

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 Playing Japan in A World at War

By Ed Schoenfeld, with contributions by Eric Thobaben

Introduction



www.loc.gov/exhibitions/ukiyo-e

“The way of the warrior is resolute acceptance of death.”

Miyamoto Musashi

Japan begins the campaign game of *A WORLD AT WAR* in what appears to be the least fortunate situation of any alliance faction. First, Japan is already at war, with its Army fighting in China and garrisoning Manchuria. Next, Japan's strategic enemies (Russia, Britain, and the United States) are far away and impossible to reach; unlike Germany, Japan will never be able to knock an enemy out of the war. As if the military situation were not difficult enough, Japan also starts with the lowest BRP base of any faction – and that includes prewar conquests in Taiwan, Korea, and Manchuria! As a result, Japan's paltry basic RP allocation of six (plus one intelligence RP) will not get much help from BRP levels or growth. Worst of all, Japan does not control its own access to oil, the most vital resource in the game. Instead, Japan must purchase it on the 'international market', a source that inevitably will be cut off by embargo. Little wonder that many players, after noting all the challenges that

face Japan, prefer to play an apparently more reasonable position with the Western Allies, the European Axis, or Russia.

Yet those players are missing one of the true joys of gaming and one of the challenges that makes *A WORLD AT WAR* superior both as a game and as an interpretation of WWII. Just as the European half of the game truly captures the tactical feel of armored combat and the strategic opportunities facing Germany, so too the Pacific portion of the game captures the tactical feel of carrier combat and the strategic opportunities available to Japan. Of course, to appreciate those opportunities, those who play Japan must first accept one basic fact: sooner or later Japan *will* be destroyed. It simply is not possible for Japan to survive the power that will eventually be directed against her. At some point the U.S. carrier fleet will overwhelm Japan's Kido Butai, Allied air and ground forces will take back Japan's conquests, and U.S. strategic forces will cut Japan's convoy route and bomb her key economic areas into oblivion.

It follows that mere survival cannot be the sole or even the primary purpose of the Japanese player. Even though victory points are awarded in the game for stretching Japan's survival out as long as possible, making a staunch defense a necessary component of a Japanese victory, a strategy focused *only* on survival will not be sufficient to achieve that victory. Rather, Japan must focus on causing the enemy to make strategic mistakes. Those mistakes might well be to attack Japan too weakly or too late, allowing the Japanese player to win a victory as defined by the game's rules. But the enemy's mistake might equally

The Way of the Warrior

The Way of the Warrior.....	Front Cover
	By Ed Schoenfeld
Preparing for War	2
	By Ed Schoenfeld

Alternative Plans.....	10
	By Ed Schoenfeld

**Next Issue: Building Your
Imperial Japanese Navy**

be to concentrate too much on Japan at the expense of timely advances on the European map, thus allowing the Axis as a whole to gain victory. Even better, Japan can make its opponent vacillate between each extreme and lose the focus needed for strategic victory.

It is the tension between those possibilities that offers real opportunity for creative and exciting play as Japan. In other words, once the player realizes that Japan cannot survive – once he “accepts death” in the sense required by the samurai ethic that infused Japan’s military culture during WWII – then that player will be able to concentrate on the sheer havoc Japan can cause in the Pacific theater. Of course, doing that will require accurate planning and judicious play, so over the next few issues we will examine the ways Japan can create havoc, beginning with the development of Japan’s forces and the run-up to war.

Preparing for War

“The Way of the Warrior is to master the virtue of his weapons.”

Miyamoto Musashi

In spite of the apparently grim initial situation, Japan does have several distinct advantages:

- 1) First, Japan is able to attack with surprise, as long as the effective U.S.-Japanese tension level is below 40 when war is declared.
- 2) Second, Japan has several force advantages: a substantial carrier arm is already launched or building, elite naval air squadrons enjoy a +1 Air Nationality DRM, the Naval Nationality DRM of three likewise starts one ahead of the Western Allies, and Japan can build marines.

EDITOR: Bruce Harper
ASSOCIATE EDITORS, ARTICLE DEVELOPMENT: Markus Kässbohrer, Ed Schoenfeld, Eric Thobaben
PROOFREADERS: Bryan Brinkman, Todd Dunnavant, Tim Schroeder
BUSINESS MANAGER: Maurice Buttazoni
ULTRA BOARD: Bruce Harper, Don Moody, Eric Thobaben, Markus Kässbohrer, Mike Crowe, Vic Hogen.

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- 3) Last, and most significant, although the main enemies are hard for Japan to reach, Japan is just as far away from her enemies’ centers of power, and she can make them fight hard for every step forward.

Accordingly, the Japanese player’s first job is to maximize these advantages while minimizing Japan’s disadvantages, including economic weakness and entanglement in China and Manchuria. By attacking at a time of maximum opportunity, Japan creates threats deep into enemy territory that the Allies must respect and defend against. As they do so, the Japanese player can exploit his advantages to blunt the Allied counterthrusts. Only when that part of the game is over should the Japanese player revert to the defensive and try mightily to hang on. Even then, the Samurai mentality will provide opportunities to confound the enemy – but that will be covered in a different issue. For now, let’s examine how to handle each of Japan’s advantages (and disadvantages) in detail.

Surprise and Tensions

“When you want to attack, you remain calm and quiet, then get the jump on your opponent by attacking suddenly and quickly.”

Miyamoto Musashi

The surprise turn is Japan’s single, biggest advantage, and maximizing its effect is the governing principle of Japanese strategy from 1939 until war is actually declared. But it is a mistake for Japan to focus exclusively on the tension level; maximizing the effect of surprise also requires sufficient forces to take advantage of it. Thus, it is necessary to consider both tensions and the ability to project force on the declaration of war turn and after.

U.S.-Japanese tensions begin at zero and rise slowly at the beginning; USJT 40 looks like it’s a long way away. But there are problems with that theory. Some tension increases, such as ship launchings and the fall of Paris, are either fixed in time or outside the Japanese player’s control. More significantly, tension ‘status’ modifiers applied every turn accelerate progressively: one point automatically, one more for each mobilization after Fall 1939, another after the (necessary) occupation of French Indochina, and yet another after the (inevitable) oil embargo. Plus there are those pesky random tension rolls.



Surprise in Japanese legend (from www.loc.gov/exhibitions/ukiyo-e)

If everything goes Japan's way, the time to declare war can be pushed back into 1942, but at the risk of Western Allied reinforcements reaching the Pacific after a normal, Winter 1941, European Axis declaration of war! Conversely, it is possible to have most of the necessary forces in place early in 1941 after rapid mobilization, but the U.S. will mobilize faster as a result. These variations present Japan and the Axis as a whole with opportunities and problems.

However, the majority of this discussion will concentrate on more conservative plans that prepare Japan for war by Winter 1941. There is still plenty of variety, depending on whether Japan chooses to guarantee that the U.S. will not mobilize too soon or tries to gain some other advantage such as a stronger economy, bigger navy, or lower tensions. While several alternatives will be discussed, the main portion of the issue will focus on a standard path, which prevents untimely American mobilizations.

The Standard Plan

"The essence of the way is this. ... You must thoroughly understand the Middle Attitude, [it] is the seat of the commander."

Miyamoto Musashi

The Standard Plan is shown in the table on this page, shaded to indicate the timing of mobilizations. In this plan, Japan mobilizes in Fall 1940 and Spring 1941 but still gains substantial economic growth and adds sufficient naval, ground, and air forces.

This tension plan provides an easy road for Japan that will not be upset by uncooperative random

tension dice. On the key turns of Summer 1940 and Fall 1941, actual USJT levels of seven and 27 (respectively) ensure that the U.S. will not mobilize before Japan is ready and, more importantly, will not force *Japan* to mobilize (as is required at effective USJT 10, 20 and 30) prematurely. In fact, in Fall 1940, random tensions provide a one in three chance that the *American* mobilization is delayed by a turn!

Turn	USJT	Modifiers
Fall 39	2	+1 Turn +1 Launch Hiryu
Winter 39	3	+1 Turn
Spring 40	4	+1 Turn
Summer 40	7	+1 Turn +2 Axis capture Paris
Fall 40	10	+1 Turn +1 Mobilizations +1 Shipbuilding increase
Winter 40	12	+1 Turn +1 Mobilizations
Spring 41	16	+1 Turn +2 Mobilizations +1 Launch Shokaku
Summer 41	22	+1 Turn +2 Mobilizations +1 French Indochina +1 Embargo +1 Launch Zuikaku
Fall 41	27	+1 Turn +2 Mobilizations +1 French Indochina +1 Embargo
Winter 41	33	+1 Turn +3 Mobilizations +1 French Indochina +1 Embargo

Steady mobilizations will be accompanied by other moves that ensure Japan's readiness to strike in Winter 1941. Northern French Indochina should be occupied as soon as possible (usually Fall 1940, after Paris falls), and Saigon two turns before Japan plans to attack (i.e., Summer 1941). That will ensure control of the rest of French Indochina in Fall and guarantee that Thailand will be available as an associated minor when war is declared in Winter. As Japan builds more units, some will be deployed in forward locations to maximize the range of Japan's invasions.

Japan will also withdraw 15 BRPs of forces from the Manchurian garrison. However, Japan should delay doing so until either Germany and Russia are at war or the U.S. has imposed the oil embargo (both usually in Summer 1941). An earlier withdrawal of units from Manchuria allows Russia to remove the

same number and kind of units from the Siberian garrison, and your European Axis partner will not thank you for allowing Russia to strengthen its defenses before the Barbarossa attack.

81.42 REDUCING THE SIBERIAN GARRISON: Russia may not reduce its Siberian garrison by transferring Siberian units to the Urals box until the Allied redeployment phase after at least one of the following conditions is met:

A. WAR WITH GERMANY: Russia and Germany are at war.

B. OIL EMBARGO AGAINST JAPAN: The U.S. has imposed an oil embargo on Japan.

C. JAPANESE REDUCTION OF MANCHURIAN GARRISON: Japan reduces the size of its Manchurian garrison, which it may do at any time. Russia may then transfer forces of the same type from Siberia to Europe, subject to the minimum Siberian garrison requirement of 30 BRPs of units, including one Russian three-factor armor unit (81.43). The size of the Japanese Manchurian garrison is determined at the start of the Russian player turn. Armor fractions are rounded in favor of Russia: if Japan has fewer than six armor factors in Manchuria, a Russian 3-3 armor unit may be transferred to Europe.

After Russia withdraws its choice of 15 BRPs of Siberian units, Japan can remove 15 BRPs of units of any type from Manchuria, with the exact choice depending on Japan's plan of attack.

It is important to note that withdrawing units from Manchuria means removing them for more than one turn. Because the garrison is counted at the start of the *Allied* player turn, Japan may actually use ground units from Manchuria at any time, so long as those units (or units worth an equivalent number of BRPs) are redeployed back to Manchuria on the same turn. That trick won't work with air units because they must be uninverted to count toward the garrison. You will want to be careful though, as Japan must keep 30 BRPs of units in Manchuria to prevent Russia from declaring war. However unlikely, an *unplanned* war against Russia can turn into disaster for Japan.

By Winter 1941, the standard Japanese plan provides Japan with surprise for its invasions, a guaranteed +6 modifier to the surprise roll at Pearl Harbor, and a modest chance (just under one in three) to catch any given American carrier task force at Pearl Harbor. Japan should produce, not mobilize, its shipbuilding increase in Winter 1941 as this prevents another increase in USJT prior to the outbreak of war:

36.11 TIMING: Mobilization represents the conversion of civilian factories to military production and has the economic and military effects set out below in each turn in which mobilization occurs. Mobilization increments are triggered for each major power in the following turns.

C. JAPAN: Fall 1939, and thereafter at the option of the Japanese player, but in no event later than when the USJT level reaches 10, 20 and 30. If USJT increases from status modifiers trigger a Japanese mobilization in the turn Japan attacks the U.S., the USJT level

increases by one prior to the Japanese declaration of war, with a possible additional increase if Japan uses the mobilization to increase its shipbuilding rate. If a Japanese mobilization is triggered by a USJT increase during an Allied player turn, that mobilization is considered to have occurred during the preceding Japanese player turn.

Multiplying Forces

"When you sacrifice your life, you must make fullest use of your weaponry."

Miyamoto Musashi

Research and production will enhance Japan's ability to strike against the Western Allies. Japan can expect to receive six RPs in 1939, eight in each of 1940 and 1941, and ten in 1942. Also, each year Japan receives one IP, an RP useable only in Intelligence projects. The table below shows an RP allocation that will help Japan make the most of its initial attack.

For clarity, projects to which RPs are not allocated are excluded, and the allocation runs into 1942 so the reader can see what will be available on the second turn of Japan's attack. Because of the number of projects in most categories and the plan's reliance on production results, general research is emphasized. Successful research results are shaded blue.

Project	1939	1940	1941	1942
Air General	2	1		
Air Range	1	1	1	1
Air Production		2	1	1
Naval Air Tr.			2	2
Naval General	1	1	1	
ASW Tech.				1
Shipbuilding		1 (→)	1	(1)
ASW FP				3
Transport FP				1
Military General	2	1		
Military Prod.			1	1
Sp. Units		1	1	
Intel. General	IP	IP	IP	
Magic				IP

In the air category, this allocation enhances Japan's advantage in elite naval air squadrons (eNAS). Naval air squadrons constructed (not just added to the force pool, but actually built and placed on the board) before Japan declares war on the Western Allies have elite status. Allocating two RPs to air production in 1940 guarantees that five eNAS may be produced that year even if Japan does not achieve a breakthrough in air general research. More NAS are produced in 1941 and 1942, and some will also be mobilized; increasing Japan's Naval Air Training (NAT) rate in 1941 allows more NAS to be built with elite status. Another NAT

increase in 1942 will help to rebuild losses. The allocation to air range research takes advantage of Japan's pre-war research modifier in this project, yielding key modifiers to help defend Japan's transports, which will carry oil and BRPs to Japan.

In the naval category, this plan assumes that Japan increases its shipbuilding by mobilization in Fall 1940 and via production for all increases thereafter. Thus, Japanese shipbuilding levels increase as follows: Fall 1940 (4), Winter 1941 (5), Spring 1942 (6), and Spring 1943 (7). While shipbuilding points can be used for combat ships, the additional shipbuilding becomes more important later in the war for rebuilding transports sunk by American submarines. Japan needs seven shipbuilding points to rebuild four transports per turn, a level needed by 1943.

27.7221 DESTROYERS, CVEs, ASW AND TRANSPORTS:

A. Each turn no more than half (round up) of each major power shipbuilding rate may be used to construct destroyers, CVEs, ASW and transports. This limit applies separately to each major power shipyard.

One RP in shipbuilding is invested in 1940 for use in 1942. A cursory review of naval projects reveals that Japan may not allocate RPs to ASW Technology and the production of ASW units and transports until 1942. This creates a high demand for RPs in the naval category in 1942. Investing an RP in shipbuilding early allows Japan to allocate the maximum five RPs to other, necessary, naval projects in 1942.

In the military category, Japan should produce two marines in time for use on the surprise turn. Allocating two RPs to military general research in 1939 helps secure an early breakthrough that will allow one marine to be produced with one RP in each of 1940 and 1941. If Japan does not achieve a breakthrough until 1941, producing both Japanese marines in 1941 will cost one additional RP plus another RP for the roll in military general research. The additional RPs may be those 'saved' by early breakthroughs in the air or naval categories, but, if necessary, RPs can be diverted from military production or even shipbuilding (RPs in these categories will need to be made up later in the war). But with normal luck, this plan instead produces five BRPs of military production in each of 1941-1942. Japan will need one-factor ground units for seaborne invasions and larger infantry to defend its conquests.

In the intelligence category, this plan produces a Magic card in 1943 or, if the intelligence general breakthrough occurs in 1940, 1942 instead. This could

reasonably be an ASW card to help defend the oil convoys, a tactical card to help in naval combat, or a strategic card to aid Japanese naval interceptions and raiders or to prevent American Magic interceptions. Magic codebreaking is probably the most direct way for Japan to use intelligence projects against the U.S. Navy, but other projects could also be useful. Indian Subversion and Chinese Occupation Policies add puppet units to the Japanese force pool and release some Japanese infantry for other duties. Espionage results may hinder Allied general research, and Counter-intelligence may stop Allied spy rings. Your European Axis partner might appreciate some help, and it is quite reasonable to pursue spy rings instead of Magic cards or even intelligence general research.

This plan does not seem to allow for much leeway in RP allocations, but to a great extent that is because our purpose is to provide a path that less experienced Japanese players can easily follow. The assumptions built into the expected results are conservative – it's more likely for average luck to save an RP or two than for bad luck to derail the program. This will happen more often than not in the air and military production projects, where a breakthrough in 1940 is made more likely by the additional RPs in general research in 1939. If Japan is lucky, then fewer RPs will be needed to achieve the desired production results in 1940 and 1941, freeing up RPs in 1941 for other projects.

A daring player might count on good luck in essential projects and give other research projects (e.g., Naval Nationality DRM, Radar, etc.) more priority. While it is quite plausible for players to vary this research program to try to achieve more research results, variations must be weighed against the risks involved. A player should not expose himself to a potential loss of effectiveness on the surprise turn unless he has carefully considered the consequences.

Similarly, some research projects were not included in the plan. Torpedoes and Harbor Attacks are less effective for Japan because of modifiers (such as Allied ASW research, CVE construction, or the -1 modifier for each prior Harbor Attack) that are often generated because of events in the European theater of the war. Other projects, such as an air transport or artificial port, are simply too expensive. Japanese players certainly could choose to pursue these projects, but doing so risks fewer results in more basic projects. Since Japanese RPs are always scarce, players should carefully match their research to a well-considered strategy for each game.



www.loc.gov/exhibitions/ukiyo-e

Ground and Air Forces

“A warrior carries two swords at his belt. This is the way of the warrior.”

Miyamoto Musashi

Now that we know the plan Japan will follow for tensions and research, we can think about the forces that will do the work. Most of the initial ground forces will continue to be needed in China and

Manchuria. Aside from 15 BRPs of units withdrawn from the Manchurian Garrison, the units used to attack the Allies will have to come from Japan’s four mobilizations (20 BRPs of units each) or from production. We will select units as follows from mobilization (M1, M2, M3, or M4) or production (P):

Fall 1939 (M1): six eNAS, two AAF, three 1-2 infantry, defer five BRPs.

Spring 1940 (M1): five eNAS (using the deferred BRPs). (P): five eNAS, one 1-2 marine.

Fall 1940 (M2): two eNAS, four AAF, one SBP, one 1-2 infantry.

Spring 1941 (M3): four 3-2 infantry, one 2-2 infantry, six 1-2 infantry. (P): five eNAS, one NAT, one 3-2 infantry, one 2-2 infantry, one 1-2 marine.

Winter 1941 (M4): five AAF, one 3-2 infantry, one 2-2 infantry. (P): one SBP.

Spring 1942 (P): five NAS, one NAT, one SBP, two ASW factors, one transport, one 3-2 infantry, one 2-2 infantry.

Note that this list tells us when the units are mobilized, not when Japan can build them. This is especially important for the Fall 1939 mobilization, where deferring five BRPs lets Japan mobilize elite NAS in Spring 1940 that will not be added to the Japanese force pool until Spring 1941. This allows the Japanese BRP base to grow more in the 1941 YSS, although the reasoning requires some explanation:

35.32 EFFECT OF UNBUILT UNITS: The BRP value of unbuilt ground and air units, including combat losses and force pool additions from mobilization and production, is deducted from the number of unspent BRPs when determining BRP growth in the following situations:

B. NEUTRAL MAJOR POWERS: For neutral major powers, in all YSS (EXCEPTION: Japanese combat losses in China in winter turns). Japan is considered a neutral major power until it is at war with Russia, Britain or the U.S.

The only Japanese units that should remain unbuilt at the end of 1939 or 1940 are attrition losses taken in the Winter turn, which, by definition, Japan could not have rebuilt prior to the YSS because these losses were incurred during the Allied player turn. Any other unbuilt units limit growth of the Japanese BRP base. Because Japan’s NAT limits the construction of NAS to three per turn, the six NAS that were mobilized in Fall 1939 are all that Japan may build in Fall and Winter 1940. Therefore, deferring five BRPs of mobilization in Fall 1939 and activating it in Spring 1940 (to mobilize five NAS) allows Japan to achieve more economic growth in the 1941 YSS while adding even more elite NAS. The five NAS and the marine that are produced in 1940 will be built in Spring and Summer 1940.

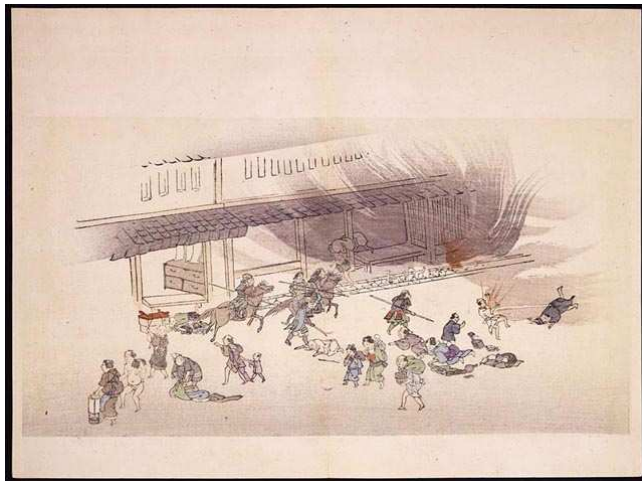
The second mobilization also takes advantage of the time required to create air units. Here we mobilize only two NAS to appear in Fall 1941. With an anticipated NAT of four, Japan can build only 12 elite NAS in 1941 before going to war in Winter, and ten of those (five deferred from the first mobilization, five from production) will already appear in Spring 1941. There is nothing particularly wrong with having more than 35 NAS, and we will produce more in 1942, but any that are built after the declaration of war will not be elite. There will be time to produce more NAS later, and Japan also needs the four AAF and one 1-2 infantry from the rest of the second mobilization.

Spring 1941 production increases Japan’s NAT to four and adds five NAS (as already mentioned), the third marine, and some large infantry units. The Spring 1941 mobilization adds infantry units that may be built in Fall 1941 – just in time for the first turn of war in Winter 1941. The larger infantry can be used in Burma while the one-factor infantry will participate in numerous seaborne invasions.

Japan’s fourth and final mobilization in Winter 1941 is the last chance to add army air in significant numbers. Army air units are particularly useful in the Pacific theater because they provide attack, search, and air cover capabilities in naval combat, but their reconstruction is not limited by Japan’s NAT. As the U.S. begins to counterattack, American land-based and carrier-based air units will counterair Japan’s land-based air units frequently. Having sufficient AAF is, therefore, a must for Japan. Japan’s fourth mobilization is also an opportunity to add more infantry to Japan’s force pool in order to garrison objectives and key one-hex islands. The exact mix of

infantry and air can be tailored to a player's individual preferences. Finally, in Winter 1941 the Japanese player should activate one RP to increase Japan's shipbuilding to five. As noted earlier, the remaining RP in shipbuilding will be activated in Spring 1942, when more infantry, NAS, and defensive strategic warfare units will be produced.

In general, this mobilization plan allows the Japanese player to treat various mobilization and production increments as being dedicated to particular roles, mainly to make it easier to think about the flow of play in the Pacific. For example, the one-factor infantry mobilized in Spring 1941 are sufficient (along with marines) to invade Japan's essential targets on the surprise turn and can readily be deployed by Fall 1941. As players gain experience in the Pacific theater, they will readily be able to "shift roles" and use more flexible tactics in preparing for war.



Internal strife is deadly (from www.loc.gov/exhibitions/ukiyo-e)

The Imperial Navy

"By the clarity [of water], tenets of the Ichi school are shown..."

Miyamoto Musashi

Including ships that start on the shipyard and will be launched by Winter 1941, Japan's surface fleet consists of six three-factor fleet carriers (CV), two two-factor light carriers (CVL), two four-factor slow battleships (BB4), four three-factor battle cruisers (BC3), four three-factor slow battleships (BC3), 28 factors of cruisers (CA), and 12 factors of destroyers (DD). On the turn Japan declares war, Japan will send all six CVs, two BC3s, and CA2 in a special task force to attack Pearl Harbor. That leaves just two CVLs and a lot of battleships, battle cruisers, cruisers, and

destroyers for all the other naval missions. While it is tempting to add shipbuilding and use it to build an even larger fleet than Japan starts with, doing so can create adverse effects with regard to tensions, the Japanese economy, and (when building carriers) the size of the U.S. carrier fleet in 1941-1942.

Naval Construction – Tokyo												
Rate	1	2	3	4	5	6	7	8	9	10	11	12
Capacity	2	4	6	8	10	12	14	16	18	20	22	24
Level	Spring			Summer			Fall			Winter		
5												
4												
3												
2												

To better understand how the Imperial Navy is built, we must first consider the Japanese naval construction chart at the start of the game, as presented above. Until at war with the U.S., Japan must advance and launch the ships on the chart, but the focus of Japanese pre-war shipbuilding is on building destroyers, which are required for seaborne invasions. The standard Japanese shipbuilding plan, as detailed in the following table, includes one pre-war shipbuilding increase mobilized in Fall 1940:

Turn	Start	Advance	Launch	BRPs
Fa39		Musashi	Hiryu, CA2	9
Wi39	DD2	Yamato		9
Sp40	DD2	Shokaku	DD2	9
Su40	DD2	Zuikaku	DD2	9
Fa40	DD2	Musashi	DD2	9
Wi40	DD2	Yamato	DD2	9
Sp41	DD2		DD2, Shokaku	9
Su41	DD2		DD2, Zuikaku	9
Fa41		Musashi	DD2, Sub	6
Wi41			Yamato?	?

As noted earlier in this issue, Japanese shipbuilding remains at three or four until Winter 1941. With either three or four shipbuilding points, Japan may use no more than two shipbuilding points (half, rounded up,

of its total) on destroyers. Because destroyers launch the turn after they are laid down, Japan may build 14 destroyer factors by Fall 1941 that, in addition to Japan's at start destroyers, provide Japan with 26 destroyer factors for use in Winter 1941. These destroyers could carry up to 13 factors of invading units against defended beaches.

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 participate in the initial invasion combat, if the invasion hex is occupied by an enemy ground unit.

Fortunately, some of the targets in the Pacific will be undefended or can be reached by sea transport, so the realistic carrying capacity is closer to 16 or 17 factors of invading ground units.

It is tempting to use the shipbuilding increase in Fall 1940 to build more CVLs before the attack. After all, having more carriers in the early war would surely benefit Japan. Unfortunately, if Japan lays down a carrier – of any size – the U.S. is permitted to lay down a carrier of any size in response.

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).

One of the main threats to Japan's success can be summarized by a simple principle: the sooner Japan builds up against the U.S., the *larger* and *sooner* the American response will be. In addition to prompting the U.S. to lay down fast carriers, laying down CVLs will cost precious BRPs that could instead be used to maximize Japan's BRP base growth



Legend's evil spirit
(www.loc.gov/exhibitions/ukiyo-e)

in the 1941 YSS. Japan has many options in terms of pre-war shipbuilding, but for the purposes of the Standard plan, we will assume that Japan adds only destroyers and no other ships. Various other plans for pre-war Japanese shipbuilding will be explored in the Summer 2008 issue of ULTRA.

Economics and Oil

“Similar [to the Way of the Warrior], there is timing in the way of the merchant, in the rising and falling of capital.”

Miyamoto Musashi

Now that we know what Japan will mobilize, produce, and build, we can determine whether Japan can actually afford it. Japan begins with a BRP base of 70 and BRP level of 40, but the Japanese BRP base and level increase with each mobilization and in each YSS if Japan ends the year with any unused BRPs and no unbuilt units (other than attrition losses inflicted by China). Japan's unit construction limit also increases as its BRP base grows.

In presenting the Standard plan, we have roughly outlined when Japan adds units to its force pool via mobilization and production. The table on the following page details Japan's actual BRP spending and growth. In the table, we assume the previously discussed timing of mobilization, production, and shipbuilding increases in detailing the construction of units in the pre-war Japanese economy. In addition, we assume average costs of rebuilding attrition losses in China (three Japanese 1-2 infantry per turn from Winter 1939 through Fall 1941) and the use of three SBP per turn from Fall 1939 through Summer 1941 and two SBP in Fall 1941. In the interest of brevity, these more “constant” builds are not listed in the table, but account for the following additional spending per turn:

Fall 1939	9 BRPs
Winter 1939 – Summer 1941	12 BRPs
Fall 1941	6 BRPs

For ease of distinguishing various types of units, the table uses abbreviations for armor (e.g. 2o3), airborne (1m2), and marines (1n2).

The economics table may seem as if it is calculated down to the last precious BRP, but there is actually a bit of leeway. While three counters is a reasonable estimate for attrition losses in China, the actual losses are often less after the Imperial army starts grinding

Turn	BRP Level	Add	Cons. Limit	Build	Spend
Fa39	40	+10 M1	26	2 eNAS, 2o3, 1o3, 3 3-2	26
Wi39	24		26	1m2	15
1940 YSS		+4 growth	28		
Sp40	104		28	3 eNAS, 1n2, 3 1-2	21
Su40	83		28	2 eNAS	14
Fa40	69	+10 M2	31	3 eNAS, 2 AAF	21
Wi40	58		31	3 eNAS	15
1941 YSS		+21 growth	38		
Sp41	135	+10 M3	41	4 eNAS, 1n2, 3-2, 2-2, 1-2	25
Su41	120		41	4 eNAS	16
Fa41	104	+5 FIC	41	4 eNAS, 4 AAF, 2-2 4 3-2, 5 1-2	41
Wi41	68	+10 M4, +2 Thai- land	45	15 BRPs	80

down the Nationalists with attritions. Good results may free up BRPs to use for additional shipbuilding or growth. If the Chinese get lucky instead, Japan can save BRPs by not using all of the shipbuilding points available after Fall 1940 – failing to build one or two destroyers will not ruin the surprise turn. If Japan chooses to use its fourth SBP in Fall and Winter 1940, then those two SBP and six BRPs used in 1940 will reduce Japan's BRP base in 1941 by three, Japan's discretionary builds in Winter 1941 by three, and Japan's construction limit in 1941 by one. Using Japan's fourth SBP in 1941 only decreases Japan's discretionary builds in Winter 1941.

Speaking of Winter 1941, the preceding table shows that Japan will have $68 + 12 = 80$ BRPs for the first turn of war. Of those 80 BRPs, 65 will be spent on a declaration of war (35) and full offensive operations on the Pacific (15) and Southeast Asian (15) fronts. That leaves only 15 BRPs for builds. The choices for Japanese builds in Winter 1941 are many: a fort (five BRPs), using shipbuilding to launch the *Yamato* or lay down carriers (three BRPs each), or rebuilding losses (variable). The decision of what to build will always lie with the Japanese player and should always support Japan's strategy for that game.

An observant reader might ask why no BRPs are allocated to offensive actions against China. Attritions are enough to keep the Chinese in check and perhaps

capture a few hexes. An advance toward Foochow and Canton can reduce the number of attrition zones, and fewer Chinese attrition rolls means fewer Japanese attrition losses. But always remember that the Western Allies are the main enemy, so concentrate on winning that fight before getting stuck in some ultimately useless Chinese adventure. Do not waste your effort (or your BRPs) on actions that do not contribute to the most important result – victory, or at least extended survival, against the U.S. and Britain.

Oil consumption isn't a problem until Fall 1941, when the American embargo starts to have an effect. Japan will only receive three oil counters from the international market in Fall 1941. Even though the oil reserve is flush, you don't want to use more than you have to, so Japan should take two oil effects. The economic oil effect would wipe out all the careful work done to build up Japan's BRP base, so the only real choices are between the air, naval, army, and construction oil effects.

First, it's important to note that any oil effects that Japan incurs in Fall 1941 can be lifted at the start of the Japanese Winter 1941 player turn by using oil from the Japanese oil reserve during the oil adjustment phase:

33.535 TIMING: A supply zone retains the supply and oil status of the previous player turn until the end of the initial supply determination segment of the current player turn (EXCEPTION: If an air, naval or army oil effect from the previous player turn is negated by the use of an oil counter during the oil adjustment phase of the current turn, air, naval or army operations are immediately restored to normal, prior to initial supply determination - 33.62). However, the uninversion of air and naval units in a supply zone requires the use of oil counters in the turn of uninversion; the oil counters used must either have been in an oil reserve or have been produced in the turn of uninversion.

That means that taking the air, naval, or army oil effects in Fall 1941 will not hamstring the Japanese attack in Winter 1941.

Next let's consider the consequences of incurring each oil effect in Fall 1941 by reviewing only those oil effects that might impact Japan in Fall 1941:

33.61 OIL EFFECTS: During his player turn, as set out in 33.52, the moving player determines which, if any, of the five oil effects set out below he wishes to offset. Oil effects apply to all members of an alliance faction within the affected supply zones. The effects are:

A. AIR:

- Defensive air activities, including providing defensive air support, opposing enemy bombing and intercepting enemy air transport activities, are permitted only in the hex in which the air units are based. Interceptors defend normally.

B. NAVAL:

- Naval units may not conduct offensive operations, protect sea supply or convoy routes, or provide or protect sea escort.

C. ARMY:

- All ground units of all types have their CTL reduced by one.
- Ground units may not be taken as attrition losses from a supply zone from which sea supply was last traced to their attrition zone (14.52A).

D. CONSTRUCTION: Construction at normal construction costs requires the expenditure of oil counters. Subject to overall construction limits, each affected major power may build up to 25 BRPs of units at normal construction costs if no oil counters are expended; up to 50 BRPs if one oil counter is expended; up to 75 BRPs if two oil counters are expended, and so on (27.35). Additional units are built at double the normal construction cost (27.13B; see also 27.14). A major power is considered to have incurred the construction oil effect if it does not spend at least one oil counter to allow up to 50 BRPs of builds at normal construction cost. See 33.72 for the use of additional oil counters for construction in conjunction with uninverting air and naval factors and exploiting armor.

33.71 Subject to the restrictions set out in 33.74:

A. AIR: If an oil counter is used by an alliance faction to offset the air oil effect, that alliance faction may uninvert 25 land-based air factors at any time during its player turn.

B. NAVAL: If an oil counter is used by an alliance faction to offset the naval oil effect, that alliance faction may uninvert 25 naval factors at any time during its player turn. Carrier-based NAS are uninverted along with their carriers, at no extra cost (17.3122).

Review of Japan's builds in Fall 1941 reveals that 41 BRPs of construction will be required to build nearly all of the infantry that Japan mobilized in Spring 1941 as well as the AAF that were mobilized in Fall 1940. If Japan takes the construction oil effect, only 25 BRPs of construction will be at normal cost; additional units are built at double the normal construction cost. Still, even under this oil effect Japan would be able to build four eNAS (four), four AAF (12), six BRPs of infantry (six), and advance the Musashi (three) at normal cost. Additional infantry and armor could be removed from Manchuria to ensure that enough ground forces are available for the first turn of war. In the Standard plan, taking the construction oil effect is problematic but possible.

In Fall 1941, Japan will have just built four 3-2 infantry, one 2-2 infantry, and five 1-2 infantry. Because the four 3-2 infantry will be particularly useful in attacking Burma, Japan would be better off not incurring the naval oil effect in order to permit sea escort of these infantry in Fall 1941. Unless Japan's ground forces that will be used on the first turn of war are already in position by the end of Summer 1941 (which is possible under some mobilization and production plans), it is easier for inexperienced Japanese players to avoid taking the naval oil effect in Fall 1941.

That leaves the air and army oil effects. What are the consequences of Japan taking these two oil effects in Fall 1941? The air oil effect means that Japan will

not be able to fly defensive air support outside the hex in which the air units are based. If you recall, Chinese ground attacks are prohibited at less than 1:1 odds. With no defensive air support, Chinese ground attacks are possible if Japan has not defended well in China. But with proper planning, Japan set up its ground units to ensure that any Chinese attacks would be at less than 1:1 odds. Incurring the air oil effect also means that Japan may not uninvert any AAF that are constructed in Fall 1941. But these AAF will likely be redeployed to a more forward air base for use in a Winter 1941 offensive, and redeployment prevents air units from being uninverted. So these air units would likely remain inverted anyway. Hence, Japan can safely take the air oil effect in Fall 1941, provided ground units in China are set up to prevent Chinese ground attacks.

The army oil effect is just as easy for Japan to take in Fall 1941. A CTL reduction of one only weakens the Japanese attritions a little, and if Japan has five ground units in Foochow and Canton, taking attrition losses from those hexes (instead of a Japanese supply zone) shouldn't be a problem. Weaker Japanese attritions in Fall 1941 (and no ZoCs!) may allow the Communist and/or Nationalist Chinese to build one partisan each that turn, but there will be no irretrievable losses so long as Japanese units have garrisoned the objectives behind the front lines. The pesky partisans can be eliminated in 1942, when oil and BRPs are available.

That concludes our analysis of standard Japanese play in the early war. The mobilization, research, and construction plans are meant to be a simple roadmap for players who are unfamiliar with playing Japan. In the sections that follow we will explore three alternative plans that Japanese players might pursue in 1939-1941. Each of these alternative plans provides different benefits and risks than the Standard plan outlined above.

Alternative Plans

"The way of the warrior is the spirit of winning, whatever the weapon and whatever its size."

Miyamoto Musashi

Numerous pre-war plans are possible when playing Japan. The three that are discussed below allow for (and will be referred to as) Maximum Growth, Extreme Shipbuilding, and Ultimate Surprise. Each plan varies in terms of tensions, research, and economics, and a brief analysis of the benefits and

risks of each (relative to the Standard plan outlined above) is provided. Because the shipbuilding options available under each of these three alternative plans will be explored in detail in the Summer 2008 issue of ULTRA, we will make only minor references to variations in Japanese shipbuilding.

Maximum Growth

“Advance with as strong a spirit as possible, and when you reach your enemy, move with your feet a little quicker than normal ... overwhelming him sharply.”

Miyamoto Musashi

This plan risks an early U.S. mobilization in Fall 1941 in return for additional Japanese economic growth. The key element is taking Japan’s second discretionary mobilization in Winter 1940 instead of Spring 1941, thus adding BRPs to provide additional BRP base growth in the 1941 YSS. Because Japan ends the year with approximately 60 BRPs (instead of 40), Japan’s base grows more than 25 BRPs in the 1941 YSS, and Japan thus enjoys an additional RP.

41.23 ADDITIONAL RPs FROM BRP GROWTH: Each major power receives one additional RP for every 25 BRPs of growth (round down) in each YSS. This additional RP is received for that year only. The BRP growth itself is unaffected. Increases in the BRP value of Russian ICs and base increases from mobilizations (36.21) are not counted.

Also, because Japan begins 1941 with a BRP level of 150 (instead of 135), Japan receives *another* RP, increasing Japan’s 1941 RP total from 8 to 10.

41.22 ADDITIONAL RPs FROM BRP LEVELS: In addition to its basic RP allotment, in each YSS (but not during the opening setup of the Campaign game and 1939 scenarios) each major power receives one RP for every 50 BRPs in its BRP total.

Note that, compared to the Standard plan, the net effect on USJT is to increase tensions by one point every turn beginning in Winter 1940. The chance of the U.S. mobilizing one turn early in Fall 1941 is just one in six, but possible where it was not under the Standard plan. If the third American mobilization does occur in Fall 1941, actual tensions will increase to 29 in Fall and 35 in Winter. Otherwise, USJT will normally be 34 (instead of 33) when Japan attacks. In either case, higher USJT increase the chances that the American player can modify the column used on the Pearl Harbor Surprise Table through some combination of the random tension die roll and play of strategic Magic cards, which may reduce the chances

of catching an American carrier at Pearl even further.

Turn	USJT	Modifiers
Fall 39	2	+1 Turn +1 Launch Hiryu
Winter 39	3	+1 Turn
Spring 40	4	+1 Turn
Summer 40	7	+1 Turn +2 Axis capture Paris
Fall 40	9	+1 Turn +1 Mobilizations
Winter 40	13	+1 Turn +2 Mobilizations +1 Shipbuilding increase
Spring 41	17	+1 Turn +2 Mobilizations +1 Launch Shokaku
Summer 41	23	+1 Turn +2 Mobilizations +1 French Indochina +1 Embargo +1 Launch Zuikaku
Fall 41	28	+1 Turn +2 Mobilizations +1 French Indochina +1 Embargo
Winter 41	34	+1 Turn +3 Mobilizations +1 French Indochina +1 Embargo

The first advantage of the Maximum Growth plan is in research. While RP allocations do not change very much, it is now possible to guarantee producing the second marine without reallocating RPs from other projects. If Japan misses its breakthrough in military general research in 1940, then it will take three RPs, not two, to produce both marines in 1941. In addition, Japan must allocate one RP to military general research in 1941. Under this plan, the two RPs are now available in 1941.

Project	1939	1940	1941	1942
Air General	2	1		
Air Range	1	1	1	1
Air Production		2	1	1
Naval Air Tr.			2	2
Naval General	1	1	1	
ASW Tech.				1
Shipbuilding		1 (→)	1	(1)
ASW FP				3
Transport FP				1
Military General	2	1	1	
Military Prod.			1	1
Sp. Units		1 (→)	2	
Intel. General	IP	IP	IP	
Magic				IP

If probabilities hold and Japan doesn't need the additional RPs to produce both marines, these RPs can be used to begin research in projects such as Air Defense, Air or Naval Nationality DRM, Radar, Indian Subversion, or Chinese Occupation Policies. Even "fun" production categories such as an air transport or a port become more plausible. Veteran Japanese players might pursue one of the above research projects beginning in 1939 or 1940 knowing that two additional RPs will be available in 1941. Alternatively, Japan can simply increase military or air production.

Mobilizations and force pool production are also adjusted to enhance economic growth by delaying when mobilized and produced units must be built:

Fall 1939 (M1): six eNAS, one 3-3 armor, three 1-2 infantry, defer five BRPs.

Spring 1940 (M1): five eNAS (using the deferred BRPs). **(P):** five eNAS.

Fall 1940 (M2): two eNAS, five AAF, one 3-2 infantry.

Winter 1940 (M3): one SBP, two 3-2 infantry, one 2-2 infantry, seven 1-2 infantry.

Spring 1941 (P): five eNAS, one NAT, one 3-2 infantry, one 2-2 infantry, two 1-2 marines.

Winter 1941 (M4): five AAF, one 3-2 infantry, one 2-2 infantry. **(P):** one SBP.

Spring 1942 (P): five NAS, one NAT, one SBP, two ASW factors, two 3-2 infantry, one 2-2 infantry.

Mobilizing one 3-3 armor in Fall 1939 means that it won't be added to Japan's force pool until Spring 1941. As a result, six BRPs need not be spent in 1940 and can provide growth in the 1941 YSS. Similarly, both marines are built in 1941, saving 3 BRPs in 1940 for growth. The Maximum Growth plan also saves BRPs by minimizing shipbuilding other than destroyer construction. The mobilized shipbuilding increase is delayed until Winter 1940 so that five AAF and one 3-factor infantry can be mobilized in Fall. This is important because the 3-3 armor unit replaces 2 AAF in the Standard Plan's first mobilization, and the Winter 1941 shipbuilding increase reduces the infantry added by the third mobilization. Thus, the Maximum Growth plan trades one AAF and a 3-2 infantry for a 3-3 armor unit.

Japan might replace some of the 'lost' forces by producing infantry factors in 1940 and allocate all three RPs needed for Specialized Unit production in 1941. But building five BRPs of infantry in 1940 will

reduce Japanese BRP base growth, which is contrary to the goals of the plan. Alternatively, Japan might produce the 1940 shipbuilding increase and use five BRPs of mobilization to generate infantry, but this results in Japan needing to allocate one RP (probably taken from transports) to shipbuilding in 1942. In any case, the 3-3 armor unit has value on its own, particularly if Japan wants to clear the Malayan peninsula on the first turn of war.

In the BRP calculations that follow, we assume that Japan accepts the trade off in its force composition. Because the naval construction plan and 'fixed' BRP expenditures are identical to the Standard plan described earlier, they are omitted.

Turn	BRP Level	Add	Cons. Limit	Build	Spend
Fa39	40	+10 M1	26	2 eNAS, 2o3, 1o3, 3 3-2	26
Wi39	24		26	1m2	15
1940 YSS		+4 growth	28		
Sp40	104		28	3 eNAS, 3 1-2	18
Su40	86		28	2 eNAS	14
Fa40	72	+10 M2	31	3 eNAS	15
Wi40	67	+10 M3	34	3 eNAS	15
1941 YSS		+31 growth	45		
Sp41	155		45	4 eNAS, 2 1n2, 1 3o3, 2 3-2, 2-2	36
Su41	119		45	4 eNAS, 2-2 2 3-3, 7 1-2	31
Fa41	88	+5 FIC	45	4 eNAS, 5 AAF	25
Wi41	68	+10 M4, +2 Thailand	48	15 BRPs	80

The first advantage of the Maximum Growth plan was two additional RPs. The second advantage is obvious: Japan's economy is more robust in 1941 and thereafter. By Winter 1941, Japan's BRP base is 135 (instead of 125), and Japan's construction limit is 48 (instead of 45). These changes may seem minor, but the ability to build three BRPs more units per turn for the remainder of the game is not insignificant. The Maximum Growth plan generates the same number of discretionary BRPs for use in Winter 1941.

The Maximum Growth plan, therefore, offers some interesting options for Japan. For Japanese players who don't mind a little risk, this plan offers a few more RPs and a larger Japanese BRP base and construction limit. Of course, there are alternative

plans that attempt to maximize other things, like shipbuilding.

Extreme Shipbuilding

“If your enemy thinks like the mountains, attack like the sea, if he thinks like the sea, attack like the mountains.”

Miyamoto Musashi

The Extreme Shipbuilding plan maximizes the size of the Japanese navy at the cost of decreased economic growth and the risk of increased tensions and fewer Japanese ground units available for use on the first turn of war. In the simplest variation, Japan increases shipbuilding twice during 1940, to five shipbuilding points, which allows additional destroyers to be built in time to participate in invasions on the first turn of war. In more daring versions, which will be explored in the Summer 2008 issue of ULTRA, Japan may build additional cruisers, battleships, and even carriers!

Turn	USJT	Modifiers
Fall 39	2	+1 Turn +1 Launch Hiryu
Winter 39	3	+1 Turn
Spring 40	5	+1 Turn +1 Shipbuilding increase
Summer 40	8	+1 Turn +2 Axis capture Paris
Fall 40	12	+1 Turn +1 Mobilizations +2 Shipbuilding increase
Winter 40	14	+1 Turn +1 Mobilizations
Spring 41	17	+1 Turn +1 Mobilizations +1 Launch Shokaku
Summer 41	23	+1 Turn +2 Mobilizations +1 French Indochina +1 Embargo +1 Launch Zuikaku
Fall 41	28	+1 Turn +2 Mobilizations +1 French Indochina +1 Embargo
Winter 41	34	+1 Turn +3 Mobilizations +1 French Indochina +1 Embargo

The first dangerous turn for tensions in this plan is Summer 1940, where a +2 random tension modifier will trigger the first U.S. Pacific mobilization one turn

early. That means U.S. Pacific shipbuilding will increase to two one turn early, and the U.S. player may either lay down a carrier (in response to any Japanese carrier laid down since the beginning of the game) or begin construction of another battleship or destroyer. Because the Summer 1940 USJT level is ultimately a threat due to the capture of Paris, a persuasive Japanese player might try to coax his European Axis partner into delaying victory in France until Fall 1940. This costs the Germans ten pro-rated BRPs and delays use of the SW combat modifier for control of the French ports in the Battle of the Atlantic, but may allow the European Axis to conquer France more thoroughly and secure a better French Surrender Level.

But even if the capture of Paris is delayed until Fall 1940, this plan suffers from the same risk as the Maximum Growth plan: the third American mobilization will occur in Fall 1941 in one out of six games. And the sooner the U.S. mobilizes, the earlier its forces will appear in 1942, and the sooner the U.S. Navy will grow and unleash its wrath on the Imperial Navy. Barring any die rolls of six for random tensions, the final USJT level under the Extreme Shipbuilding plan is equal to that of the Maximum Growth plan.

Project	1939	1940	1941	1942
Air General	2	1		
Air Range	1 (→)		1	1
Air Production		2	1	1
Naval Air Tr.			2	2
Naval General	2	1		
ASW Tech.				1
Shipbuilding		2	1	
ASW FP				3
Transport FP				1
Military General	1	1	1	
Military Prod.			1	1
Sp. Units		1	1	
Intel. General	IP	IP	IP	
Magic				IP

Research allocations under this plan are similar to the Standard plan, with eight RPs in 1941, but the allocation changes to guarantee one shipbuilding result in 1940 and improve chances at a naval general research breakthrough in 1940. Note that we accept a lower chance of a breakthrough in military general research in 1940, which would prevent Japan from producing a marine that year. Producing both marines then requires achieving the military general research breakthrough in 1941, carrying forward the RP in specialized unit production from 1940 to 1941, and

diverting a 1941 RP from a different project to specialized units. But normal luck should provide for producing one marine in 1940 and another in 1941. Note that there is no allocation to Air Range in 1940, and the roll for the 1939 RP is delayed one year to take advantage of a possible breakthrough in air general research.

Fall 1939 (M1): six eNAS, two AAF, three 1-2 infantry, defer five BRPs.

Spring 1940 (M1): five eNAS (using the deferred BRPs). (P): five eNAS, one SBP.

Fall 1940 (M2): two eNAS, three AAF, one SBP, four 1-2 infantry.

Spring 1941 (P): five eNAS, one NAT, one 3-2 infantry, one 2-2 infantry, one 1-2 marine.

Summer 1941 (M3): five 3-2 infantry, one 2-2 infantry, three 1-2 infantry.

Winter 1941 (M4): five AAF, one 3-2 infantry, one 2-2 infantry. (P): one SBP.

Spring 1942 (P): five NAS, one NAT, one SBP, two ASW factors, one transport, one 3-2 infantry, one 2-2 infantry.

The resulting mobilization scheme also diverges significantly from the Standard plan. Because the second discretionary mobilization is delayed from Spring to Summer 1941, infantry units added from it will not be available for the surprise attack. Instead, the Japanese player must use infantry from China or Manchuria on the first turn of war. The role of the Summer 1941 mobilization, thus, is to provide units that will replace those removed from Manchuria or China. Also, recall that Manchurian garrison levels apply only at the *beginning* of the Allied player turn. Japan may use units from Manchuria to invade the Philippines, Brunei, or even Malaya (including by sea transport through Singora) on the first turn of war. So a certain degree of care by the Japanese player can remedy having fewer mobilized ground units. Because this involves greater planning and/or skill, players who are less experienced with Japan should use caution when pursuing the Extreme Shipbuilding plan.

We've discussed the risks and costs of the Extreme Shipbuilding plan; now for the benefits. The Japanese shipbuilding plan is augmented as indicated below. For simplicity, we assume that all of Japan's additional naval builds are destroyers, cruisers, and its second submarine. The most important advantage of the Extreme Shipbuilding plan is that it provides four additional destroyers for the first turn of war. That

may seem insignificant, but these additional destroyers provide distinct advantages. In Winter 1941, Japan could invade one additional, defended target, such as Balikpapan or Batavia. Alternatively, Japan could invade up to four undefended targets, most notably Pacific islands in the Gilberts or Solomons. This shipbuilding plan also launches an additional CA6 and Japan's second submarine prior to the outbreak of war. The precise sequence of naval builds can be varied based on the Japanese player's choice of ships and comfort with spending BRPs.

Turn	Start	Advance	Launch	BRPs
Fa39		Musashi	Hiryu, CA2	9
Wi39	DD2	Yamato		9
Sp40	DD2, CA2	Shokaku	DD2	12
Su40	DD2, CA2	Zuikaku	DD2	12
Fa40	DD3	Musashi	DD2, CA2	15
Wi40	DD3	Yamato	DD3, CA2	15
Sp41	DD3, CA2		DD3, Shokaku	15
Su41	DD3		DD3, Zuikaku, sub	15
Fa41		Musashi	DD3, CA2	6
Wi41	?		Yamato	?

Japan's BRP expenditures also differ significantly from the Standard plan, beginning with the 'constant' builds, which show more shipbuilding.

Fall 1939, Fall 1941	9 BRPs
Winter 1939	12 BRPs
Spring 1940 – Summer 1940	15 BRPs
Fall 1940 – Summer 1941	18 BRPs

Turn	BRP Level	Add	Cons. Limit	Build	Spend
Fa39	40	+10 M1	26	2 eNAS, 2o3, 1o3, 3 3-2	26
Wi39	24		26	1m2	15
1940 YSS		+4 growth	28		
Sp40	104		28	3 eNAS, 3 1-2, 1n2	24
Su40	80		28	2 eNAS	17
Fa40	63	+10 M2	31	3 eNAS, 2 AAF	27
Wi40	46		31	3 eNAS	21
1941 YSS		+11 growth	35		
Sp41	125		35	4 eNAS, 1n2, 3-2, 2-2, 4 1-2	34
Su41	91	+10 M3	38	4 eNAS	22
Fa41	79	+5 FIC	38	4 eNAS, 3 AAF	22
Wi41	62	+10 M4, +2 Thailand	41	9 BRPs	74

It is apparent that the Extreme Shipbuilding plan substantially weakens the Japanese economy with a lower BRP base and construction limit than other plans. In addition, Japan has only nine BRPs for builds in Winter 1941. Yet, Japan's invasion capabilities are greatly enhanced for the first turn of war. Permutations of this plan that maximize destroyer construction but minimize other naval builds result in a better economic position for Japan. But what self-respecting "Extreme Shipbuilder" would do something as silly as that? If the Japanese player can take advantage of his augmented naval assets he will have gained more than he lost under this plan.

Ultimate Surprise

"Many things can cause a loss of balance. One cause is danger, another is hardship, and another is surprise."

Miyamoto Musashi

This third and last alternative plan keeps tensions as low as practical at the cost of having fewer air and ground forces when Japan attacks. The major benefit is an enhanced Pearl Harbor attack – with USJT under 30 at the time war is declared, there is a better than 50% chance of catching any one American carrier group and an almost 20% of nabbing all three!

Turn	USJT	Modifiers
Fall 39	2	+1 Turn +1 Launch Hiryu
Winter 39	3	+1 Turn
Spring 40	4	+1 Turn
Summer 40	7	+1 Turn +2 Axis capture Paris
Fall 40	8	+1 Turn
Winter 40	10	+1 Turn +1 Mobilizations
Spring 41	13	+1 Turn +1 Mobilizations +1 Launch Shokaku
Summer 41	17	+1 Turn +1 Mobilizations +1 French Indochina +1 Launch Zuikaku
Fall 41	23	+1 Turn +2 Mobilizations +1 Shipbuilding increase +1 French Indochina +1 Embargo
Winter 41	29	+1 Turn +3 Mobilizations +1 French Indochina +1 Embargo

The only dangerous turn for tensions is Fall 1940, where a +2 random tensions result will force Japan to mobilize prematurely and increase tensions by one on every subsequent turn and force Japan to mobilize before declaring war in Winter 1941. However, if this does occur, then only another "6" random tension roll in Summer 1941 (raising actual tensions from 18 to 20) would spoil this plan. Otherwise, the only effect of the "6" random tension roll in Fall 1940 will be that Japan will attack with tensions at 31, after accounting for the forced mobilization in Winter 1941.

The hard choices come if Japan actually succeeds in attacking with tensions under 30, as planned. Air units mobilized on this turn will not be available for use in a Winter 1941 surprise attack, so Japan will have to make do with its at start forces augmented by its first mobilization. Accordingly, research allocations emphasize the air category.

Project	1939	1940	1941	1942
Air General	2	1		
Air Range	1	1		1
Air Production		2	2	1
Naval Air Tr.			2	2
Naval General	1	1	1	
ASW Tech.				1
Shipbuilding			1	1
ASW FP				3
Transport FP				
Military General	2	1		
Military Prod.			1	1
Sp. Units		1	1	
Intel. General				
Magic		1, IP	IP	

This approach guarantees five BRPs of air production in both 1940 and 1941, but a 1940 breakthrough in Air general research (which is assumed under this plan) allows one RP in Air production to be carried forward to 1941 to produce 10 BRPs of air units in 1941. Of course, a die roll of six for Air general research in 1939 makes things easier for Japan! Otherwise, this research plan is similar to the Standard plan except that one transport is not produced in 1942 and Japan produces a strategic Magic card in 1941. If this card is drawn in Winter 1941, then Japan can either cancel an American strategic Magic card or perhaps even reduce the effective USJT level by one! Either way, the column used on the Pearl Harbor Surprise Table could be improved for Japan. In addition, Japan will be more likely to thwart American Magic interceptions after the surprise turn.

Regarding mobilizations, all of the comments made under the Extreme Shipbuilding plan regarding the need to use additional units from Manchuria and China also apply, with the difference that the units Japan needs most are AAF instead of ground units. Because the naval construction plan is identical to the Standard plan described earlier, it is omitted below.

Fall 1939 (M1): six eNAS, two AAF, three 1-2 infantry, defer five BRPs.

Spring 1940 (M1): five eNAS (using the deferred BRPs). **(P):** five eNAS, one 1-2 marine.

Winter 1940 (M2): three 3-2 infantry, two 2-2 infantry, seven 1-2 infantry.

Spring 1941 (P): seven eNAS, one AAF, one NAT, one 3-2 infantry, one 2-2 infantry, one 1-2 marine.

Fall 1941 (M3): two AAF, one SBP, three 3-2 infantry.

Winter 1941 (M4): five AAF, one 3-2 infantry, one 2-2 infantry. **(P):** one SBP.

Spring 1942 (P): five NAS, one NAT, one SBP, two ASW factors, one 3-2 infantry, one 2-2 infantry.

Producing ten BRPs of air units in 1941 allows Japan to maximize eNAS construction and add one more AAF. Other units are added later than under the Standard plan, so Japan will need to use units from China and Manchuria in Winter 1941. Once again, shipbuilding and “constant” builds are similar to the Standard plan and not listed in the table below.

Turn	BRP Level	Add	Cons. Limit	Build	Spend
Fa39	40	+10 M1	26	2 eNAS, 2o3, 1o3, 3 3-2	26
Wi39	24		26	1m2	15
1940 YSS		+4 growth	28		
Sp40	104		28	3 eNAS, 1n2, 3 1-2	21
Su40	83		28	2 eNAS	14
Fa40	69		28	3 eNAS, 2 AAF	21
Wi40	48	+10 M2	31	3 eNAS	15
1941 YSS		+21 growth	38		
Sp41	135		38	4 eNAS, 1n2, 3-2, 2-2	24
Su41	111		38	4 eNAS, 3 3-2, 2 2-2, 7 1-2	36
Fa41	75	+10 M3 +5 FIC	41	4 eNAS	10
Wi41	80	+10 M4, +2 Thailand	45	27 BRPs	92

One notable benefit of the Ultimate Surprise plan is that Japan has a flush 27 BRPs available for builds in Winter 1941. This is because the air units normally mobilized in 1940 have not yet been added to Japan’s force pool. Consequently, Japan is able to rebuild combat losses, build a fort, and even lay down several carriers. And if Japan can catch a few American carriers in the initial attack on Pearl Harbor, then these additional carriers may allow Japan to maintain carrier superiority into 1943!

Conclusion

“The primary thing when you take the sword in your hands is your intention to cut the enemy, whatever the means. ...Fixed formation is bad. Study this well.”

Miyamoto Musashi

Perhaps the most interesting aspect of these variations in Japanese strategy is how easily one flows into the other depending on events during play. If Ultimate Surprise is thwarted by an early forced mobilization, it changes easily into a Standard plan. If the Japanese player learns that his German counterpart chooses not to attack Russia, he can transpose quickly to Maximum Growth. Good attrition results in China may allow a cautious player to lay down a few cruisers or capital ships, or an Extreme Shipbuilder to attack with more ground units than anticipated. Or Japan may combine double mobilizations with double shipbuilding in a variation of the Maximum Growth plan that adds shipbuilding in Fall and Winter 1940 and yields three additional destroyers for the first turn of war, but with a stronger economy than that presented under the Extreme Shipbuilding plan.

In short, it is the Japanese player who determines the course of his war, calmly responding to changes in his original plan as the Allies wait in suspense, wondering what the fiend has up his sleeve *now*. (An occasional evil laugh may encourage your opponent’s dismay.) Following the Way of the Warrior, regardless of the approach chosen, the Japanese player should be able to plan appropriately and secure the necessary forces for his surprise attack and perhaps, with good strategy and a bit of luck, earn victory in the end. Achieving that victory also will depend on following the Way of the Warrior – by attacking the enemy and defending against his counter-attack – but the details of that must be covered in later issues.