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ULTRA

Free

A quarterly newsletter devoted to *A WORLD AT WAR*, GMT Games' strategic simulation of World War II. To order AWAW, go to www.gmtgames.com or phone 1-800-523-6111.

THE WAY OF THE WARRIOR

A Review of Japanese Pre-War Strategies

by Eric Thobaben

Introduction

The Spring 2008 issue of ULTRA explored the basics of playing Japan in the early war. Balancing the timing of Japan's mobilizations with increasing U.S.-Japanese tensions is central to any Japanese strategy, as keeping the USJT level low is key to any Japanese player who wants a better chance at catching American carriers at Pearl Harbor. But Japan must also mobilize and produce sufficient air and ground forces to capture and garrison Japan's overseas conquests. With regard to shipbuilding, Japan is well served by building as many destroyers as possible before the outbreak of war to maximize Japanese invasion capabilities. In terms of economics, by growing the Japanese BRP base early in the war, Japan may enjoy a higher unit construction limit and more RPs for research and production.

Clearly, not all of these goals are achievable in any one plan. If Japan seeks to minimize tensions in order to sink American carriers at Pearl, then that will come at the expense of the Japanese player having all of his mobilized ground and air units in play when he attacks. Similarly, building as many destroyers as possible costs more BRPs and prevents Japan from maximally growing its economy before going to war. In short, Japan can't do everything, and Japanese players in *A WORLD AT WAR* have many difficult (but fun!) decisions to make during the early war. These choices will influence the flow of the game for the rest of the war and, therefore, should be considered carefully.

The Spring 2008 issue of ULTRA laid out four plans that will be tied into early Japanese shipbuilding options

in this issue. These plans included the Standard Plan, Maximum Growth, Extreme Shipbuilding, and Ultimate Surprise. Each of these plans is briefly outlined below in order to refresh the reader's memory of the benefits and hindrances of each pre-war strategy.

The Standard Plan

In the Standard Plan, Japan attempts to do a little bit of everything, but nothing to the maximum. Japanese mobilizations are timed such that random tension rolls cannot bring about an early American mobilization on any turn, and the USJT level is at 33 when Japan attacks, which leaves some chance of catching an American carrier at Pearl Harbor. Japanese ground and air units are available in a timely manner to use in Japan's opening attack, which will include 26 factors of destroyers – a solid level for invasion capabilities. The Standard Plan is suggested for players new to the Pacific theater because it provides a well balanced approach to playing Japan without undue risks.

Maximum Growth

A strong economy will help Japan rebuild units and fight the Western Allies longer at Japan's defensive perimeter as well as when the Western Allies near the Japanese home islands. For that reason, some players favor growing the Japanese economy before the attack on the West. Under the Maximum Growth plan, Japan takes its second discretionary mobilization in Winter 1940 instead of Spring 1941. The main benefits of Maximum Growth are a larger BRP base (by roughly 10

Building *Your* Imperial Japanese Navy

The Way of the Warrior..... Front Cover
By Eric Thobaben

Building *Your* Imperial Japanese Navy 3
By Eric Thobaben

I Got This Navy, Now What?.....15
By Eric Thobaben

**Next Issue: Banzai – Japan's
First Two Turns of Attack**

BRPs), a higher unit construction limit (plus three per turn), and two additional RPs in the 1941 YSS. These gains come at a cost of the final USJT level being one point higher (34 instead of 33) and a one in six chance of the U.S. mobilizing in Fall 1941. For players who enjoy maximizing Japan's RPs or BRP base, Maximum Growth is a suitable pre-war plan.

Extreme Shipbuilding

Among A WORLD AT WAR players, there are those who are infatuated with big ships. (I am one such player.) For these players, laying down big ships isn't just an option – it's the duty of any respectable fun-seeking player. Similarly, there are Japanese players who seek to push the envelope of Japan's invasion capabilities in the first two turns after going to war with the West. Simply put, the more destroyers, the merrier. If either of these sounds like you, then you may elect to pursue the Extreme Shipbuilding plan.

Under this plan, Japan produces one shipbuilding increase in Spring 1940 and mobilizes a second in Fall 1940. With five shipbuilding points by Fall 1940, Japanese destroyer levels may reach 30 (instead of 26) for the first turn of attack, which offers substantially greater options for invasions on the surprise turn. Alternatively, one might also launch additional cruisers or lay down one or more battleships or carriers to grow the Imperial Navy larger to better fight the U.S. Navy. But either of these advantages on the seas comes at a cost. First, building a larger navy costs BRPs, and Japan's economy is less robust under this plan. Second, there are opportunities for early U.S. mobilizations due to random tension rolls. Finally, Japan must delay its

second discretionary mobilization until Summer 1941, and any units mobilized this late will enter the Japanese force pool too late for use during a Winter 1941 attack. Overall, Extreme Shipbuilding certainly has its benefits, but it has its share of drawbacks too.

Ultimate Surprise

Strike early, strike deadly. The fourth and final plan explored in the Spring 2008 issue of ULTRA is that of Ultimate Surprise. This plan minimizes U.S.-Japanese

tensions in order to significantly increase the odds of catching American carriers at

Pearl Harbor. With fewer American carriers in 1942, Japan can expand its defensive perimeter strongly and perhaps maintain carrier superiority through mid-1943, delaying the U.S. counterattack. For this plan to succeed, Japan must delay its first discretionary mobilization until Winter 1940 and its second until Summer 1941. Like the previous plan, Ultimate Surprise suffers from generating fewer ground and air units available for the surprise turn. In addition, random tensions rolls can reduce the effectiveness of and, in rare cases, even spoil this plan.



"Battleship Row" at Pearl Harbor
(www.history.navy.mil/photos/events/wii-pac/pearlhbr/ph-bbs.htm)

Conclusion

Regardless of how you prefer to play Japan, you'll want to fine tune your pre-war plan to suit your needs for each game. The four plans described above broadly cover Japan's pre-war options, but in some respects are just the tip of the iceberg in terms of pre-war possibilities. A brazen Japanese player might combine Maximum Growth and Extreme Shipbuilding to "go big" on everything. An unlucky tension roll in Fall 1940 might slide an Ultimate Surprise plan into one of Maximum Growth. The remainder of this issue will incorporate these four plans into various early-war shipbuilding options for Japan. The goal is to explore – and perhaps push the envelope on – what the range of Japanese shipbuilding options are and under which of these plans each of these options are best pursued. This issue ends with a short article on various uses of the Imperial Japanese Navy.

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BUILDING *YOUR* IMPERIAL JAPANESE NAVY

Japanese Shipbuilding Options in the Early War

by Eric Thobaben

Introduction

By December 1941, the Imperial Japanese Navy included the largest fleet of operational aircraft carriers built to date; these would serve as launching platforms for one of the most striking surprise attacks by naval air units in history when Japan attacked Pearl Harbor. In addition, two of the largest, heaviest battleships ever built had been launched and were either being commissioned or nearing the final stages of outfitting: the *Yamato* and the *Musashi*, each displacing 72,800 tons when fully loaded. With the hope of negotiating a peace treaty with the Americans and the British early in the war, the Japanese knew they would need to build a sizeable and powerful navy that included both carriers and battleships.

In *A WORLD AT WAR*, one of the first strategic decisions the Japanese player must make involves which naval units to build before the outbreak of war. Ultimately, these decisions should be customized to match the Japanese player's overall strategy. If a defensive perimeter, the historical Japanese strategy, is of primary concern, then several strong battleships and a fine group of carriers will be needed to fight the U.S. Navy across the Pacific Ocean. A raiding strategy might warrant the construction of additional carriers or battleships while the remainder of the Japanese Navy engages the Americans. And if the Imperial Japanese Army, instead of the Japanese Navy, is calling for stronger attacks into India, China, or perhaps even Russia, then the Japanese player may opt for a minimal navy and direct his resources toward building a powerful army or air force instead. This article explores the benefits and drawbacks of several shipbuilding options available to Japan in the early war. The goal is to help Japanese players optimize their naval construction prior to the outbreak of war between Japan and the West.

U.S.-Japanese Tensions

Effectively managing U.S.-Japanese tensions is crucial for the Japanese player in order to enjoy surprise when Japan attacks. One factor in those decisions is the timing and rate at which to increase Japanese shipbuilding in conjunction with Japanese

mobilizations. Every admiral would like to build his navy as large as possible, but for every action there is a reaction, and the Japanese player must weigh the gains against the costs before expanding his shipbuilding capacity.

There are numerous options with respect to the timing of Japanese shipbuilding increases and mobilizations. Considering only the four plans detailed in the Spring 2008 issue of *ULTRA*, Japan increases its shipbuilding rate via mobilization or **production** in the following turns:

1. Standard Plan: Fall 1940, **Winter 1941**.
2. Maximum Growth: Winter 1940, **Winter 1941**.
3. Extreme Shipbuilding: **Spring 1940**, Fall 1940, **Winter 1941**.
4. Ultimate Surprise: Fall 1941, **Winter 1941**.

Under each plan, Japan produces (rather than mobilizes) a shipbuilding increase in Winter 1941 in order to minimize USJT increases prior to Japan's surprise attack but maximize Japan's long-term shipbuilding capacity. Fall 1940 is a typical turn for Japan's first shipbuilding increase (Standard Plan), although careful management of the USJT level sometimes requires this shipbuilding increase to be delayed until Winter 1940 (Maximum Growth) or even Fall 1941 (Ultimate Surprise). Extreme Shipbuilding generates two shipbuilding increases in 1940 and offers the widest range of early shipbuilding options of the four plans.

For each of these plans, the USJT level increases by turn and the timing of **mobilizations** are indicated in the table below. See the Spring 2008 issue of *ULTRA* for more details.

Plan	1940				1941			
	Sp	Su	Fa	Wi	Sp	Su	Fa	Wi
Standard Plan	4	7	10	12	16	22	27	33
Maximum Growth	4	7	9	13	17	23	28	34
Extreme Shipbuilding	5	8	12	14	17	23	28	34
Ultimate Surprise	4	7	8	10	13	17	23	29

One key factor to consider when balancing USJT increases with increasing Japanese shipbuilding is the ability of the Americans to respond – particularly the first American Pacific mobilization when the effective USJT level reaches 10. Until the first American Pacific mobilization is triggered, the U.S. Pacific shipyard remains at one SBP. This SBP must be used to continue construction of existing ships. Thus, until this first American Pacific mobilization, the U.S. may not lay down any additional ships in its Pacific shipyard in 1940. The U.S. will likely have increased its Atlantic shipbuilding rate to two in Spring or Summer 1940, which would allow the U.S. to begin construction of a new naval unit each turn in its Atlantic shipyard; but that is out of the Japanese player’s control. And in 1940 it is common for the second U.S. Atlantic SBP to be used to lay down BB5s or construct additional destroyers. If we assume that as a given, then the Japanese player is still well served by delaying when the first American Pacific mobilization occurs and, thus, when the U.S. player may begin construction of additional ships in the American Pacific shipyard.

For this reason, the Japanese player wants to delay triggering the first American Pacific mobilization as long as possible. In addition, Japan should try to delay when the second and third American Pacific mobilizations (effective USJT 20 and 30, respectively) occur. This delay tactic is contingent on the effective tensions roll, however, and the Japanese player must be mindful of the risks his plan poses with respect to triggering early American Pacific mobilizations. The probability of each plan triggering the first, second, and third American Pacific mobilizations is as follows (with M_1 , M_2 , and M_3 indicating a guaranteed American Pacific mobilization):

Plan	1940				1941			
	Sp	Su	Fa	Wi	Sp	Su	Fa	Wi
Standard Plan			4/6	M_1		M_2		M_3
Maximum Growth			2/6	M_1		M_2	1/6	M_3
Extreme Shipbuilding		1/6	M_1			M_2	1/6	M_3
Ultimate Surprise			1/6	4/6	M_1		M_2	M_3

It is worthwhile to consider the risk of early American Pacific mobilizations under each of the four plans. The color coding reveals the difference in risk most clearly. The Standard Plan offers the American player no opportunities for an early Pacific mobilization. The only variation that may occur is that the first U.S.

Pacific mobilization may be delayed until Winter 1940 in two out of six games.

In contrast with the Standard Plan, under Maximum Growth Japan delays its first shipbuilding increase to Winter 1940 and, as a result, has a much better chance (four in six) of delaying the first U.S. Pacific mobilization until Winter 1940. But since Japan takes its second mobilization in Winter 1940 instead of Spring 1941, there is also a one in six chance of the Americans mobilizing in Fall 1941. If we prioritize possibly delaying the first American mobilization over the final USJT level when Japan attacks, Maximum Growth actually provides Japan with a good chance of delaying the construction of a new naval unit in the U.S. Pacific shipyard until Winter 1940. We will return to this point later when we discuss restrictions on American fast carrier construction.

Of all four plans, Extreme Shipbuilding clearly poses the greatest risk of early American mobilizations. No other plan risks a Summer 1940 U.S. Pacific mobilization, the consequences of which can be far-reaching. If, due to a “6” random tension roll, Japan is forced to take its first discretionary mobilization in Summer 1940 instead of Fall 1940, the USJT level will be one higher throughout the rest of the USJT projection (see the table below). Another “6” random tension roll in Spring 1941 could trigger yet *another* early American mobilization, which further raises tensions and allows the U.S. player to impose an oil embargo in Spring 1941. (Two “6” random tension rolls on two key turns will only occur in one out of 36 games, but we’re considering the worst case scenario here.) And just when you thought it couldn’t get any worse, what was a one in six chance of the third American mobilization in Fall 1941 could become as great as a five in six chance. If all three of these key random tension rolls favor the Americans, the USJT level would reach 38 in Winter 1941. Another “6” random tension roll would push the effective USJT level to 40, and Japan would lose surprise for its initial attack. The table below shows this worst case scenario.

Plan	1940				1941			
	Sp	Su	Fa	Wi	Sp	Su	Fa	Wi
Extreme Shipbuilding	5	8	12	14	17	23	28	34
Extreme Shipbuilding (worst case)	5	11	13	15	20	26	32	40

The problems for the initial Japanese attack are mostly due to the imposition of the oil embargo in

Spring 1941. With declining oil supply, Japan is well advised to attack one turn early in Fall 1941. But because the random tension roll occurs during the Spring 1941 Allied player turn, Japan will not have occupied Saigon the appropriate two turns prior to going to war. This will result in Thailand remaining neutral in Fall 1941, which restricts Japan's options for attacking into Burma and the Malaysian peninsula on the surprise turn. Alternatively, Japan could wait until Winter 1941 to attack, but a "6" random tension roll could spell disaster when Japan attacks. Without surprise, Japan's early expansion becomes much more difficult.

Of course, if you can convince your European Axis partner to delay the capture of Paris (and the resulting +2 USJT increase) until Fall 1940, then this potential domino effect dilemma goes away. But delaying the fall of France will likely reduce the effectiveness of the German submarines by one turn (for not controlling the French ports), so expect to spend some "DPs" when proposing this to your German partner...

The risk of a Summer 1940 American Pacific mobilization notwithstanding, Extreme Shipbuilding (specifically, the Spring 1940 Tokyo shipbuilding increase) offers the greatest opportunity for laying down additional Japanese capital ships and fast carriers early in the war *before* the Americans can respond in kind. But choosing to do so comes with a degree of risk, and it is a good idea to have a back-up plan in case your USJT projection goes awry.

The fourth and final plan, Ultimate Surprise, is geared toward trying to catch American carriers in Pearl Harbor. What is also interesting is that Ultimate Surprise is the most likely plan to delay the first U.S. Pacific mobilization: a Fall 1940 American mobilization is very unlikely, and it is possible to delay the first American mobilization until Spring 1941. If you recall, the eventual goal of Ultimate Surprise is to sink American carriers at Pearl Harbor and maintain Japanese carrier superiority through 1942. Coupled with a likely delay in the shipbuilding increase of the U.S. Pacific shipyard, an Ultimate Surprise plan could seek to both sink carriers at Pearl Harbor and lay down one or more Japanese carriers early in the war – before the U.S. may respond in kind. We will discuss this option in greater detail below.

Now that we have considered the timing of the first American mobilization under all four plans, it is worthwhile to briefly consider the second and third U.S. Pacific mobilizations; each will almost certainly generate increases in U.S. Pacific shipbuilding. This

analysis is relatively simple due to the way these four plans converge on similar USJT projections in 1941. Assuming no early American mobilizations through 1940, the Standard Plan, Maximum Growth, and Extreme Shipbuilding all guarantee that the second U.S. Pacific mobilization will occur in Summer 1941, with no possibility of this timing being accelerated or delayed. Ultimate Surprise likewise guarantees a second U.S. Pacific mobilization, but one turn later (Fall 1941). From Japan's perspective, after accounting for the first American Pacific shipbuilding increase in late 1940, the U.S. will not begin construction of additional naval units until either Summer or Fall of 1941.

The third U.S. Pacific mobilization has a one in six chance of occurring in Fall 1941 under Maximum Growth and Extreme Shipbuilding. But in most games, under any of these plans, the third American mobilization occurs after Japan attacks in Winter 1941. At this point the Americans are in the war, and the U.S. wartime economy takes off. Once at war, Japanese players no longer need concern themselves with the precise shipbuilding levels in the U.S. shipyards; suffice to say that many ships will be laid down, and numerous American ships will be launched each turn beginning around mid- to late 1943.

Having explored the USJT projections under various plans related to the timing of Japanese mobilizations and shipbuilding increases, we can now turn our attention to building the Imperial Japanese Navy. Our shipbuilding analysis begins by determining how to maximize the most important naval units for Japanese expansion: destroyers. After establishing a baseline for pre-war destroyer construction, we then consider the possibility of pre-war construction of cruisers, fast carriers, and capital ships using any remaining Japanese shipbuilding capacity. For more advanced Japanese players, we also consider the option of laying down additional fast carriers or battleships near the start of the game at the expense of building a few destroyers.

Destroyers Aplenty

In *A WORLD AT WAR* your seaborne invasion capabilities are limited by the number of destroyers you have:

21.513 DESTROYER AND TRANSPORT REQUIREMENTS:

A. UNDEFENDED HEXES: One destroyer factor is required to carry each invading ground factor if the invasion hex is not occupied by an enemy ground unit.

B. DEFENDED HEXES: Two destroyer factors are required to carry each invading ground factor, including ground units which do not

at start, total 26 destroyers for use on the surprise turn. We will consider 26 destroyers as the baseline for an invasion capability sufficient to capture Japan’s historical conquests on the DoW and DoW+1 turns.

Unlike the other three plans, Extreme Shipbuilding offers a key advantage: from Fall 1940 through Summer 1941 (four turns), Japan may lay down one additional destroyer per turn. This allows Japan to increase its destroyer levels to 30 instead of 26. Every destroyer counts on the first turn of attack. To help the novice player better understand the importance of a few additional destroyers, with each additional destroyer Japan could invade Wake, an island in the Gilberts, an island in the Solomons, or an undefended hex in or near the Bismarck Archipelago (e.g., Hollandia, the beach near Lae, or the beach near Rabaul). With an additional DD4, Japan could do all four!

Much like RPs and DPs (every player wishes he had more), Japanese players always desire to have more destroyers available for when Japan attacks. Still, as a player’s skill increases, he will be drawn to explore other early-war Japanese shipbuilding options. Can I get away with laying down one or more fast carriers? Or should I amass a fleet of large battleships? If I have to choose one or two capital ships or fast carriers over destroyers, can I still pull off my initial attack? Before we answer some of these questions, and after accounting for construction of our destroyers, let’s first consider the simplest option for additional pre-war shipbuilding: cruisers.

A Few Good Cruisers

At this point in our analysis it is helpful to return to the Japanese Naval Construction Chart. For most of our four plans, Japan’s shipbuilding capacity (3 SBPs) is used completely from Winter 1939 through Summer 1940 by advancing and launching ships that begin the game on the Japanese Naval Construction Chart and building two destroyers per turn. Under the Standard Plan, Japan increases its shipyard to 4 SBPs in Fall 1940, which provides the Japanese player with his first option for beginning construction of an additional naval unit. We will consider laying down additional cruisers, but first let’s forecast the space in the Japanese shipyard from Fall 1940 to Fall 1941. By doing so, we can see how many cruisers we may be able to launch before going to war and, therefore, what benefits these additional cruisers may provide on the DoW and DoW+1 turns. In the interests of brevity, we will shorten the Naval Construction Chart so that it only includes the

shipbuilding rows in use. At the start of Fall 1940, the status of naval construction in Tokyo is as follows:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
4			<i>Musashi (BB5)</i>	
3				<i>Yamato (BB5)</i>
2	<i>Shokaku (CV)</i>	<i>Zuikaku (CV)</i>		
Launch			<i>DD2</i>	

Cruiser construction begins as follows:

27.725 BEGINNING NEW CONSTRUCTION:

27.7251 A major power must expend one shipbuilding point and three BRPs to begin construction on a ship, regardless of the ship’s size or type:

B. Cruisers are placed in the “2” row two columns from the column for the turn in which construction is begun. Cruisers must be constructed in two factor increments. Thus a cruiser laid down in spring would be placed on the “2” row in the “Fall” column.

Japan could begin construction of two cruisers in 1940: one in Fall 1940 and a second in Winter 1940. At the end of 1940, the Japanese Naval Construction Chart would appear as follows:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
3			<i>Musashi (BB5)</i>	
2	<i>CA Shokaku (CV)</i>	<i>CA Zuikaku (CV)</i>		<i>Yamato (BB5)</i>
Launch	<i>DD2</i>			

Note that Japan now has eight ships under construction in Tokyo: two CVs, two BB5s, two cruisers, and two destroyers. Because Tokyo has 4 SBPs, it has a shipyard capacity of eight ships. So the Tokyo shipyard capacity is now at its maximum.

27.741 The total shipyard capacity for each location capable of building destroyers, CVEs, cruisers and named ships or repairing cruisers and named ships is twice the shipbuilding rate for that location. The number of destroyers, CVEs, cruiser and named ship counters on the Naval Construction Chart at any moment for each shipbuilding location may not exceed the shipyard capacity for that location. New ships may not be laid down, and repairs may not be started of damaged ships, in excess of this limit.

27.742 When the completion of naval construction or repairs results in the transfer of a ship from a Naval Construction Chart to the board, the construction of a new ship or repair of a damaged ship may be started in the same unit construction phase.

Back to our cruiser construction. Since our cruisers were placed in the Spring and Summer columns, they will launch (using a second SBP each) in Spring 1941 and Summer 1941. Drawing from this basic formula, an additional SBP in Tokyo allows Japan to launch two cruisers (CA4) each year. Japan could begin construction of a third cruiser in Fall 1941, but it would not launch until Spring 1942, after the critical period of Japanese expansion on the DoW and DoW+1 turns. Thus, under the Standard Plan, Japan could launch an additional CA4 prior to going to war.

What benefits might these additional CA4 provide? In most cases, these CA4 would provide one additional combat factor of shore bombardment each turn.

21.525 EFFECT OF SHORE BOMBARDMENT: For every three naval factors providing shore bombardment, one combat factor is added to the strength of the attacker's ground units when determining the odds for ground combat.

At a total cost of 12 BRPs over four turns, it is probably wiser not to build these additional CA4 because it is more valuable to grow the Japanese BRP base and save Japan's scarce BRPs for more important builds in Winter 1941, when Japan's BRP level is near zero. Still, construction of the additional two cruisers is an option that we want to consider in case players are looking to gain every combat factor possible for the DoW and DoW+1 turn invasions.

Up to this point, our cruiser construction options have focused on the Standard Plan as a baseline. If you recall, under Maximum Growth, Japan gains its fourth SBP in Winter 1940. Therefore, one option under a Maximum Growth plan would be to use some of Japan's additional BRPs to launch CA4 before going to war. Because the one-year period from Winter 1940 to Fall 1941 occurs before Japan goes to war, both cruisers would be launched before the Japanese attack. However, one principal benefit of Maximum Growth is more RPs in the 1941 YSS, and spending even 3 BRPs in Winter 1940 may reduce Japan's BRP level so as to negate this RP boost. Japanese players pursuing Maximum Growth must plan very carefully if they

would like to build additional cruisers.

In contrast, Ultimate Surprise has Japan delaying its shipbuilding increase to four until Fall 1941. This plan leaves no room for Japan to build additional cruisers without cutting into construction of Japanese destroyers. Thus, few players build additional cruisers under Ultimate Surprise.

Extreme Shipbuilding, as you might expect, offers an interesting option for cruiser construction. Because Japan increases its shipbuilding to four in Spring 1940, there are two additional turns to construct cruisers than under the Standard Plan, when the first shipbuilding increase occurs in Fall 1940. In addition, Extreme Shipbuilding has Tokyo's shipbuilding rate increasing to five SBPs in Fall 1940. Assuming maximum destroyer and cruiser construction, at the start of Fall 1940, the Japanese Naval Construction Chart appears as follows under an Extreme Shipbuilding plan:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
4			<i>Musashi</i> (BB5)	
3				<i>Yamato</i> (BB5)
2	<i>Shokaku</i> (CV)	<i>Zuikaku</i> (CV)	CA	CA
Launch				DD2

As Japan continues construction of these two cruisers, they are launched by the end of 1940. Note that this does not prevent Japan from beginning construction of three destroyers each turn in Fall 1940 and Winter 1940. In each of these turns, Japan's five SBPs are used as follows: one SBP advances a BB5, one SBP launches a CA2, and three SBPs begin construction of three destroyers.

This brings us to 1941. In Spring 1941, the Japanese player may begin construction of a third cruiser, which is placed in the Fall column of the 2 row (see the Japanese Naval Construction Chart on the following page). Come Fall 1941, the third cruiser is launched just in time before Japan goes to war. Extreme Shipbuilding, therefore, allows Japan to build not only 30 destroyers

(instead of 26), but also an additional CA6.

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
3			<i>Musashi (BB5)</i>	
2		<i>Zuikaku (CV)</i>	CA	<i>Yamato (BB5)</i>
Launch	<i>Shokaku (CV)</i>	DD3		

These six additional fleet factors provide exactly two combat factors of shore bombardment on the DoW and DoW+1 turns. With an additional DD4 and two combat factors of shore bombardment, Japan may have the firepower to capture one more *defended* target in Winter 1941 that would not be possible under the other three plans or under this plan with only augmented destroyer construction. In summary, Japan's expansion capabilities are maximized under an Extreme Shipbuilding plan that augments both destroyer and cruiser levels.

Of course, there are other ships that might serve the Imperial Navy better after Japan's first two turns of expansion. One possible order from the menu is more fast carriers.

Fix Me Up Some Flattops

What A WORLD AT WAR player hasn't looked at the ship counters that come with the game and fantasized about how to get them into play? I mean, look at those four Japanese CVBs. There's got to be a way to get at least one of those into play by mid-game, right?

The short answer is "Yes, but it will cost you." How much depends on which of the four plans you are pursuing. As noted earlier, assuming maximum destroyer construction and the mandatory continued construction of CVs and BB5s from Winter 1939 onward, three of Japan's SBPs are used each turn on "upkeep". In order for Japan to comfortably (i.e., without reducing its destroyer construction) lay down and advance additional fast carriers, the shipbuilding rate in Tokyo should be increased to four. This is where the benefits of the Extreme Shipbuilding plan really shine. Unlike the other three strategies, which increase Japanese shipbuilding to four in Fall 1940 or later, Extreme Shipbuilding does so in Spring 1940. Extreme

Shipbuilding provides the best opportunity for players to explore new horizons in early-war Japanese shipbuilding.



The Akagi in April 1942. More of these would be nice, no? (content.answers.com/main/content/wp/en-commons/thumb/b/b9/300px-AkagiDeckApril42.jpg)

But before we get too immersed in delusions of carrier grandeur, we must recall that for every action there is a reaction:

27.7325 RESTRICTIONS ON AMERICAN FAST CARRIER CONSTRUCTION: Prior to the outbreak of war between the U.S. and Japan, American construction of fast carriers is prohibited except as permitted by the events set out below. This restriction does not affect the continued construction of American fast carriers laid down prior to the start of the game. For each of the following events, the U.S. may begin the construction of one American fast carrier of any type:

- A. The launch of the Hiryu (Fall 1939), Shokaku (Spring 1941) and Zuikaku (Summer 1941) (one fast carrier for each launching);
- B. The laying down of any other Japanese fast carrier (one fast carrier for each Japanese fast carrier placed on the Japanese Naval Construction Chart).

First, the American player is already free to begin construction of three fast carriers – one in each of Fall 1939, Spring 1941, and Summer 1941 – due to the launching of the *Hiryu*, *Shokaku*, and *Zuikaku*. The first carrier is usually laid down in the Pacific U.S. shipyard in Winter 1939 because there is no at start ship to advance in the Winter row. The other two carriers are typically laid down in early 1941. So the Japanese player should anticipate at least three American carriers to be under construction by Winter 1941.

Second, by laying down an additional Japanese carrier, Japan opens the door for the American player to do likewise. If the Americans will respond with a carrier of their own, is laying down additional carriers really in Japan's best interest? Yes and no. If the Japanese player is able to time when he lays down a carrier, he may be able to gain an advantage in terms of when it is launched. Recall that until the American Pacific shipyard (or the American Atlantic shipyard) increases

to two SBPs, the U.S. may not begin construction of any new ships (other than the carrier in Winter 1939). If Japan lays down a carrier earlier in the war, then the U.S. may not be able to match that carrier until several turns later. If Japan begins construction of a fast carrier in Winter 1939 (at the expense of DD1), then the U.S. may not be able to respond until Spring or Summer 1940 (in the U.S. Atlantic shipyard) or Fall 1940 (in the U.S. Pacific shipyard). Alternatively, the Japanese player could wait until Spring 1940 to lay down an additional carrier – especially if Japan will produce +1 SBP in Tokyo in Spring 1940. Regardless, the sooner Japan lays down its first additional carrier, the better. Otherwise, it might be better just to play it cool and not begin construction of any carriers until the start of the war, when the 27.7325 restriction is lifted, and the Americans can build as many carriers as they want.

Earlier in this article we discussed how the Maximum Growth and Ultimate Surprise plans provide the best chances for delaying the first U.S. Pacific mobilization. It is appropriate to return to these points now that we are discussing restrictions on American fast carrier construction. If Japan begins construction of a fast carrier in Winter 1939 and is able to delay the first U.S. Pacific mobilization until Winter 1940 (or, under Ultimate Surprise, maybe even Spring 1941), construction of the Japanese carrier may be up to one year ahead of any American carrier that is laid down in response (at least in the U.S. Pacific shipyard). This allows Japan to either “get ahead” by launching a carrier one year sooner than the corresponding American carrier or “size up” and launch a carrier that is one factor larger than the corresponding American carrier. In either case, this confers an advantage to Japan in terms of carrier superiority in 1942-43, which could influence the outcome of a major carrier battle in the Pacific.

There is one more perk to laying down a carrier in Winter 1939. If the carrier is a CV, then it will launch in Winter 1941. For those Japanese players bold enough to try to maintain surprise (or not!) and attack in Spring 1942, this CV would be the seventh CV in the Japanese strike force that attacks Pearl Harbor. In fact, legend has it that a Japanese player once laid down *two* CVs in Winter 1939 and attacked Pearl Harbor with *eight* CVs in Spring 1942, as permitted under the following rule:

51.12 JAPANESE STRIKE FORCE: As the first patrol mission of the turn in which Japan declares war on the U.S., Japan may attack Pearl Harbor by air with a naval force consisting of any number of CVs and CVBs, plus at least two fast three-factor battleships and one cruiser, without regard for the normal range limit on patrols (21.3614, 21.3616). CVLs may not be used for the initial attack on Pearl Harbor. The Japanese strike force sails as a single TF, despite its size (the normal

limit is 25 naval factors in a TF - 20.162A) and composition (normally a TF must contain at least one fleet factor for each fast carrier factor - 20.162F), and counts as one TF for uninversion.

Of course, laying down Japanese carriers in 1939-1940 comes at the cost of building destroyers. A dip in the final Japanese destroyer level (from 26 to 24 destroyers) may not cripple the initial Japanese attack, but the Japanese player will find himself passing on a few undefended targets in Winter 1941. So the Japanese player may need to finish “cleaning up” his conquests on the DoW+2 turn if he begins construction of one or more fast carriers early in the war.

Let’s consider a few options for Japanese carrier construction early in the war by using the Japanese Naval Construction Chart. These options are as follows:

1. One CVL.
2. One CV.
3. One CVB.
4. Two CVLs.
5. Two CVs.
6. Two CVBs.

As we explore each carrier build option, we will discuss how to balance the timing of beginning construction vs. the reduction in pre-war destroyers built.

The simplest option is building one additional CVL. Under any of our four plans, the CVL could be laid down in Winter 1939 at the expense of building one destroyer. To maintain a level of 26 pre-war destroyers, the CVL could instead be laid down when Japan increases its shipbuilding to four. This would be Spring 1940 (Extreme Shipbuilding), Fall 1940 (Standard Plan), or Winter 1940 (Maximum Growth). For now, let’s assume an approach where Japan begins construction in Winter 1939. At the end of Winter 1939, the Japanese Naval Construction Chart appears as follows:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
4			<i>Musashi</i> (BB5)	
3				<i>Yamato</i> (BB5)
2	<i>Shokaku</i> (CV)	<i>Zuikaku</i> (CV)		<i>Shoho</i> (CVL)
Launch	<i>DD1</i>			

Under any plan other than Ultimate Surprise, Japan will have a fourth SBP available by Winter 1940, when the CVL is launched. So beginning construction of one CVL in Winter 1939 only comes at a cost of one destroyer. Under Extreme Shipbuilding, Japan should begin construction of the CVL in Spring 1940 instead; the CVL is launched in Spring 1941 (before Japan attacks), and the maximum 30 destroyers are all available for use in Winter 1941. The same is true of the Standard Plan: laying down the CVL in Fall 1940, when Tokyo's SBPs increase to four, still has the CVL launching in Fall 1941. Under Maximum Growth, an alternative is to begin construction of the CVL in Winter 1940 and launch it in Winter 1941, after Japan attacks, but still increasing Japan's carrier levels for 1942.

The problem with building a single CVL is that it allows the American player to lay down a fast carrier of any size. If the American player opts to use his first opening (usually Spring or Summer 1940) in the U.S. Atlantic shipyard to lay down a carrier, he could launch a CVL by early 1941, a CV by early 1942, or a CVB (that is maximally accelerated in early 1942) by late 1942. If Japan seeks to gain an advantage in carrier superiority in 1942, then building an additional CVL provides only a small or short-lived benefit at best.

Construction of one CV or CVB follows a similar path to building one CVL except that delaying the start of carrier construction beyond early 1940 yields little benefit to Japan in terms of carrier superiority in 1942-1943; by Fall 1940, the American player can likely respond in kind, and any time advantage that Japan may have had is lost. For this reason, it is suggested that a Japanese player who seeks to build one CV or one CVB begin construction in Winter 1939 or, under Extreme Shipbuilding, Spring 1940. Assuming the start of construction of a CVB in Winter 1939, by the end of 1940 the Japanese Naval Construction Chart is as follows:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
3			<i>Musashi (BB5)</i>	<i>Shinano (CVB)</i>
2	<i>Shokaku (CV)</i>	<i>Zuikaku (CV)</i>		<i>Yamato (BB5)</i>
Launch	<i>DD2</i>			

Under any plan, Japan may build a CV or CVB beginning in Winter 1939 at a cost of one destroyer. Under Ultimate Surprise, the cost would be two destroyers because that plan does not have Japan increasing its shipbuilding capacity to four until Fall 1941. Following the CVB example on the Naval Construction Chart, Japan would launch this CVB in Winter 1942, which is still early enough to influence the outcome of mid-war carrier battles.

Once again, Extreme Shipbuilding offers some interesting alternatives to early-war naval construction. Under this plan, Japan is likely well off beginning construction of a CV in either Winter 1939 (at the cost of one destroyer) or Spring 1940. The CV would then launch in either Winter 1941 or Spring 1942. Deciding which turn is superior depends on how many discretionary BRPs Japan will have for builds in Winter 1941 and what the Japanese player plans to do with the CV. If there isn't a pressing need for the CV on the DoW+1 turn (Spring 1942), then beginning construction in Spring 1940 is the better option. First, this prevents the loss of one pre-war destroyer that would have been built in Winter 1939. Second, Japan will be flush with BRPs in Spring 1942, and the decision to launch the CV will not come at the expense of other key builds in Winter 1941.

Similarly, construction of a CVB is best begun in Spring 1940 instead of Winter 1939 under Extreme Shipbuilding. As with the CV construction, beginning construction in Spring 1940 prevents the loss of one pre-war destroyer. More importantly, advancing or accelerating construction of the CVB in Winter 1941 will be either slower to launch the CVB or more costly in terms of BRPs, which are more scarce in Winter 1941 than Spring 1942. Assuming that construction of the CVB began in Winter 1939, let's consider the Japanese Naval Construction Chart at the start of Winter 1941:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
3				<i>Shinano (CVB)</i>
2			<i>Musashi (BB5)</i>	<i>Yamato (BB5)</i>
Launch				

Any Japanese extreme shipbuilder will choose to launch the *Yamato* BB5 in Winter 1941. With few discretionary BRPs available, the most likely option for the *Shinano* CVB would be to advance it to the 2 row and launch it in Winter 1942. Accelerating construction of the *Shinano* CVB in Winter 1941 at a cost of three or six additional BRPs leaves Japan with too few BRPs for anything else. It's possible, but it would be painful. A fanatical extreme shipbuilder could choose to maximally accelerate the *Shinano* CVB in Winter 1941 and launch it in Summer 1942. But he would be passing on other key builds in Winter 1941 in order to do this.

If instead we lay down the CVB in Spring 1940, then the Japanese Naval Construction Chart looks like this at the start of Spring 1942:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
3	<i>Shinano</i> (CVB)			
2			<i>Musashi</i> (BB5)	
Launch				

Come Spring 1942, Japan will have the BRPs to maximally accelerate the *Shinano* CVB from the 3 row of the Spring column to the 2 row of the Fall column. Then the *Shinano* CVB launches in Fall 1942 – one turn earlier than if it had been laid down in Winter 1939 (at a cost of one pre-war destroyer, I might add) and advanced in Winter 1941. In summary, under Extreme Shipbuilding, it's better to begin construction of one CVB in Spring 1940 instead of Winter 1939.

Now that we have considered the timing of beginning construction of one CVL, CV, or CVB, it's appropriate to consider more aggressive options for pre-war Japanese fast carrier construction; namely, two CVLs, CVs, or CVBs. The reader is left to explore different combinations of carrier construction (say, one CVB and one CVL) on his own.

If Japan seeks to build two CVLs, then the same rules apply that applied when building one CVL. First, CVLs are kinda wimpy, and the American response will probably be two CVs or one CV and one CVL; in the end, Japan may gain little or actually lose some ground in the race to maintain carrier superiority in 1942-1943.

Still, constructing two CVLs is still an option, so we will explore it.

As before, beginning construction of a CVL in Winter 1939 is unnecessary; laying down a CVL in Summer or Fall 1940 still has the carrier launching before Japan goes to war. Unlike building one CVL, building two CVLs will cost Japan some pre-war destroyers – how many will depend on the plan that Japan is pursuing. Let's walk through the calculations assuming that Japan begins construction of one CVL in each of Summer and Fall 1940. Once again, let's review the Japanese Naval Construction Chart at the end of 1940:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
3			<i>Musashi</i> (BB5)	
2	<i>Shokaku</i> (CV)	<i>Shoho</i> (CVL) <i>Zuikaku</i> (CV)	<i>Junyo</i> (CVL)	<i>Yamato</i> (BB5)
Launch	<i>DD2</i>			

Similar to the cruiser construction option, the Tokyo shipyard is topped off at eight ships. So we are at our maximum for all plans except Extreme Shipbuilding, under which the Tokyo shipyard could handle as many as ten ships beginning in Fall 1940.

It's obvious that the *Shoho* and *Junyo* CVLs will launch in Summer and Fall 1941, respectively. What isn't obvious is how many destroyers will not be built in order to build these two CVLs under various plans. Under Ultimate Surprise, where Tokyo gains its fourth SBP in Fall 1941, Japan will have to forego building one destroyer in each of Summer 1940, Fall 1940, and Summer 1941. Thus, Japan's pre-war destroyers will total only 23 instead of 26. That's doable, although the reduced invasion capabilities will hurt.

A Maximum Growth plan has Japan's shipbuilding increase in Winter 1940; hence, only one destroyer build in each of Summer and Fall 1940 need be skipped. This allows Japan to build two CVLs and still attack with 24 destroyers.

Under the Standard Plan, Japan's Fall 1940 shipbuilding increase would only require passing on the Summer 1940 destroyer build. This plan sees Japan build two CVLs and attack with 25 destroyers. Of these

three plans, the Standard Plan is superior for a Japanese player who would like to build two CVLs.

If the Extreme Shipbuilding plan is pursued, then Japan need not reduce its pre-war destroyer construction at all. In Summer 1940, Japan has four SBPs (one to advance a BB5, two to lay down two destroyers, and one to lay down a CVL). And come Fall 1940, when the Tokyo shipyard goes to five SBPs, the fifth SBP is allocated to building a third destroyer each turn. Under Extreme Shipbuilding, Japan can build 30 destroyers and two CVLs before the outbreak of war.

Construction of two CVs or two CVBs becomes more problematic for Japan, but is still doable. As noted earlier when building one CV or CVB, it's better to start construction earlier – in Winter 1939 or early 1940, depending on the Japanese player's plan. Let's consider a few options for building two CVs or CVBs.

The first option is the zany strategy of building two additional CVs for use in a Spring 1942 attack on Pearl Harbor. For this to work, two CVs are laid down in Winter 1939, advanced in Winter 1940, and launched in Winter 1941. Under any of our four plans, this will cost Japan two destroyers in Winter 1939 and one to two destroyers in Winter 1940. The final pre-war destroyer levels under each of our four plans are as follows: Standard Plan (23), Maximum Growth (23), Extreme Shipbuilding (27), and Ultimate Surprise (22). This reduced level of invasion capabilities for the DoW and DoW+1 turns will be felt by Japan under any plan except Extreme Shipbuilding. Finally, the USJT level will increase by two in Winter 1941 due to Japan launching two three-factor named ships, which could be problematic given the greater risk of higher USJT under the Extreme Shipbuilding plan.

The second option is to launch two CVs or CVBs in 1942, when Japan and the U.S. are vying for carrier superiority. As when building one CVB, beginning construction in Winter 1939 is inadvisable. In Winter 1941, when Japan attacks, there will be few BRPs available to launch a CV or advance a CVB. When to begin construction will, therefore, depend on when these two CVs or CVBs will be needed by Japan. For now, let's assume that Japan seeks to build two CVBs with the goal of tilting the balance of carrier superiority in favor of Japan by the end of 1942. In this case, laying down one CVB in Spring 1940 and another in Summer 1940 results in the following ship placement on the Japanese Naval Construction Chart at the start of Spring 1942:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
3	<i>Shinano (CVB)</i>	<i>Yurei (CVB)</i>		
2			<i>Musashi (BB5)</i>	
Launch				

In 1942, Japan will maximally accelerate the *Shinano* CVB and the *Yurei* CVB so that they will launch in Fall and Winter 1942, respectively. By the end of 1942, the number of Japanese fast carrier factors will increase by eight – not too shabby. The American response in terms of which fast carriers are laid down and when will determine the duration of Japan's temporary boost in carrier superiority.

Just as constructing two CVLs reduced the number of pre-war Japanese destroyers for all plans except Extreme Shipbuilding, so too does construction of two CVs or CVBs. Assuming the construction timing proposed above, Japan will go to war with the following number of destroyers: Standard Plan (24), Maximum Growth (24), Extreme Shipbuilding (30), and Ultimate Surprise (22). The implications of these varied destroyer levels will be discussed in the Fall 2008 issue of ULTRA.

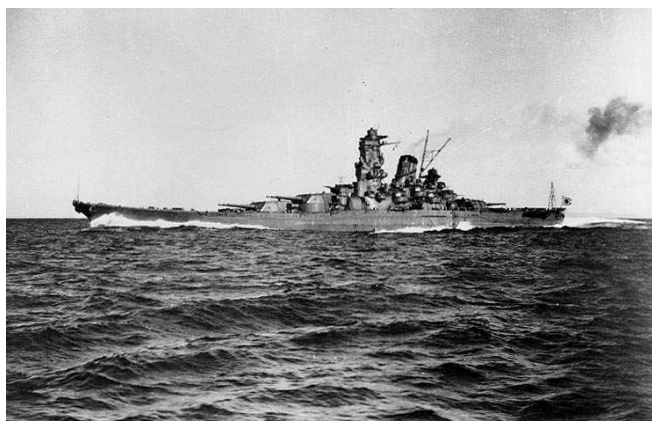
For fun, we will end our discussion of pre-war carrier construction by briefly considering an extreme option under Extreme Shipbuilding: building two CVs (initial construction in Winter 1939 and Fall 1940) and two CVBs (started in Spring and Summer 1940) to augment the Imperial Navy. First, the Japanese Naval Construction Chart at the beginning of Winter 1941:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
3	<i>Shinano (CVB)</i>	<i>Yurei (CVB)</i>		
2			<i>Unryu (CV)</i> <i>Musashi (BB5)</i>	<i>Amagi (CV)</i> <i>Yamato (BB5)</i>
Launch				

The Tokyo shipyard maxes out at ten by Fall 1940 (two battleships, six carriers, and two destroyers), so Japan is limited to building two destroyers per turn in Fall and Winter 1940 – even though Tokyo has 5 SBPs. Consequently, Japan tops off at 27 destroyers for its initial attack. On the plus side, Japan launches a CV in Winter 1941, and the maximum acceleration of the two CVBs in 1942 results in launching one CVB and a CV in Fall 1942 and the second CVB in Winter 1942.

Building a Japanese carrier fleet of this size will provoke a strong U.S. response, but beginning construction of four American carriers will still be limited by space in the U.S. Atlantic and Pacific shipyards. In addition, laying down these four carriers will likely come at the expense of the American player laying down as many BB5s in 1940. Rest assured, the carrier battles in a game where Japan follows this Extreme Shipbuilding option should be massive! Who benefits more will depend on where the naval battles are fought and the all-important search dice.

Now that we have thoroughly explored various options in building more Japanese carriers early in the war, we will briefly consider building more battleships. Each carrier is pivotal in Pacific naval battles, but having a few more big ships in the Imperial Navy can also pay dividends.



The *Yamato* in 1941. BB5s always add a little punch to a navy.
(www.history.navy.mil/photos/sh-fornv/japan/japsh-xz/yamato.htm)

The Bigger, the Better

Four words: *Satsuma*, *Owarii*, *Kii*, and *Hizen*. Yes, just as many veteran Japanese players are drawn to bringing a Japanese CVB into play, so do players wonder whether building an additional BB5 (or two!) could help stem the tide of the American advance. The construction of additional Japanese battleships is certainly a possibility under each of the four plans

(particularly Extreme Shipbuilding). One advantage of beginning construction of Japanese battleships instead of fast carriers is that construction of battleships does not prematurely unleash the carrier-building potential of the American wartime economy.

As shown on the Japanese Naval Construction Chart on page 6 of this issue, Japan begins the game with four 3-factor battlecruisers built and two 5-factor battleships under construction. These are Japan's only fast capital ships, and if Japan wants more fast battleships for a fast-striking task force, then more will need to be built. Similar to carriers, 3-, 4-, and 5-factor battleships that will enter play in 1942-43 should be laid down in 1940 or perhaps even Winter 1939, depending on when they will be needed.

The timing of when construction begins on Japanese battleships is similar to that of fast carriers in most regards. Taking up space and using SBPs reduces the number of destroyers that may be built until Tokyo has four SBPs. Battleships laid down in Winter 1939 will be difficult to accelerate (and possibly advance) in Winter 1941 when BRPs are scarce. And the larger the battleship, the sooner it should be laid down if it is to have any impact on the outcome of Pacific naval battles.

For our shipbuilding example, we will consider how to expeditiously build two BB5s. The timing of naval construction is identical to that of building two CVBs: the BB5s are laid down in Spring and Summer 1940, generating the following ship placement on the Japanese Naval Construction Chart at the start of Spring 1942:

Naval Construction - Tokyo				
Level	Spring	Summer	Fall	Winter
4	<i>Satsuma</i> (BB5)	<i>Kii</i> (BB5)		
3				
2			<i>Musashi</i> (BB5)	
Launch				

The BB5s are, thus, laid down in 1940, advanced in 1941, maximally accelerated twice in 1942 (albeit at some cost), and launched in Spring and Summer 1943,

when they would still be great assets in naval battles in the mid-war. If the Japanese player favors construction of BB4s instead of BB5s, the only change is that they launch in Fall and Winter 1942 instead of early 1943. Similarly, BC3s launch in Spring and Summer 1942 instead of late 1942 or early 1943. Regardless of which combination of fast battleships you choose, they will nicely complement your fast carriers in a task force.

That Submarine

A short note should be made regarding the second Japanese submarine, which begins the game unbuilt. As discussed earlier, construction of destroyers takes priority through Summer 1941 (for launch as late as Fall 1941). But in Fall 1941, Japan will only have the *Musashi* BB5 and perhaps one additional ship to advance or launch. It is this turn when Japan should build its second submarine. This allows Japan to use the submarine to intercept sea supply to an island group such as the Gilberts or the Solomons during the Allied Winter 1941 player turn. Alternatively, Japan should build its second submarine in Winter 1941 for use in the Pacific or Indian Ocean SW box in Spring 1942, before the Western Allied defensive SW combat modifiers stack up against Japan. One final alternative is to wait until 1942 to build the second submarine, although each passing turn makes the sub less useful while Western Allied ASW tech research results accumulate.

Conclusion

In the end, Japan's choices in early-war shipbuilding may not influence the outcome of the game. After all, the American economy grows so rapidly after war breaks out that eventually the Imperial Navy will be overwhelmed. On the other hand, Japan may get lucky in the initial naval skirmishes, and the Americans could suffer a Midway-like defeat in 1942. If Japan is to fight hard to maintain its defensive perimeter for longer, especially against a rapidly growing U.S. Navy, then more fast carriers could be necessary to replace carrier losses as they occur. Alternatively, launching one or two additional battleships could bolster the Imperial Navy or open other options for its use. Finally, a combination of one or more carriers and one or more battleships may provide the best balance in growing the Imperial Navy but not opening the door for the American player to begin construction of as many fast carriers in 1940.

Whatever ships the Japanese player plans to build in the early war, he should be careful to plan out how he will accomplish the task with respect to the timing of shipbuilding increases and mobilizations. If properly planned, a Japanese strategy based on growing the Imperial Navy larger and stronger can be a blast to use against the Americans in the Pacific. It could also – just maybe – tilt the balance in Japan's favor in the mid-war and eventually allow Japan to survive beyond Fall 1945, securing victory through use of the Imperial Navy!

I GOT THIS NAVY, NOW WHAT?

A Few Pointers on Employing the Imperial Japanese Navy

by Eric Thobaben

Expansion, Resistance, Contraction

Now that we have discussed how to augment the Imperial Navy in various ways, it is useful to explore how it might be used to greatest effect. As noted throughout this issue, the overall Japanese plan, be it Ultimate Surprise or Maximum Growth, should provide guidance as to how the Japanese player approaches the early war. These early-war decisions then impact the options available to Japan in the mid-war (to some extent). The combination of these mid-war decisions and the outcome of several naval battles will then set the stage for Japanese options in the late war. How to best utilize the Imperial Navy is crucial to Japan's survival

as it attempts to maintain a defensive perimeter for as long as possible and fight the Americans when it is most prudent to do so.

How the Imperial Navy is employed changes as the game progresses. In the first two turns of war (usually Winter 1941 and Spring 1942), the Imperial Navy is used primarily for offensive missions such as seaborne invasions and shore bombardment. For the next year (Summer 1942 through Spring 1943), Japanese ships might patrol, raid, conduct seaborne invasions, provide shore bombardment, and contest American invasions. From about Summer 1943 onward, the Imperial Navy will usually be used defensively to oppose American invasions and perhaps counter-invade key hexes.

In summary, use of the Imperial Navy changes throughout the war, from offensive to defensive. The pointers below are meant to provide some guidance in getting the most out of your Imperial Navy.

A Raiding We Shall Go

Like the Germans and Italians, Japan has the option of raiding and, with some luck, disrupting Allied convoys. Because the Western Allies typically have one or two air range research results in 1942, Japanese raiders are more likely to attrition the Western Allied navies than sink any transports. For that reason, if the Japanese player elects to raid, he should do so with the toughest combination of ships that he can muster. This excludes BB5s, which were historically directed at fighting the U.S. Navy in fleet engagements.

21.532 RAIDER GROUPS:

A. ELIGIBLE SHIPS: Cruisers, capital ships and fast carriers may raid; Japanese five-factor battleships, destroyers and slow ships may not.

Only fast ships may raid, and Japan's largest fast capital ships are 3-factor battlecruisers. One advantage of building a Japanese BB4 is that it is the largest Japanese fast battleship that may raid. One of the options under Extreme Shipbuilding is to build two BB4s, which would pack a punch as a two-ship raiding group or, with a CV in the raider group, a sizeable punch. But without a BB4, a Japanese raiding group of one BC3 and one CV or two BC3s still may do some damage and may even escape detection and reach the transports. If Japan's intent is more to attrition Western Allied ships, a third ship (perhaps a BC3 or CA2) should be included in the raid.

Raiding is risky and sometimes results in the loss of your raiding ships. Raids should, therefore, only be conducted when Japan still enjoys a naval nationality advantage, the Western Allies only have one air range research result, or both. Once these advantages are gone, Japan should use its ships in other ways.

On Patrol

One popular and effective use of the Imperial Navy is, during the movement phase, to put one or two task forces on patrol within three hexes of several islands that will be the targets of seaborne invasions during the combat phase. Up through 1942, Japan often enjoys carrier superiority and has a larger navy than the Western Allies in the Pacific. This allows Japan to invade several targets in the same island group, but hold back one or two beefy patrolling task forces to support

any invasions that are intercepted by the Western Allies. By having its strength nearby, Japan ensures a strong showing in the first round of naval combat that may result in the Americans withdrawing and the invasions going through. Once again, a plan that includes building a few Japanese carriers may increase and prolong Japan's edge in carrier superiority early in the war.

Patrols use oil, however, and should be used sparingly. In 1942, when Japan is still expanding, Japanese patrols are more common. But by 1943, maintaining or growing the oil reserve becomes more of a priority as Japan goes on the defensive.

D-Fence

By mid-1943 or 1944, the U.S. Navy will have grown sufficiently large that Japan will be on the defensive. Wise use of the Imperial Navy during this time may result in a Japanese naval victory that blunts the American advance or even stops it cold for a turn. When on the defensive, be sure to fight 1) under Japanese land-based air superiority or 2) with Japanese carrier superiority if the Americans are invading two distant targets. Under either or both of these circumstances, Japanese naval losses should be lighter, and the Imperial Navy should remain a threat for longer. If Japan is able to lay down additional carriers near the outbreak of war and launch them by the end of 1943, these may replace key carrier losses that allow the Imperial Navy to more staunchly defend into 1944.

Final Remarks

This short list of pointers is geared toward novice Japanese players who are new to the Pacific theater and might benefit from a better understanding of how the initiative changes hands from Japan to the U.S. from 1942-1944. Reflecting on the early-war shipbuilding options presented earlier, it is clearer how a few additional destroyers, fast carriers, or battleships may provide key advantages at different points during the war. If this issue was successful, novice Japanese players should be excited to play Japan and build an Imperial Navy of *their* choosing. Whether or not they earn victory will be decided in battle on the high seas.

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