid 42 to mid 43.Improved the quality a little of Japanese Assault Divs and minor changes to a few others.
- Made a slight adjustment to the organisation of the Pearl harbour attack TFs to better reflect the set up of the scn. Now KB 1+2 more balanced and slightly smaller (vulnerable) for secrecy.
- Clarification - On 2 day turns, allow two attacks in 1942 in jungle and jungle rough hexes - this excludes single hex Islands, remember. Movement across major rivers triggering shock attacks in jungle hexes are allowed.
- No pursuit rule extended to Mountain hexes as well - pursuits are therefore excluded from Jungle, Jungle Rough, and Mountains.
- Added some more damaged industry in Japan for them to build up if they are inclined.
- Slightly improved the quality and morale of the starting air groups on Japanese aircraft on elite carrier groups KB1 and 2 /Cruiser Air Groups.
- Added and amended a few more build options for Japan, including a hypothetical reaction to the Fletchers in an Akizuki II class DD (featuring light armour, heavier/ slower/ slightly shorter range but with better 10cm turrets in mid-1944). Added the Niitaka class CA as a

build possibility/ distraction (credits to John 3rd design). Added an option to build a couple of large SST based on I400. These are the SST 500 series.

- **French** Rationalised the French forces and expanded a little. Slightly modified some French arrivals and set up. Reduced the night and day experience of French submarines a little and increased their TT dud rate to 20% - research shows these SS were not very useful. Added missing A/C to Surcouf (carry over from original RA8.0).
- Added Constellation BC to PH at the start. We assumed Lex and Sara were converted after C was built. The same applies to the Tosa/ Amagi; it makes more cohesion. Added Titanic class xAP, M Class SS. Hood BC. Thanks for the Art and Data to Hrafnagud.
- Slightly improved most starting Japanese Surface combat ships Night Exp. Again to reflect the intensive "night doctrine training," these elite crews would have pre-war. Arriving ships have far less.
- **China** – Chinese a bit stronger, some more forts, more supply, better garrison requirements in allied favour, amended air arrivals and replacements. Added Partisans in China and Manchukuo.
- Revisited ship stats, especially BC, where deck armour seemed a bit high esp for allied ships.
- **Thailand** - Reworking, turning them into a minor ally of Japan. Added naval units air units and revised the land units. Thailand enters the war on Japan's side on Jan 1st 1942. Thai units may only cross one border, naval units may only use Thai ports, air units may not leave Thailand. Japan must build aircraft for them. Thai aircraft may only be used in Thai units.
- **Kreigsmarine**- Added the famous **Monson Gruppe** assets to some extent plus 2 Nav-BF/HQs, which appears in 42/ 43 at their historical sites. Added a few what-ifs as well ... Japan wanted to buy the FW200 Well they get some. All units of MG should only operate in the Indian and Southern Ocean area from their base HQs (until they are destroyed).
- Added in the weapons load-out system (With supreme thanks to Evoken), principally, this is to make the war against the submarine a little bit more interesting... for both sides. Patrol aircraft and ASW aircraft will have more specific functions now. There are some ASM for both sides.
- Removed fighter bombers as an aircraft type to allow players more flexibility in changing aircraft types. PDU must be on.
- Some Japanese aircraft groups are missing from arriving carriers and some are not carrier trained. This is by design and represents the disorganisation within this arm of the Japanese military.
- **Scn 42** is the same but only has NO US CV in PH at the start. Two old BB are moved back into PH.
- **V1.4 fixed Engines issue from 1.3, one or two other balance changes**
- **V1.5 Important fixes**
- Refugees accidentally designated as Engineers – Fixed
- Removed R+D from 2 tiny aircraft factories - Fixed
- Delayed arrival date slightly of the two Dutch BC in Scn 42, now arrive Mombasa, play balance
- Delayed arrival date slightly of two USN CV in Scn 42, play balance

All coastal and River barges on both sides now designated as AKL

Added a small troop capacity to some more Japanese AKL

Small changes to Japanese transport aircraft stats

One minor arrival date change for a couple of Japanese aircraft

Slightly reduced Chinese aircraft starting pools and production

- **V 1.6**
- Removed duplicate bases in DEI. – REQUIRES RESTART
- Removed the 5 starting (Prototype) planes from the pool from E15K2 Norm reduced other prototypes slightly.
- Adjusted a very slightly a couple of build rates for early allied and Japanese bombers and pools
- Adjusted some Japanese plane stats slightly for more cohesion and TR planeloads and SR.
- Reviewed some older Japanese BB ranges/ fuel in light of new thoughts on modernisation.
- Slightly put back Japanese CVL arriving 42 by c 1 month, scn 42 and 2/3 months scn 43.
- Slightly reduced Japanese Garrison requirements in China and added a few more security units.
- Slightly reduced exp on starting air Groups CV Shokaku, Zuikaku and CVL Ryujo
- Slightly reduced PP for both sides.
- Amended the optional one attack rule, per day turn to all Forest and all combination Mountain and Combination Rough hexes (optional).
- **V1.6a**
- Fixed Grace Loadouts
- **V1.6b**
- Removed small R+D Oscar 1c FTY left in error.
- **V1.6c**
- Moved duplicate base from Ternate to a new slot to be a proper base force
- Corrected Australian Spitfire MKII range stats to be in line with RAF Version
- **V1.7** – *(after extensive PBEM play testing mid-1942 + test playing of late war stuff)*
- Small revisions and Tweaks to many aircraft. Tweaks to arrival dates.
- Fixed late war Ohka ASM aircraft and fixed missing durability For Ohka carrying Frances.
- M. Gruppe base forces are now immobile/fixed.
- Reduced the size of some starting Japanese Arms/AC. Factories to make the economy tighter.
- Added some Garrison requirements for Japan in Thailand (Rebels).
- Fixed two Thai HQ on arrival, slightly tweaked Thai XX arrival dates and replacement sqds.
- Removed as an oversight – Duplicate allied base from Boela.
- Removed extra production Shipyards in Singapore.
- Slightly improved V.late war Redwood/Ookami DD classes + SS – ASM ammo.
- Added new V.late war Japanese SS/ASM as a final development.
- Slightly reduced the Axis ASM weapons penetration and effect (generally now these Guided missiles cannot penetrate BB belt armour).
- Added a slightly improved version of the Pete FP for mid 42 as a prelude to the Norm – with a new upgrade path.
- Added Japanese Variant very late war TA 152 consistent with mod / 4E allied bomber development. Allowed an interesting upgrade path.
- Reduced starting pools on most modern Japanese and Thai aircraft.
- Slightly reduced Japanese Garrison requirements in PI.
- Reduced downward Japan starting Oil , Tweaked upward supply.
- Increased oil in DEI storage.
- Gave Japan a slightly improved standard Infantry Squad from 4301.
- Slightly improved ASW loadouts on some allied Patrol AC.
- Tweaked a few upgrade dates for ships and some AA revised to be more consistent with the mod and give players a bit more control.
- Tweaked CA Mogami conversion to be more consistent with the mod (more fuel/ range).

- Fixed Akagi 12/41 AA.
- Tweaked Kongo Class BC upgrade path to be more consistent with mod.
- Revised Amagi class belt armour to 290 to make some extra allowance for TT bulkhead
- Corrected Tosa class BB secondary armament to 10x1 from 8x1.
- Fixed starting 41/12 class of CVE Taiyo to correct Taiyo 41/12 class not later.
- Tweaked large late war improved allied Naval guns- 15" and 16" upwards a touch.
- Tweaked early allied AC pools and production to be a bit tighter.
- Tweaked B36 production and number in arrival units mid-1945, fixed issue with Tarzon Guided bomb.
- Gave Titanic and Olympic Engine refits from Mid 42 - for better range, also refurbished load capacity.
- Reduced Some more bases AF (mainly) build capacity (both sides) – For play balance and mod theme/ pace of lower pre-war development.
- Reduced accuracy on allied bombers' guns (turrets/ waist) in line with other mods and play experience. The gun is denoted by a "b". No change to fixed forward guns aimed by the pilot. Japanese are already pretty poor.
- Reduced starting Exp of some (mainly Infantry Division) Japanese units.
- Added one small SBS and one small SAS unit for the British – Arrive early 1943.
- Reduced disabled squads on some starting Indian and British units.
- Reduced disabled % in many starting allied CD units.
- Slightly improved some allied fort start levels in Burma (jungle + bases) to represent the difficulty of the terrain.
- Revised CV Ranger TT ordinance implementation to 6/42. New research.
- Rationalised Japanese old CL – CLAA Upgrades.
- **V1.7a**
- Several minor AC fixes
- **V1.7b**
- Reinstated optional Fuso/ Ise BB / BBCV optional conversions/ art .
- Reinstated optional Mogami CA upgrade path/ art.
- Added final Allied C Class CL/ CLAA upgrade.
- Several AC enhancements.
- Added A6M3 Version of the Rufe.
- Added short production run of B24 XB41 Gun Ship
- Further tweaked Japanese CL/CLAA updates/ art.
- Revised Japanese air group size and upgrade sizes mainly downwards.
- Tweaked some Japanese transport cargo ships loads back up.
- Improved resource production slightly for Japan, increased starting Home Islands stockpiled resource volume
- Added two more Oakland Class CLAA late 43.
- Gave Japanese AKL to AMc a small ASW capability
- A couple of device changes to make loading practical/easier
-
- **V1.7c**
- Revisit of modern French BB/BC data, art.
- Revisit general CA/CL data.
- Changed French Le Fier class DD and Japanese Minekaze, Wakatake, and Momi from DD to TB. Tweaked data.
- Added Mogador class Large DD. X 2 – New art.
- Added Courbet Dreadnought class x 2 – New art.

- Added some more upgrades for French ships, mainly better ASW.
- Improved French OOB slightly, assuming more ships handed over to the allies and not destroyed/ scuttled (Mid 42 onwards arrivals), 6 X DD, 3 X TB, 1 X CM, 1 X CA, 1 X AO, 1 X AKE, 1 X ARD, 2 X PG, 2 X SS and 2 V Old BB).
- Changed French Bourganville "Colonial Patrol" to PG, has some small ML capacity. Added two more.
- Tweaks to Japanese Junyo and Shokaku class late war AA, also Junyo starting AA, more in line with mod.
- Amended and improved Emergency Convoys equipment to better fit the mod.
- All allied Submarines now require min RS 1 for upgrades (there are already more of these small yards on map). Japanese already had this restriction.
- Japanese Subs have upgrade dates better suited to the spirit of the mod and Kaiten availability dates/ tactical deployment. Tweaked cargo capacity slightly up on SST.
- General minor amendments on small J. Navy ships.
- A few minor device changes, mainly very old gun ranges/ Kaiten
- **V1.7d**
- Japanese DD/TB/APD review to be more consistent with mod.
- Japanese B65- Kai review to be a bit more effective and consistent with mod.
- A few further, mainly minor ship corrections.
- A couple of plane tweaks on new information.
- All Commonwealth C and D Class obsolete CL now convert to useful CLAA late 43 onwards. Tweaked other allied CL/CLAA to be more consistent with mod.
- Added Optional Yamato / Hybrid conversion from 9/43, including conversion to the 51 cm main gun 2x3. The art existed so I thought it would be nice to add it as it does fit the ideas of the mod and Japan has quite a lot more and better FP options mid-war onwards.
- Hellcat now (cvl) min operational requirement.
- Minor Japanese ship potential build dates changes
- **V1.7e – mainly play balance for scn 42**
- Improved starting supply for Japan, c +200,000.
- Other tweaks to the Japanese starting industry. Minor adjustments to allied supply scn 42.
- Tweaks to ship build/ arrival dates, mainly scn 42.
- Added 4 more late-war Japanese DD to try and build. Added 4 more obsolete DD 12/41
- Improved some Mid war Japanese plane availability dates c 1-2 months.
- Tweaked finish dates and production on a few allied AC downward.
- Corrected CVL Hiyo build date – accidentally introduced error in scn 42.
- Added a few more Japanese Security Police and Chinese collaboration Police units.
- Corrected stats to match for duplicate Japanese aircraft large cannon devices 37mm +.
- Aircraft tweaks.
- Base Tweaks.
- Split Spitfire IIa and IIaLR into two distinct aircraft.
- Added ability for Japan to build a few ACM.
- Added 3 more Japanese Naval Transport AC Groups. Appearing late 42/43.
- Added an Oscar IIIb (5/43) – early attempts to upgrade fighters toward the bomber menace.
- Added Thai Import Oscar IIIa as a final Thai fighter aircraft. Mid 43.
- **V1.7f – With thanks to Dean for the thoughtful input.**
- Corrected starting location of AO Tsurumi to Tokyo after bug reported.

- Increased F4F and F6F production slightly. Tweaked F4U series production.
- Changed a number of allied aircraft to Commonwealth Nationality.
- Reduced most other allied aircraft production levels pre-July 1942 and some after.
- Aircraft Tweaks on both sides.
- Added some more Chinese pilots and increased availability but decreased experience.
- Added a handful more Dutch Pilots.
- Minor Delays to some early 42 Allied Division arrivals.
- Minor tweaks to starting supply and industry.
- **V1.7g – almost everything play balance.**
- Radar and AA ammo omitted on one German ship - fixed.
- Japanese late war SS upgrades – tweaked.
- Reduced casement guns on (mainly Japanese) BB/BC for late war upgrades to reflect added weight of more AA than historical. Same with some TT reloads on CL/CA.
- Added 5 or 10mm armour to all protected/shielded TT devices on Japanese modern DD/CA ships.
- Slightly improved the “Modern” Aso Class Japanese CVL.
- Amendments to some mid war arriving CV air groups to better match arrival dates - mainly scn 42.
- Tweaked and corrected a few ships armour.
- Rationalised CVE Weapons ordinance to be more cohesive.
- Aircraft tweaks. Including general raising of Transport types durability a little to reduce ops losses but increased the SR to 2 on all but the most simple, smaller/modern types. Some more Allied aircraft to Commonwealth Status.
- Added option to get the Ki 61 Tony / D4Y1 Judy into play 2/3 months earlier but have to R+D the engine Kawasaki Ha 60 harder - which has been put back 2 months.
- Rationalised/ tweaked a few other upgrade paths for Japan.
- Slightly reduced Japan’s starting HI factories and starting Engine R+D.
- Delayed the Japanese three most advanced Engines (Rocket, Jet and Piston) by c 2 to 3 months in scn 42 and 3 to 4 months in Scn 43. These are all under potential R+D at the start.
- Reduced slightly some allied starting TOE and some arrivals more so in scn 42.
- Slightly reduced Japanese Garrison requirements (PI/ China) – Scn 42 mainly.
- Corrections to Bomb/TT and some other devices back to stock original. Legacy from earlier mod.
- Added a slightly improved 24 inch LL only for heavy modern Japanese DD types upgrades early 44 onwards.
- Added another round of Akizuki DDAA late war option to try and build.
- Added Hiryu (Unryu) late war “economy” CV build option. Very light armour but cheap to build – no air groups as standard.
- **V1.7h**
 - **Fixed** Thai squad upgrade **issue causes game to sometimes hang** when clicking on Thai Inf units from Jan 43.
 - Fixed two Japanese air group starting TOE for “Special Groups” - arriving Dec 42.
 - Added the chance to get the B6N1 Jill into play (with SR 3) 10/11 1942 if the Engine is pushed in research.
 - Aircraft tweaks.
 - Ship Tweaks.

- Reworking of A6M4/ J Zero to be a truly early experimental designs, with flaws.
- Mogador DD class – Gun/TT issue – fixed.
- Updated Olympic and Titanic xAP stats after personal visit to H+W Shipyard, Belfast.
- Added two new L2D2 Tabbies that can be built – Freighter “wide door” variant for both J Army and Navy end 42/43.
- Added final version (1 SR) of the N1K1 George for 5/45
- B25 J1 and J11 starting mid 44 - now have no end dates.
- Slightly raised durability of most CVE classes.
- Revised SNLF Assault Divisions TOE to make them more useful for the intended role, revised and standardised Guards TOE.
- Amended Japanese ADU (Atoll Defence Units) to better reflect guns used removed from ships on upgrades and less big guns.
- Other TOE tweaks to better fit the mod and add a bit more depth.
- Slightly raised Tokyo starting LI
- Reduced slightly some isolated Island/ base AF start levels
- **V1.7i – with sincere thanks to Dean for allied side inputs...**
- Added final “Wide door” Cargo version of the Emily. 8/44.
- Japanese, German, and Italian SS/SST tweaks for better mod cohesion.
- Added 8 more Obsolete Interwar Japanese DD/TB in mothball status in December 41. The allies already had a lot added. *Play balance.*
- A few TOE tweaks, mainly adding MG AA and some more support here and there.
- Minor ship tweaks on upgrade dates and arrival dates – *play balance.*
- Ship and aircraft tweaks- for more cohesion.
- House Rule additions (House rules are optional) –
- A. Thai units rebuilt in Japan may move anywhere their restriction allows.
- B. Monsun Gruppe German base units x 2 may not be rebuilt. German air units/ Subs may station anywhere from 1/44. Surface units may already station at will.
- C. Japanese ships may not carry reserve FP replacements as this is considered in the revised advantageous loading.
- **V2.0 – with sincere thanks to Dean Williamson**
- **Amendments to Play the mod under the new Beta patch and new map V.1127 9-11-22. Still plays under 1126b for games in progress.**
- **V.1127**
- **New Convoys added for allies, Suez gets more convoys that come in after middle east opens 43/08, they come with supplies and equipment.**
- **Cristobal gets convoys starting from 43/06 to 45/08.**
- **Soviets get some re supply convoys 2 in 44 and 2 in 45 that give planes supplies fuel and some ground equipment.**
- **USA get a convoy 42/07 USA get some AA from convoys and in 45/06 they get equipment for land troops.**
- **New bases in Australia, Japan, New islands, New off map bases.**

- **SCN 43 the same as 42** but Allied early war CV slightly advanced, Japanese slightly delayed. CV Saratoga, BB California and Tennessee start at PH.
- Fixed potential bug with Nakajima Ha 45 Engine trying to upgrade to a slot that holds nothing.
- Fixed bug with B29C – B39 upgrade
- Aircraft/ ship tweaks.
- Reduced allied aircraft factories.
- Added Light Bomber tab to applicable A/C.
- Added several obsolete French A/C types, *chrome really*.
- Added P47 Mk.2 as Commonwealth aircraft from 5/44.
- Amended RAAF P51 D to Commonwealth.
- Added 1/44 “Lightweight” Recon Version of M6A2 to upgrade from the Glen, if players want to keep that option in play. SS may still upgrade to Kaiten Carriers in 1/44. *Chrome and more options*.
- Added a slightly improved version of the Sally for the Thai AF, 1/43.
- Added Thai Helen IIb 5/43.
- Added A6M5c back in as more progressive step and tweaked Zero upgrade paths.
- Added Japanese FW200 V10 (Patrol) aircraft to build - 2/42.
- Added Heavier version of the G8 Rita - Mid 44.
- Added and interim Oscar IIIc.
- Added Japanese Version of HE177 Samurai from Mid 44.
- Corrected/enhanced Japanese Aerial TT loadouts to reflect historical – data present in original DB but not used. Effect is early TT are not quite as good but mid war onwards are better. *Accuracy and Chrome*.
- Added more historical German and Italian, SS Torpedoes and guns. *Chrome and accuracy*
- Added historically cancelled Japanese Submarines I-125 and 6, and option to convert to SST.
- Added option to Convert Kuma Class CL to CLTT early war. Kitakami and Oi start now in this format. *Chrome and more options*.
- Added option to build an Agano II class CLAA late war- *play balance*.
- Added option to build 9 More Yugumo class DD late 42/early 43-late 43 as originally intended. Added some more Matsu class very late war DD - *play balance*.
- Added 4 more Tenryu (intended to be built) class obsolete CL at the start – *play balance*.
- Added 2 More Australian and 4 more British Battle Class DD 1944 onwards – *play balance*.
- Added 3 More S/T Class DD, under Dutch Flag late 42/43, *play balance*.
- A few device and TOE tweaks.
- Added USS Dean Williamson (AE) appears 6/44.
- Added 6 X French TB La Melpomene class 12/41
- Added light French CV Joffre 12/41 and Sister 6/44.

- Added at San Francisco 6 x Interwar four stackers in mothball, considered not sold to UK/RN.
- After consultation – starting Fuel, Supply and Oil increased in Home Islands. Changed Refinery fuel out to 10 from 9 and supply out to 2 from 1. Other small Industry tweaks - *play balance*.
- Slightly improved and added Allied, Chinese and allied daily supply. *Play balance*.
- Slightly improved allied starting forces. *Play balance*.
- Added a * to versions of Zero and Corsairs that are not carrier capable – *for ease of reference*.
- Full new art update, plus new art for new Scn 44 - *coming soon*
- **V2.0 a.**
- Corrected/removed CVE air groups placed on CA Pasadena 9/44.
- Device/ aircraft Tweaks - *Play balance and cohesion*.
- Ship Tweaks and a few corrections - *Mainly French*
- Added 2nd Pluton Class French CM at Tahiti 41/12/07.
- Increased HI Res in from 18 to 19. LI Res in from 15 to 16. Oil out from 10 to 11 - *Play balance*.
- Added a final modest upgrade, B5N3 Kate – *play balance*
- Remodelling/ more detail for most aircraft and some SS TT loadouts, after new research.
- Slightly reworked Japanese ASW – now slightly worse early war, slightly better mid 44 onwards and V slow escort ships do not get powerful DC.
- **V2.0b**
- Increased HI Res in from 19 to 20. LI Res in from 16 to 17. And removed some damaged Industry from Japan. A few other tweaks mainly negative for Japan. Added some more starting Res.
- House Rule amendment- One attack per day turn in the restricted rough hexes before 1944, two thereafter.
- Early Matsu class DD, Akizuki and Shimakaze class DD delayed around 2 months each - *cohesion and play balance*.
- Pushed back a few allied mid/late war BB - slightly.
- Slightly reduced build size of some more PI/DEI/ Australia bases. *Play balance and game pace*.
- Engines on G6N1 corrected from 4 to 6, SR to 5, date to 6/43 - *correction*
- Slightly increased damage/days to some Japanese CLAA/CAV/BB upgrades – *cohesion*
- Reduced Top speed on some Japanese CLAA/ CLTT conversions where the weight has gone up considerably- *cohesion*
- Slightly recalculated a few ship ranges – *cohesion*
- Slightly tweaked small Japanese ship Guns and ASW on new research, *play balance*.
- Slightly improved most allied CVE Mvr and Durability ratings.
- Reduced or removed Japanese TT re loads on CA, 44 onwards. *Realism, with improved and heavier AA during 44 upgrades*.
- Rationalised Japanese Mogami CAV air groups upgrades - *cohesion*
- Hatsuharu class DD last late war TT upgrade missing – *corrected*
- Shiratsuyu class DD – small AA issue 4/43 upgrade – *corrected*

- Earlier 120mm DP gun replaces 127mm DP guns on Japanese CV / CVL/ CVE prior to May 42.
- TOE issue with 9th Australian Division – *corrected, hangover from the previous base mod.*
- Added 12 more in total mid war onwards allied AK/AKA/AP/LSI(L) and gave some AK/AKA some modest troop lift- *More allied lift capacity needed.*
- Added 6 more allied Support ships, mid war onwards, AKE/AE and AS.
- Tweaked allied PT boat ranges up a touch and one or two other PT tweaks on both sides- *play balance, cohesion.*
- One or two aircraft arrival date tweaks, slight increase in some mid war fighter production US.
- Aircraft rocket load out tweaks, marginal improvements to rockets.
- One or two other ship fixes- *cohesion.*
- **V2.0c**
- Tweaked and slightly modified Furutaka and Aoba CLAA conversions to be more realistic.
- Revised some arriving CV air groups to be more realistic for the potential arrival dates – Mid War Japanese CV.
- Corrected Italian SS art to look more realistic (Liuzzi Class).
- Reduced several allied and Japanese TT reloads on CA,CB and BC to allow flak to increase realistically. Cohesion.
- Delayed MG KG007 and 009 Air groups arrival to early 1944. Play balance.
- A few minor AA tweaks downward to some Japanese CV - Cohesion.
- Adjusted a few Japanese DD arrival OOBs to better fit likely arrival times – Correction.
- Akitzuki- Kai, TT reduced to 1 ammo - Cohesion.
- Reduced Japanese starting pilot pools/starting quality and reduced monthly intake/ quality. - Play balance and cohesion.
- Added some extra build rates for Japanese Light AA Land based MG – as always seem to be in very short supply.
- Pushed back slightly (1 or 2 months) a few Japanese A/C – Play balance.
- A few aircraft tweaks both sides. Continuity.
- Reduced Belt armour of Shinano CVB – Realism.
- HI, Japan Res in now 21 from 20, LI back to 15. Other industry tweaks – Play balance.
- Reduced PP slightly for both sides.
- A few minor base adjustments, AF and Port sizes and starting Forts.
- Tonan Maru TK ,final upgrade MG AA ammo missing –Fixed.
- Tweaked Thai Army and added proper Thai names for units - Chrome.
- Tweaked Collaboration Japanese PI / Malay units – chrome.
- Increased Motorised support on many USA mainland bases – Realism.
- Further tweaked Japanese air group sizes to restrict pilot training.

- Added Heavy FP version of the Rex from 1/44 for the Hybrid BB or land only - Cohesion
- **V3.0 changes from 2.0c (as at test point PBEM, 2 day turns Aug 44)**
- Fixed game to work with new 2022 map (scn 44+45) and all old extended Maps (scn 42+43).
- Game was changing U boat commanders to random Japanese commanders after disbanding - fixed. Thanks to LST on the Forums for help.
- 10+ Minor weapons facing issues and leader issues to be corrected from stock – thanks to Omat for pointing out. Fixed
- A few spelling corrections as pointed out in the main game by other players - Fixed.
- Two allied ships allocated to no TF at start – possible error from original mod – Fixed.
- Some ship art enhancements – Chrome.
- Wrong Art for a few Soviet planes – Fixed.
- P47D25 – Armour corrected to 1 – Fixed.
- BB with less than 22kt capability now have cruise speed of 12kts.
- A few minor upgrade corrections for allied BB as pointed out in the main game by other players - Fixed.
- A few Japanese and allied ship upgrade path tweaks to make them flow better.
- More upgrade options for obsolete starting DD/TB for both sides – Chrome and realism.
- Reduced some more Japanese DD reloads to reflect late war AA and TT upgrades/ weight – Realism.
- Improved significantly CV deck armour where both the deck and hanger were armoured - Realism.
- A couple of tweaks for Soviet Patrol planes - cohesion
- Slightly reduced some arriving Japanese starting CV/CVL air groups experience and CV Trained status- Cohesion.
- Slightly increased many Japanese BB/CV ship upgrade damage to reflect mid war onward shortage of parts and components and longer delays in port- Realism.
- Mogami class now start as CL and upgraded to CA or converted to CL CAV as desired – Cohesion with mod and chrome.
- Made all SS and old Float Planes SR 2 to reflect use in high seas etc. making them prone to damage - Realism
- Slightly downgraded Japanese aircraft upgrade paths to make it slightly harder work to get in the best planes 44 onwards esp. – Play balance and realism.
- Ship tweaks, mainly AA and AA ammo, a few corrections in ranges and cargo loads – Realism and chrome.
- Slightly improved Yamato Kai class – to make it slightly more tempting to build – Chrome and cohesion.
- Tweaked Japanese late war DD advanced ASW weapons down a bit. Realism.
- Reduced Japanese daily PP to 25 to reduce the ability to rebuild destroyed stuff and reduce flexibility - Realism.

- Reduced accuracy by a significant amount of the TT launched from large Japanese Bombers and Patrols 4E+ - Realism.
- Tweaked pilot numbers arriving - Realism and cohesion.
- Tweaked Japanese smaller SS Kaiten load outs, Tweaked type 43 and 44 Kaiten. Reduced TT ammo on larger boats carrying the Type 44 Kaiten – Realism
- Rationalised (reduced) Japanese TT loadouts for DD etc. esp. to reflect late war AA upgrades – Realism.
- Increased German and Italian commanders PP to make them very expensive to replace with Japanese - cohesion and Realism.
- Slight increase in DEI oil production and base tweaks, HI Oil up a small amount – Play balance.
- Added more French and Dutch Naval leaders – Not enough.
- Added a number of new ships, old and new, good and wretched. Most obsolete ships are deemed to have had some upgrades and refits from when they were originally built until December 1941 Cohesion with mods start and play balance.
- Added 2 British historical floating dock ARDs to Singapore Dec 7th – Realism, One was captured later come back for Japan as it was captured and fixed.
- Increased slightly Allied Garrison requirements in rebellious N. India area. Cohesion with mod.
- Land units TOE reviews (ongoing to be finalised in the next patch) – chrome and play balance.
- Added Grumman XF5F1 (Navy) and XP50A (Army)- art already in files. Revised USN Hellcat path to XF6F then F8F Bearcat. Cohesion with mod/Chrome.
- Added more versions of some aircraft to give more options and development paths over a long time. Chrome.
- Japanese upgrade paths for transport AC revised to make them more user friendly. Realism.
- Tweaked a few Chinese forts upwards to reflect difficult terrain – Play balance.
- Got rid of number naming convention for early war, all war ships on both sides TB+ now have names - Chrome.
- Reduced allied A/C arrival to reserve bases until 1943. Play balance.
- Improved accuracy of rockets slightly (again testing shows not accurate enough). Realism.
- Improved accuracy of all PGM (testing shows not accurate enough).
- Japanese Junyo and Hiyo CVL now convert from (useful) large Liners, their air groups arrive in Jan 43 at Tokyo –Cohesion with mod, choices and Chrome.
- Ryuho now converts from its mother AS from Feb 1942. Air groups arrive untrained late 1942 – Realism and Chrome.
- Changed Japanese CVL/CVE/CV/CVB Air groups names to generic description to deny the allies unfair intel – Realism and chrome.
- Review of starting positions on map of some units, shops and A/C and destinations of some TF varied – Chrome and balance.

- Added dud rates for some bombs and shells. – chrome and realism.
- Naval Guns/ turrets denoted as * Improve with modernisation and experience – Realism.
- Added an early Japanese Radar (pre-May 42) of dubious worth and a late war one of high worth - Chrome.
- Changed Jap BB starting classes/names/numbers to better reflect historical deployment, usually in pairs of each class - Realism and balance.
- Many US subs now have large end 42 refits, including HOR Engine replacement.
- US subs now get a more modern and dangerous Type16 21inch TT upgrade from 1944 onwards.
- Added Ranger Joes – Modified Japanese Submarine build cost workaround. Reduces sub-build cost – Realism
- **V3.0a**
- Correction to some J Submarine upgrade paths – Fix.
- Couple of modest changes to downgrade late war J CV and BB AA – Realism.
- Made NI K4 George CV version (CVB) only- Realism and play balance.
- Corrected Jill and Grace Naval attack loadouts – Fix.
- Two J ship class FP capacity revised/ corrected – Fix
- **V3.0b**
- Some spelling mistakes were fixed.
- Revised starting position of CL Achillies and Kashiwara Maru.
- Corrected starting position of British 77th AA Regt – Fix.
- Some aircraft tweaks – New research.
- Corrected some late Japanese CVs to remove CVB George on arrival and replace with A6M7 Zero - Fix.
- Tweaked ASM ranges, Allied down a bit, J up a bit.
- Increased J Type 94 mine starting pool.
- Slightly reduced MVR rating on JI Gun Boat J SS, tweaked dive depth up for Type SXXto, one or two other SS Mvr adjustments. Cohesion.
- Corrected Weapons on Dutch submarines upgrades - Fix.
- Tweaks to Russian SS and TT – New research.
- Tweaks to various SS.
- A few minor French tweaks and French Buffle A/C = Nationality French, not US. Fixed.
- Tweaks and a fix (Tiger)to late-war British BB.
- Reduced Truk AF to 1 as at 12/41 – Play balance and realism.
- Given KB 3 1st turn move bonus. More options and risks at the start.
- Slightly reduced LA early war AC production. Play balance.
- Admin corrections on a few French ships.
- Added one more J AC FTY to cope more with the late war aircraft diversity.
- Removed the damaged starting HI Factories in Japan.
- Shimakaze – Small AA facing error – Fixed.
- Added 4 more US combat ENG units (late 42-43). Play balance.

- Added version of J Liz and Rita 4E bombers as options for IJA to build. Chrome.
- Correction to CA Maya refit secondary AA/DP guns. Realism.
- Slightly increased LI. Play balance.
- Added a few more late war J Subs to build and reduced build cost. Chrome and cohesion.
- **NEW Pwhex file** only for scn 44+45 super extended map, adds stacking limits with thanks to Jansako.
- **V3.0C**
- Tried fixing problem with Air group 3614 arriving on turn 6 with B29c
- Slightly reduced the G8 Rita bomb load – new research and realism.
- Added upgrade options for I400 class submarines to convert to SST. Realism and cohesion.
- Tweaked late war J SS build cost to make it slightly more attractive to build – Balance.
- Tweaked downwards D4Y Judy loadout and changed engines for last two models. Realism
- **V3.0D**
- Problem detected that will make the game crash in replay. Please rename the FW200c Tropischin in the JapPlanes folder from Jptop00464 to 0464.
- Delete Jptop00114 Ki-200 Oziroisi should leave you with the correct Jptop0114 Ki-200 Oziroisi.
- Sea Meteor moves to 11/44 from 9/44. Cohesion with mod.
- Some (mid-war+) allied aircraft now have slightly reduced production- Cohesion with mod - Too many.
- Ended A20G production in 4/44. Realism with mod.
- Reviewed and tweaked some mid-war onwards J A/C radars - Cohesion with mod.
- Malayan 1941 squad not upgrading – Fixed.
- Tweaks to FR CA Duquesne armour. Tweaks to Suffren and Algerie classes. New research.
- UK CAs Devonshire and Cumberland now come on as York Class. CL Newcastle II becomes Hawkins class CA. More in keeping with mod.
- Australian 1sy Army HQ not perm fixed – Changed and fixed.
- LI res In now 16 from 15.
- Allowed NIKI Mk2 George to upgrade to Mk4. Realism.
- Slight improvement to CB Hokkaido class to make it slightly more tempting to build.
- Tweaks to CL Oyodo AA layouts and upgrade times.
- Reduced Ohka range – it seems it uses maximum range all the time, so it is much less accurate. Under review.
- Review of all Plane Guided Missiles to improve effect.
- Tweaked/ improved Oomami and Oomami–Kai class Frigates- Slightly more incentive to build.
- Small ship and AC tweaks- Ongoing research.

- Reduced all J midget subs durability to 3 to reduce the VP for them and encourage more use - It will make no difference to their survivability.
- **Added all known data changes, fixes, and additions from the new patch V.1128 (Nov 24).**
- Added back in missing (mainly small) allied transport ships added in RA but into invisible TF. Fix.
- Split TBM-3 Avenger production to better reflect the ASM Bat carrying version as a separate model as it was not loading out correctly; some others also simplified- Fix.
- Removed French commanders from Vichy subs I 601 and 602. Fix.
- Added USN nationality to late war hypothetical Redwood Class DD (prevents them from coming on) – Fix.
- Added 2 more AC FTY and 2 more Engine FTY for Japan. They have to switch engines over mid-war, and it takes a bit too long to restart. Play balance.
- Added several more SS and small PF for J to build in lieu of the later arriving allied DE/DD from the patch. Balance.
- Tweaks to CVE Kaiyo, Mitaki, Mayasan, Tamamatsu, Taiyo, Unyo, Shinyo and Chuyo – and revised arrival dates. More in keeping with mod.
- Reduced Truk starting Port size to 3. Reduced Midway starting AF to 2. Reduced Babeldaob starting to AF2 and Port 2, Rabaul to starting port 1. Slow the initial pace and, in keeping with low tech, start to mod.
- Reduced all Andaman Islands to max AF build level 2.
- Added Engine R+D dates in the description to help decide R+D development where possible, excluding jets (no space).
- Increased Rocket accuracy again, as the hit rate is still too low.
- Corrected a few more spelling and description mistakes.
- Changed British CVL Unicorn air groups to replenishment groups – Historical use, also made Unicorn and Colossus class CV as these ships could handle all aircraft, primarily in replenishment capacity.
- Changed some UK CVE late war arriving air groups to better match mod and rationalised UK deck park capacity on CV 1943+, tweaks to UK CVE ships.
- Corrections back to stock values on some mainly small bombs – Thanks to Jansako for spotting.
- New Guinea Force HQ – Now made Command HQ.
- Tweaked CB Alaska class MVR down – New research.
- Tweaked BC Admiral class to reflect a large engine overhaul in early 42.
- Tweaked UK CL/CA Armour – new research on sub-classes.
- A few aircraft tweaks and corrections.
- Tweaked Yodo and Oyodo class ASM 1945 upgrade.
- Fixes and enhancements to Ki200, FW200 and Liz Loadouts.
- Tweaks downward to some allied Inf replacements late war, removed most end dates.
- **V3.0E**
- Removed Duplicate base Truscott in Northern Australia. Legacy from RA

- Corrected the Location of Sydney Island. Legacy from RA.
- Yamato removed one excess radar from the final upgrade on 3/45.
- A few late-war aircraft tweaks and very minor corrections.
- A couple of small J unit TOE issues- Fixed.
- Bearing in mind the extreme 1944 hard-coded modifier for allied ASW - Slight tweaks downward to some allied DC. Tweaked downward J 3-inch ASW mortar and depth of attack of type 95.
- Tweaks to A and J small calibre ship AA guns to bring them back to stock levels from RA levels.
- **Aircraft of Kamikaze variant K** should only equip Kamikaze units – also tweaks and improvements to K class aircraft.
- Revised Victory conditions - The fall of Tokyo or three cities from the options of Nagasaki, Kagoshima, Hiroshima, Kobe, Osaka, Yokohama, Fukuoka and Maesa) to land forces before 1st September 1945, triggers an immediate Allied Decisive victory. If the game moves past the end of October 1945 with victory points less than 2-1 in the ally's favour, the best-allied result is a draw.
- Added a **v** as a victory indicator to bases applicable.
- **V3.0F**
- **Two New Scn age of Steel Scn 50+51, 50 for standard map, Scn 51 for super extended map.**
- A few land unit symbols were tweaked. Chrome.
- A few tweaks to device data, some TOE data, aircraft and ships, mainly late war.
- A more comprehensive update mine effects and accuracy for both sides.
- Added a slightly better late War J Depth Charge from about 5/44.
- Finally found the error with the Ohka (error in the original game). Fixed.
- Added Fido ASW homing mine and Japanese v late war copy. Chrome.
- Entered end date for J 1943 Inf Squad. Fix.
- Changed CVE Yurei from Hosho to Zuiho class CVL– More in keeping with mod.
- Added new ships for NEW Scns 50+51 “Age of Steel”.
- Updated Art Folder for Age of Steel and a couple of other minor changes = Agincourt added.
- Scn length reduced - Now finishes 26/12/45 = 1580 Turns. But the actual end date is later to allow acceleration of some ships.
- Increased LI slightly in HI.
- **Empire V3.0g + Age of steel V1.0b**
- **Important error fix for the Rocket assist drive, stopping production of one engine NAK 35. Fixed.**
- A few minor device/ship/plane tweaks.
- Amended some higher allied Garrison requirements in mainland Japan to represent the fanatic resistance movement. Realism.
- A few minor base starting changes, added some daily supply to hexes critical for rice/ food production. Chrome.
- Errors with various Australian Brigades allocated to build up to the wrong Divisions or impossible units – Fixed.
- Increased 1942 Pilot rates for Japan – Up just a touch.

- Tweaked up the Chinese Army strength at the start. Play balance.
- Changed Hiyo and Junyo classes to CV. Re-evaluation.
- Tidy up of late-war British SS data and removal of one equipment duplication.
- Smoothed out and improved Japanese CL conversion choices – chrome.
- Improved Japanese Koi class CLAA to make them more tempting to build late war.
- Amended or corrected some late-war ship and SS upgrades to make them flow more in line with the mod.
- Made the J2M Jack Upgrade path smoother. Realism.
- Improved starting status of most 1945 Training Kamikaze air units – Play balance.
- Added British sub X-1 – A very interesting one off - Could not resist (New art in art expansion zip).
- A few more US LST and one AGC for 1945, option to convert LST to short-range amphibious attack LST in Nov 44.
- Adjustment on aircraft types to some late-war arriving CV air groups for Japan – better date matches.
- Adjusted some ship build and or arrival dates out of 1946 to earlier – Scn has been shortened.
- Changed Goa and East Timor to Portuguese and added a few minor Portuguese units and ships starting and arriving 42 onwards.
- Removed CLs Nigeria and Bermuda from the game and replaced them with four new late-war CLs of the Neptune class. More in keeping with mod.
- Added late war Japanese SS Torp upgrades to the larger SS – In keeping with mod and Chrome.
- Several British subs arrive with the wrong upgrade date status- Fixed.
- Reduced Resource production in the area of Japan itself and increased it elsewhere. Play balance, too many resources close to Japan, moved some to more historical locations. New Research.
- **Optional - Revised Victory conditions** - The fall of Tokyo before 1/11/45 = Allied decisive victory. Three cities from the options of Nagasaki, Kagoshima, Hiroshima, Kobe, Osaka, Yokohama, Fukuoka and Maesa to land forces before 1/9/45 = Allied Decisive victory. If the game moves past the end of September 1945 with victory points less than 2.5/1 in the Allies' favour, the best Allied result is a draw unless Tokyo is taken. Any victory location that has a nuclear bomb used on it ceases to become a victory location. If that is Tokyo, it loses its status as an auto victory location.
- **Empire V4.0 and Age of Steel V1.0C**
- Error with Marine CD unit at Pago with move orders at the start – Fixed.
- Eased up Chinese Inf values a touch, review of some other infantry types as well – Play balance.
- British BC Renown using Repulse upgrade path and review of both classes. Fixed.

- A few fixes and enhancements to Japanese E-class ships upgrades and paths, late war. Fixed and play balance.
- A few US subs arrive with the wrong date/upgrade level. Fixed.
- Small adjustments to large J Merchant ship conversion options, range and cargo balance. Chrome and enhancement.
- Hampden Bomber Mk I, Mk I TB and Blenheim If – revisions and a couple of minor corrections. A few other aircraft historical corrections – extra research.
- Streamlining of AC radars to make them fit the mod better.
- SBD Dauntless line revisions, mainly loadouts - new research.
- Changed A/C on Akitshima and Chihaya AV at start to a unique version of the Emily. Chrome.
- Made non-US Allied ASW upgrades on ships a bit more progressive and in keeping with the mod. Chrome and play balance.
- Last Version of George 1/45 CV now instead of CVB.
- DB, and other tweaks elsewhere.
- Clarification on optional victory conditions- The fall of Tokyo before 1/11/45 = Auto allied decisive. If three cities from the options of Nagasaki, Kagoshima, Hiroshima, Kobe, Osaka, Yokohama, Fukuoka and Maesa to allied land forces before 1/9/45 = Auto Allied Decisive victory. If 3 VP locations are taken after 1/9/45 and before 1/10/45, then the result is a Draw. If the game moves past 1/10/45 with victory points less than 2.5/1 in the Allies' favour, the result is a draw unless Tokyo is taken. Any Victory location that has a Nuclear bomb used up on it ceases to become a victory location. If an atomic bomb is used on Tokyo, it loses its status as an automatic victory location (they did not want to kill the emperor).
- Added a final K version of the Jet, Nakajima Kikka 2/45 and Francis 11/44.
- Added a few more Japanese Yangtze large river barges and some ocean-going barges, and Tugs.
- Improvements to Russian supply and reduced stacking issues by more spread arrivals. Will mean a slightly slower Russian offensive. Fix and Chrome.
- Tweaked Japanese Heavy Industry and Arms down a bit at start, tweaked Naval shipyards up a touch at start, HI now uses 23 from 21 Res. Play balance.
- Added another conversion option to Mortar support ship for LSTs 12/44. Chrome.
- Added option not to convert Oyodo Scout class CL class in 12/44 to CL armed with Washi missiles for surface attack and retain the AC capacity. Splits the path. Chrome.
- Revisions to TOE of late war Japanese militia divisions- new research and more in keeping with mod.
- Changed starting positions a few Japanese SS. More in keeping with mod.
- Reduced British 43-44, US Army ,Navy, and Marine pilot replacement levels 42-44 – Too high.
- **V5.0 and A.O.S V2.0**

- Delete your Allied and Japanese Planes folders from the main artwork folder, delete Jap Ships back and Jap Ships shil folders, delete allied ships back and Allied ships Shil folders – nothing else.
- **Re-download the art and reinstall for the big benefits of this patch, lots of new art fixes to displays and enhanced art for planes and some ships – Sincere thanks to Viberpol from Matrix Forums for his work!**
- Review of Data base and revisions on new research.
- Corrected Malerial base omissions in Burma. And extended the area to Malaya and parts of North Borneo/ Sarawak, including remote Jungle Islands.
- Minor changes on many planes, some new variants of existing planes to make things flow better.
- Ki200 is removed and replaced by Ki90/91, and a T version was added for the late war. More in keeping.
- Review of light and medium bomber status - better suits the mod.
- PBY-5a should be Patrol type- Fixed
- Added additional P400 Air Cobra as Commonwealth 2-7/42. Export model in keeping with mod and play balance.
- Removed Kayru II and replaced it with more accurate R2Y2 Army and Navy (CVB) Jet 5/45 and 6/45.
- Opportunity to build early German GM Aircraft replacements, all moved back (should not be worth building). More in keeping with Mod.
- Added KI-94 II Fighter 11/44+. And KI 64 IIc 9/44 - More in keeping with mod.
- Reduced SBD6 Dauntless production slightly 8/44-1/45. More in keeping with Mod should be phased out.
- A few starting pool and production tweaks. Tighter for allies until mid-42.
- Tojo IIa now 9/42 form 11/42. Play balance.
- Aichi Ha 60 Engine now 42/11 from 42/12, so changed Tony Ia to 9/42 to match this potential arrival by R+D.
- Crew experience of CA Exeter substantially reduced- deployed with a raw, new crew. Chrome and historical.
- CL Kuma and Tama now start as TT variants only in Scn 50+51 – More in keeping with those Scn.
- Tone Class CA is now completed as CL only in Scn 50+51. More in keeping with those Scn.
- CS Nisshin and Mizuho no longer convert to CVL - more in keeping with mod as too slow.
- A change to a few late-war arriving J Air Groups to make more use of varied planes. Chrome.
- Hosho Air Groups now Trainers – optional new rule; should not be removed from CVE Hosho.
- Kaga and Akagi classes now have more historic air group allocation, but added reserve planes and increased their ordinance slightly on new research. And Allied CVs now have pre-6/42 loadouts at a more realistic level, pending the arrival of folding-wing F4Fs and deck parking.

- Added a few more YO, DE and LST for Japan.
- Made two Vichy French sub-Commanders- Chrome.
- Modifications to the super Yamato class to better fit development within the Mod from the former Yamato- more desirable to build, and new art.
- Changed Ohka to TT format on planes delivering this at low altitude. Fix for better gameplay.
- Allow the Matsu class DD to convert to DE 11/44 or APD 4/44. Chrome.
- Allow British C+D Class CL not to convert to CLAA 9/42. Chrome.
- Allow British M Class subs to convert to either ML or TR 2/42. Chrome.
- Allow the Tachibana class DD not to convert to DE 11/44. Chrome.
- Allow the Akizuki class DD not to convert to DD ASW version 10/44. Chrome.
- Allow Ise and Fuso class BB to convert to CV 9/42; 2.2 years! Single-hanger, armoured type.
- Amended Ryuho conversion from AS Taigei to 8/42, modifications to upgrade 1944 – Chrome and more in keeping with mod.
- Tone, Mogami, and Oyodo now have reduced AC capacities as newer, larger and heavier plane types appear. Realism.
- Added AO Apple and Pear Leaf 12/41 – Missing UK small Oilers -with thanks to Kohler from Matrix forums.
- Removed Temeraire and Lion BB from SCN 46-49 – More in keeping with those mods.
- Corrected TK Francol to the new Bergol class light Tanker and also added missing Sebol and Bergol 12/41- with thanks to Kohler from Matrix Forums.
- Increased AC deployment at PH on Dec 7th to make it more tempting for airfield strikes. Game balance.
- Advanced a few allied very late war Air groups into late 44/45.
- Eliminated almost all Japanese CVE arriving air groups.
- Corrected a French AG to a realistic starting location and added French Devastator for 12/41 – 5/42, SBD-3 8/42-4/43, D338/344 (T), Sud-Est SE100 Fighter 12/41-2/42.Chrome.
- Added P40Q 4/44-10/44.
- Added Japanese 57mm AT gun for 44/1 and a 75mm for 44/11. Added a Japanese Type 4 Tank 44/11. In keeping with mod.
- Revisions to some Japanese land units TOE/OOB.
- Added full range Of Thai commanders.
- Review and some fixes to Thai Armed forces.
- Tweaks to many ships – New Research, and a few minor corrections.
- Dud rates of some obsolete ammunition types have been increased- New research.
- Review of Torpedoes with new research – Resulted in a few new ones being added, mainly late-war Torpex types. All

sides now have technological progression on torpedoes.
Thanks, Drachinifel.

- Torpedoes are now rated better for realistic penetration. This means some BB with belts 201-325mm will have some resistance or defeat smaller TT, when they hit the belt armour. 325mm+ will have more, and 400mm+ will have belts capable of defeating all (allied) TT. The most powerful TT will still overcome any Belt. Play testing shows that around 60% of TTs do not hit the ship in the belt despite the given message in the playback. Ships hit outside the belt seem to suffer the full but variable effect of the TT.
- Improved Exp of arriving 232 RAF and 17 RAF as Battle of Britain Veterans in this mod. Play balance.
- Tanaka, Raizo, is now a ship commander (Starting CL Jintsu). More in keeping with the game. Other Leader minor modifications. Added Yamamoto back into the game.
- Halsey is now a TF commander.
- A few aircraft now have an armour rating of 3.
- Reduced some starting pilot pools and Dec 41 arrival rates, plus some others. Play balance and realism.
- Tweaked upwards some starting allied forts and reduced AF in poor terrain in Burma – Realism and Play balance.
- Tweaked base sizes in remote and hostile terrain areas in S China. Realism.
- Corrected unit symbols for some Japanese, Para, Commando and SNLF units. Tweaked a couple of their TOEs. Chrome and Fixed.
- Revised dispositions of some Dutch and British starting forces and made them slightly better equipped with yet more obsolete equipment. Play balance.
- Added 55,000 starting value to the Naval Shipyard pool, reduced HI to 5000.
- Reduced PH to AF size 8 – More in keeping with mod.
- Rework of Refugees to make them more worthwhile to rescue and disband, and make them more likely to appear closer to on-map developments- Chrome.
- Added 4 more Japanese Aircraft Factory sites.
- Most Thai land and offensive air units now arrive 25/1/42 – day of declaration of War officially on Allies.
- Update to Read me PDF.
- **V5.0a and AOS V2.0a**
- Corrected Shokaku TT loadout on new advice. Slightly upgraded Shokaku-Kaimon Class ordinance on the basis of the above.
- Slightly improved Taifu class CVs – To make it more tempting to build.

- Corrected names of the Arashi class AR sister ships, one starts, and one is to be built. 2nd Historically cancelled.
- Corrected a few B24 arrival errors and data inconsistencies between Scn Versions.
- Improved Bremerton USN base repair capability – Player research
- Removed duplicate MacArthur from the game- Fixed.
- Slightly increased disabled elements 12/41 in some USN starting BF.
- **Corrected Japanese 250KG bomb stats in Scn 42+51. Error-Fixed.**
- Removed Australian duplicate base – Armidale - Error from original mod - Fixed
- Added 5 x Allied LST/AG – Missing and player research. Slight tweaks to LSTs.
- Japanese 40mm Ho-301 Cannon – New research – reduced range, slightly increased ROF/ Accuracy, slightly reduced pen, increased charge.
- Japanese late war 42mm (Frag) Cannon, increased ROF/ Accuracy a touch.
- Tweaks to the TOE of a small number of Australian units.
- Review of Japanese SC series and some other small classes – New research put forward from the forums, reduction in fuel use, and some other minor corrections.
- Correction to Dido class CLAA update 2/42 - Fixed
- Tweaks to Flower Class KV – New research.
- Tweaks to Castle class KV – added 6 more, including four British late war.
- Bunker Hill and Essex now arrive with Wildcats but enhanced sizes of other AG.
- Scn 43+45 Essex moves forward 1 month to Jan 43 and Bunker Hill March 43 – To make these Scn more tempting to play (Saratoga is in PH on Dec 7th 1941).
- Added early F6F-1A Hellcat (cvl), 1-3/43 - in keeping with mod.
- Added Swordfish III (ASW) 12/42-5/43 – in keeping and fills a gap.
- Added TR version of the Beech 18S = Beech C45-E 12/41 1/44– In keeping with mod.
- Added Wirraway CA8 – Fighter Trainer – Commonwealth.
- Added A20H – USAF, and reviewed the A20.
- Added B-36RB-3H Recon USAF 10-11/45.
- Added PB2Y-3/5R Coronado TR – USN 6/44-9/45 and PB2Y-2 2/42- 10/42. Very in keeping with mod.
- Added F4F-4s FF as a development of the earlier one and in keeping with the mod – 2/43 – 1/44.
- Added a weaker B-32A Dominator. In keeping with mod 3-9 44.
- F8F Bearcat can now operate from CVE+ - New research.
- Created 2 Norwegian, 1 Belgian and 2 Polish ship commanders, tweaked a few commanders.
- Added 2 more allied TK at Singapore 12/41.
- Minor corrections to a few Thailand Ships – New research.
- Washington and North Carolina BB now arrive with the earliest upgrade stage – More in keeping with mod.
- Fletcher and Gearing class DD now have optional 1945 DDAA upgrades. More in keeping with mod.
- A few other AC and ship tweaks – New research.
- Modest Increase in allied air production 1943+.
- Correction to Ki 49 Helen upgrade path to last variant – Fixed.
- US Patapsco Class TK now reclassified as small AO. Missing from the original game, added 10.
- US Navajo Class YP – Added 8 missing from the game.

- Added a few more US and UK Tks to early 1942 – many are missing from the game and the allies need more capacity.
- Added 3 ancient (WW1) O1 class AO for UK – arrive 43 and 44.
- Standardised British CV early war FTR AG to split 2 – more versatility in coping with their CV upgrades.
- Delays to some arriving British SS in late 1943 – more in keeping with the mod.
- US 125,140,174 and 102 Ind Inf Regt's now unrestricted - more in line with mod.
- Air Unit 3614 / B29C (Hard code error) arrives in late 42 regardless of arrival date in editor – so now a B25C rather than B29.
- Reviewed and raised some allied land replacement rates.
- A few other tweaks and minor corrections on planes and ships.
- Suggested new House Rule – 4E TR and RECON should only operate from AF size 4+