

Japanese Monograph No. 160



**OUTLINE OF NAVAL ARMAMENT AND  
PREPARATIONS FOR WAR**

Part III

**PREPARED BY  
MILITARY HISTORY SECTION  
HEADQUARTERS, ARMY FORCES FAR EAST**

**DISTRIBUTED BY  
OFFICE OF THE CHIEF OF MILITARY HISTORY  
DEPARTMENT OF THE ARMY**

## FOREWORD

This is the third of a series of six monographs in regard to Japan's naval armament in preparation for and during the Pacific War.

Additional monographs covering Japan's naval armament plans are:

	Mono No
Outline of Naval Armament and Preparations for War, Part I	145
Outline of Naval Armament and Preparations for War, Part II	149
Outline of Naval Armament and Preparations for War, Part IV	169
Outline of Naval Armament and Preparations for War, Part V	172
Outline of Naval Armament and Preparations for War, Part VI	174

## Preface

Through Instructions No. 126 to the Japanese Government, 12 October 1945, subject: Institution for War Records Investigation, steps were initiated to exploit military historical records and official reports of the Japanese War Ministry and Japanese General Staff. Upon dissolution of the War Ministry and the Japanese General Staff, and the transfer of their former functions to the Demobilization Bureau, research and compilation continued and developed into a series of historical monographs.

The paucity of original orders, plans and unit journals, which are normally essential in the preparations of this type of record, most of which were lost or destroyed during field operations or bombing raids rendered the task of compilation most difficult; particularly distressing has been the complete lack of official strength reports, normal in AG or G3 records. However, while many of the important orders, plans and estimates have been reconstructed from memory and therefore are not textually identical with the originals, they are believed to be generally accurate and reliable.

Under the supervision of the Demobilization Bureau, the basic material contained in this monograph was compiled and written in Japanese by former officers, on duty in command and staff units within major units during the period of operations. Translation was effected through the facilities of Allied Translators and Interpreters Service, G2, General Headquarters, Far East Command.

This Japanese Operational Monograph was rewritten in English by the Japanese Research Division, Military History Section, General Headquarters, Far East Command and is based on the translation of the Japanese original. Editorial corrections were limited to those necessary for coherence and accuracy.

## TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
I	GENERAL SITUATION <span style="float: right;">1</span>
	Preparation of Armament Against the United States <span style="float: right;">3</span>
	First Requisition, Conversion and Equipment of Vessels <span style="float: right;">6</span>
	Extraordinary Supplementary Armament Plan <span style="float: right;">7</span>
	Urgent Armament Plan <span style="float: right;">15</span>
	Second Requisition and Equipment of Vessels <span style="float: right;">29</span>
	Acceleration of other War Preparations <span style="float: right;">30</span>
	War Preparations Upon Decision to Go to War <span style="float: right;">31</span>
	Organization of Special Naval Units <span style="float: right;">32</span>
	Progress of Armament and Other War Preparations at the Time of the Outbreak of War <span style="float: right;">34</span>
II	OUTLINE OF THE FIFTH AND SIXTH NAVAL ARMAMENT REPLENISHMENT PLANS <span style="float: right;">41</span>

### Charts

No.	
1	Extraordinary Supplementary Armament Plan Other Supplementary Armament Plans between the Fourth Armament Replenishment Plan and the Urgent Armament Plan <span style="float: right;">9</span>
2	Progress of Shipbuilding <span style="float: right;">13</span>
3	Urgent Armament Plan <span style="float: right;">17</span>
4	Urgent Armament Plan Approved Budget <span style="float: right;">21</span>
5	Urgent Armament Plan Progress of Shipbuilding <span style="float: right;">23</span>
6	Air Strength at time of Outbreak of War <span style="float: right;">37</span>

7	Roster of Naval Officers at time of Outbreak of War	39
8	Fifth Armament Replenishment Plan	42

## Chapter I

### General Situation

With the outbreak of World War II on 1 September 1939, the United States policy appeared to be to assist Great Britain and France in every way possible. The arms embargo was lifted at the beginning of November 1939, and, at the same time, the construction of an additional 40 US destroyers was approved. To offset the preponderance of German submarines in the spring of 1940, the United States leased 50 escort destroyers to Great Britain and extended positive aid in regard to the strengthening of the escort provided Europe-bound merchant ships.

In November 1939, having been notified of the commencement of the Japanese Fourth Armament Replenishment Plan, the United States Navy submitted to Congress the Third Vinson Plan, and, on 4 June 1940, it was signed by the President. The plan called for the construction of 3 aircraft carriers, 8 cruisers, 52 destroyers and 32 submarines, having a total tonnage of 400,000 tons. Also included in the plan was the construction of auxiliary vessels amounting to 125,000 tons, making a total tonnage of 525,000 tons. In addition, provision was made for 6,000 Navy planes and 36 flying boats. The appropriations for this plan amounted to \$1,300,000,000, and the year of completion was set at 1944. It was estimated that the United States would have a main strength totaling more than 2,100,000 tons, with a nucleus of 23 battleships, when this plan was completely realized.

In the spring of 1940, at the same time as the Third Vinson Plan began to get under way, the United States Navy decided to station permanently in the Hawaiian area the main force of the fleet then bound for that area to take part in large-scale maneuvers.

It was felt that the tightening of the political and economic encirclement of Japan by the United States, Great Britain, the Netherlands, Australia and China, coupled with the protraction of the China Incident, was making Japan's position more and more untenable. In order to surmount this difficulty, Japan took steps to strengthen her tripartite ties and to advance to the south. This caused the Anglo-American bloc to stiffen their attitude toward Japan. To cope with this critical situation, the Japanese Navy carried out various emergency measures. In 1941, to counteract the Third Vinson Plan, the Fifth Armament Replenishment Plan was adopted. (See Chapter II) However, on 19 June 1941, the astronomical United States' Stark Plan was approved. The Stark Plan was a two-ocean fleet plan with a 70 percent increase in the total tonnage of naval vessels and an increase in Navy planes to 15,000. The appropriation for this 6-year plan was \$10,000,000,000.

Although it was realized that the fulfillment of the Fifth Armament Replenishment Plan would be most difficult from the standpoint of finance, materials and equipment, Japan considered it necessary to continue in the naval armament race, which resulted in the drafting of the Sixth Armament Replenishment Plan. (See Chapter II)

The strained relations between Japan and the United States led the navies of the two nations to compete in an unlimited and endless armament race.

#### Preparation of Armament Against the United States

The armament policy of the Japanese Navy had hitherto been based on the requirements of the national defense policy which aimed to maintain a strength in the ratio of 7:10 with the United States. The object of the national defense policy was to guarantee the security of the nation by securing the supremacy of sea and air in the Western Pacific. The 7:10 ratio was based on the tactical principle accepted at that time by the navies of all countries, which concluded that the strength of the offensive force must be at least 50 percent superior to that of the defensive force. While a navy of 7:10 ratio would be insufficient for offensive warfare, it would be enough for defensive warfare.

Because of the completion of the naval armament replenishment plans in the United States, the Japanese Navy's policy for maintaining the 7:10 ratio with the United States became futile, and it was estimated that in a short space of time the ratio of Japan's strength would decrease to less than 6:10 with the United States. Consequently, strenuous efforts were made to offset the quantitative deficiency by such means as effective armament preparations, skilled strategy and an effort to meet quantity with quality. Toward the end of 1940 Japan was forced to revise the armament policy generally as follows:



## Battleships

As it was predicted that in the near future the ratio of battleships would become less than 5:10 with the United States, the idea of meeting quantity with quantity was abandoned. It was decided that by building such huge battleships as the Musashi and Yamato quantitative deficiency would be balanced by the superior power of individual vessels. In accordance with the sudden change in the situation at the end of 1941, however, the construction of battleships, other than the almost completed Musashi and Yamato, was suspended. After the defeat in the Midway Battle in June 1942, it was decided to complete the reconstruction of the battleship Shinano into an aircraft carrier by the end of 1944.

## Aircraft Carriers

Although at the end of 1940 there was no real difference in strength between the United States and Japan in regard to this type of vessel, there was every possibility that the United States would build more aircraft carriers in the near future. Therefore, without adhering to the tonnage ratio, Japan adopted a policy of creating parity on the number of vessels built by the United States. Finally, having exhausted her capacity for shipbuilding, Japan decided to convert first-class merchant ships into aircraft carriers. This plan was studied for some years before being put into operation.

## Cruisers

It was felt that there would be no difficulty in maintaining the 7:10 ratio with the United States in regard to cruisers, as

Japan was in quite a favorable position in regard to this type of vessel, especially in regard to heavy cruisers. It was decided, therefore, that the Japanese Navy policy of giving priority to superiority of fire power, torpedo power and speed should be continued.

#### Destroyers

Although the ratio with the United States in regard to destroyers was approximately 7:10, it was felt that within a short period of time the difference in strength would be great, because of the United States' gigantic armament plans, and her capacity to reduce the time required in shipbuilding. Another factor was that the Japanese Navy required their destroyers to carry heavy torpedo equipment to be used for night combat. This meant that the destroyers had to be larger, and, in consequence, not able to build as many.

#### Submarines

From the start, the quality and number of this type of vessel was not based on the ratio with the United States. As the Japanese Navy employed these vessels chiefly in interception actions and fleet warfare, they were all large, but they were few in number. In order to remedy this defect, midget submarines were built.

#### Aircraft

Until the Third Armament Replenishment Plan, which counteracted the Second Vinson Plan, Japan aimed generally at an equal number of planes with the United States, but because no measure could be taken to cope with the Third Vinson Plan, which called for 6,000 Navy planes lost in the China Incident, it became more and more difficult

to maintain the ratio. By estimating the potential air strength of the United States which could be engaged in an offensive in the Far East, the minimum strength required to intercept this force was to be maintained. There was a tendency, however, to underestimate the power of the United States, and the Japanese Navy hoped that the lack of planes could be compensated by the mobility of the forces stationed at dispersed air bases.

#### First Requisition, Conversion and Equipment of Vessels

At the outbreak of the China Incident, vessels were requisitioned and equipped as part of the preparations for war. The Japanese Navy being unable to take any measures to counteract the Third Vinson Plan, decided on 15 November 1940 to requisition a total of 550,000 ship tons. These ships would be converted into aircraft carriers, transports, cruisers, gunboats and other auxiliary vessels as well as used as general naval transports. The work was undertaken gradually and, for the most part, was completed within six months.

In contrast to the nine aircraft carriers built under the Vinson Plans and supplementary armament plans, Japan's Third and Fourth Replenishment Plans made provisions for only three carriers. In consequence, in order to maintain parity, Japan had to make further plans. As a result, it was decided to convert first-class merchant ships. The Kasuga Maru was requisitioned and the Izumo Maru and Kashiwara Maru were purchased. The work of converting them into aircraft carriers was started in early 1941. The Taiyo (Kasuga Maru)

15,000 tons was completed 25 August 1941; the Junyo (Kashiwara Maru) 19,000 tons was completed 3 May 1942, and the Hiyo (Izumo Maru) 19,000 tons was completed 31 July 1942. It was planned that after careful study and preparation other merchant ships and some warships would be converted into aircraft carriers in order to increase the aircraft carrier strength.

In accordance with the Fourth Armament Replenishment Plan, the keels of the battleships Shinano and Kii were laid at Yokosuka and Kure Naval Yards respectively, and their construction up to double-bottoms was completed. The work was suspended temporarily on account of the delay in the construction of armour, and later, because of the major changes in armament and war preparation plans affected by the outbreak of war, it was decided to discontinue construction. Because of the sudden decrease in carrier strength caused by losses in the Battle of Midway, however, it became necessary to convert the Shinano into an aircraft carrier.

#### Extraordinary Supplementary Armament Plan

The Navy Ministry and the Naval General Staff agreed on the details of the Fifth Armament Replenishment Plan in order to counteract the Third Vinson Plan, but it looked as though there might be some difficulty in obtaining the necessary finances, materials and plants from the Finance Ministry, Planning Board and War Ministry respectively.

It was thought wise for the Naval General Staff to consult the Army General Staff in regard to the Fifth Armament Replenish-

ment Plan. The Army General Staff agreed to the plan under the following conditions: that it should be discussed again if it showed signs of hampering the established armament plan of the Army; that the Army would deliberate the matter of allocation of materials included in the material mobilization plan; and that it would decide the allocation of necessary manpower. Since the outbreak of the China Incident, the Japanese Navy had recognized the necessity for giving priority to the Army in regard to armament replenishments, in consideration of the nature of the operations. Unless priority was granted to the Fifth Replenishment Plan, however, it would be impossible to realize the plan. Therefore, the conditions imposed by the Army made it clear that they were rejecting the plan. From this time forward there was a constant struggle between the two services in regard to munition production.

The Japanese Navy felt keenly the necessity for taking extreme measures in order to accelerate their war preparations, and in May 1941 it established, and immediately put into execution, the Extraordinary Supplementary Armament Plan, known in Japanese as the "Maru Rin." (For details see Chart 1.)

Additional Supplementary Plans were placed into effect between the Fourth Armament Replenishment Plan and the Urgent Armament Plan and their progress, on the whole, was satisfactory. (See Charts 1 and 2)

There was no new plan for air armament. The air armament plan of the Fourth Armament Replenishment Plan had progressed compara-

Chart 1 - Extraordinary Supplementary Armament Plan

	Standard Displacement per Vessel	Number of Vessels	Total Tonnage	Speed	Main Armament	Remarks
Submarines (Medium)	970	9	8,730	19.5 (Surface)	80mm gun 25mm machine guns Torpedo tubes	1 2 4
Submarines (Small)	525	9	4,725	14.2 (Surface)	25mm machine guns Torpedo tubes	2 4
Gasoline tankers (Medium)	7,950	2	15,900	16.0	127mm guns	4
Gasoline tankers (Small)	4,460	4	17,840	16.0	120mm guns	2
Subchasers	440	16	7,040	16.0	80mm dual purpose gun	1
Auxiliary minesweepers	215	6	1,290	9.5	80mm gun	1
Auxiliary minelayers	280	4	1,120	9.5	80mm gun	1
Refrigerator ships	920	3	2,760	14.0	80mm gun	1
Ketch torpedo boats	20	6	120	35.0	Torpedo tubes	2
<b>Total</b>		<b>59</b>	<b>59,525</b>			<b>¥220,934,750.00</b>

Approved budget the fiscal year 1941  
General account: ¥196,424,750.00

Approved budget the fiscal year 1941  
Extraordinary military expenditure: ¥21,030,000.00

Chart 1— Other Supplementary Armament Plans between the Fourth Armament Replenishment Plan and the Urgent Armament Plan

	Standard Displacement per Vessel	Number of Vessels	Total Tonnage	Speed	Main Armament	Remarks
Cable laying boats	1,564	4	6,256	14.0	80mm dual purpose gun 1	Approved budget the fiscal year 1939 Extraordinary military expenditure: ¥13,667,000.00 (of which ¥3,480,000.00 allotted to motor torpedo boats)
Refrigerator ship	920	1	920	14.0	80mm dual purpose gun 1	
Refrigerator ship	640	1	640	13.0	80mm dual purpose gun 1	
Subchasers	440	7	3,080	16.0	80mm dual purpose gun 1	Approved budget the fiscal year 1940 Extraordinary military expenditure: ¥8,820,000.00
Training ship	5,800	1	5,800	18.0	140mm guns 4 127mm dual purpose guns 2 Torpedo tubes 4	Approved budget the fiscal year 1941 General account: ¥7,660,000.00

Chart 2 -- Progress of Shipbuilding

Extraordinary Supplementary Armament Plan:

Type of Vessel	Class	Name of Vessel	Number of Vessels	Period of Construction	Remarks
Submarines (Medium)	Ro 35 Type	Ro 35 & others	9	Oct 41 to Dec 43	
Submarines (Small)	Ro 100 Type	Ro 100 & others	9	Jun 41 to Apr 43	
Gasoline tankers (med)	Ashizuri class	Ashizuri & others	2	Jul 41 to Nov 43	
Gasoline tanker (Small)	Sunoseki class	Takasaki	1	Jul 42 to Sep 43	
Gasoline tankers (Small)	Sunoseki class		3		Construction suspended
Subchasers	No 13 Type	No 24 & others	16	May 41 to Feb 43	
Auxiliary Minesweepers	No 1 Type	No 1 & others	6	Jun 41 to Oct 42	
Auxiliary Mineslayers	No 1 Type	No 1 & others	4	Jun 41 to Aug 42	
Refrigerator ships	Kinowaki class	Hayasaki & others	3	Dec 41 to May 43	
Motor Torpedo boat	No 1 Type	No 1 & others	6	May 41 to Dec 41	
	Total	59	{ 56 3	May 41 to Dec 43	Completed suspended

Other Supplementary Plans between the Fourth Armament Replenishment Plan and Urgent Armament Plan:

Type of Vessel	Class	Name of Vessel	Number of Vessels	Period of Construction	Remarks
Cablelayers	Hachim class	Hachim & others	4	Oct 39 to Aug 41	
Refrigerator ships	Kinowaki class	Kinowaki & others	2	Oct 39 to Mar 41	
Subchasers	No 13 Type	No 17 & others	7	Oct 40 to Nov 41	
Training ship	Katori class	Yashiwara	1	Aug 41 to Oct 41	Construction suspended
	Total	14	{ 13 1	Oct 39 to Nov 41	Completed suspended



tively well due to the stalemate in the China Incident with resulting small losses in aircraft. In addition, ¥100,000,000 was allotted for the immediate preparation and activation of 17 of the 93 units of the Training Air Group included in the Fifth Armament Replenishment Plan. (See Chart 8)

#### Urgent Armament Plan

At the liaison conference between Imperial General Headquarters and the Government, held on 2 July 1941, the "Outline of the National Policy of the Japanese Empire in connection with the Change of Circumstances," which emphasized the drive southward and the inevitability of war with the United States and Great Britain to achieve Japan's objective, was agreed upon. In order to comply with this policy, the Japanese Navy, being well aware of its great deficiency in armament as compared with the United States, realized that it was necessary to speed up war production. In the latter part of August 1941 it decided on the over-all execution of the Expeditionary Preparation Plan. As part of it, the Wartime Armament Preparation Plan was immediately enforced. This plan became known as the Urgent Armament Plan. (See Charts 3, 4 and 5)

In order to equip oil tankers to carry airplanes, an additional ¥10,264,000 was approved for 1944 (¥2,566,000 for each vessel). Because it was decided to construct an aircraft carrier of 12,500 tons instead of a cruiser, a further ¥10,610,000 was approved for 1945.

Chart 3 - Urgent Armament Plan

Type of Vessel	Number of Vessels	Total Tonnage (Standard Displacement)	Speed	Main Equipment	Remarks
Aircraft carrier	1	17,150	34	127mm dual purpose guns 12 25mm machine guns 31 Aircraft 49	UNRYU
Cruisers	2	24,400	35	200mm guns 10 127mm dual purpose guns 8 Torpedo tubes 16 Aircraft 3	After launching one cruiser converted into aircraft cruiser (IBUKI Class), but conversion work suspended. Construction of 1 cruiser suspended.
Destroyers (Class A)	16	41,104	35	127mm guns 6 Torpedo tubes 8	Construction of 8 destroyers suspended.
Destroyers (Class B)	10	27,000	33	100mm dual purpose guns 8 Torpedo tubes 4	Construction of 1 destroyer suspended. Construction of 3 destroyers cancelled.
Submarines (Class B)	6	13,110	Surface 23.6	140mm gun 1 Torpedo tubes 6 Aircraft 1	
Submarines (Class C)	6	13,080	Surface 23.6	140mm gun 1 Torpedo tubes 8	Construction of 3 submarines cancelled.
Submarines (Medium)	12	11,412	Surface 19.7	80mm gun 1 Torpedo tubes 4	Construction of 4 submarines cancelled.
Submarines (Small)	9	4,662	Surface 14.2	25mm machine guns 2 Torpedo tubes 4	
Seaplane tender	1	4,620	19	127mm dual purpose guns 4 (Installation for carrying one large flying boat)	Construction suspended.

## Urgent Armament Plan (Cont'd)

Type of Vessel	Number of Vessels	Total Tonnage (Standard Displacement)	Speed	Main Equipment	Remarks
Escort ships (Class B)	16	15,040	19.7	127mm dual purpose gun 1 120mm dual purpose gun 1 Depth charge throwers 2	
Escort ships (Class A)	14	12,040	19.7	120mm guns 3 Depth charge thrower 1	
Minesweepers	28	18,200	20	120mm guns 3 Large sweep cables 6	Construction of 17 minesweepers cancelled.
Auxiliary minesweepers	16	3,360	9.5	80mm gun 1	
Light minelayers	14	10,080	20	80mm dual purpose gun 1 Depth charge throwers 2	Construction of 13 minelayers cancelled.
Subchasers	20	8,800	16	80mm dual purpose gun 1 Depth charge throwers 2	Construction of 1 subchaser cancelled.
Auxiliary subchasers (wooden)	100	13,000	11	13mm machine gun 1	
Motor Torpedo boats	18	1,350	29.5	Torpedoes 12	Construction of 3 torpedo boats suspended. Construction of 7 torpedo boats cancelled.
Oil tanker	1	18,850			Construction cancelled.
Oil tankers	2	36,800	16.5	120mm dual purpose guns 3	Later equipped to carry 6 airplanes.
Oil tanker	1	6,000			Construction cancelled.
Total	293	300,058			

Chart 4 -- Urgent Armament Plan  
Approved Budget

Type of Vessels	Tonnage	Number of Vessels	Cost of one Vessel (Unit of ¥1000)	Total Cost (Unit of ¥1000)
Cruisers	12,000	2	60,000.0	120,000.0
Aircraft Carrier	17,100	1	87,039.0	87,039.0
Destroyers (Class A)	2,570	16	17,424.6	278,793.6
Destroyers (Class B)	2,980	10	17,820.4	178,204.0
Submarines (Class B)	2,280	12	20,497.2	245,966.4
Submarines (Medium)	1,000	12	7,920.0	95,040.0
Submarines (Small)	550	9	4,713.5	42,421.5
Flying Boat Tender	11,000	1	47,410.0	47,410.0
Escorts	1,200	30	5,112.0	153,360.0
Light Minelayers	720	14	4,334.4	60,681.6
Minesweepers	700	28	3,738.0	104,664.0
Auxiliary Minesweepers (Fishing Boat Type)	300	16	1,431.0	22,896.0
Subchasers	400	20	2,921.6	58,432.0
Auxiliary Subchasers (Wooden)	100	100	780.0	78,000.0
Oil Tankers	18,400	4	14,720.0	58,880.0
Motor Torpedo Boats	100	18	2,262.0	40,716.0
Total		293		1,672,504.1

Chart 5—Urgent Armament Plan  
Progress of Shipbuilding

Type of Vessel	Class	Name of Vessel	Number of Vessels	Period of Construction	Remarks	
(Total)			293	226	Completed	
				7	Dec 41 to Apr 45	Work suspended
				58		Construction cancelled
Cruisers	Sasuma class	Ibuki	2	1	Apr 42 to Mar 45 (Converted into aircraft carrier)	Work for conversion into aircraft carrier suspended
				1	Jun 42 to Sep 42 (suspended)	Work suspended
Aircraft carrier	Remodeled Hiryu class	Unryu	1	Aug 42 to Aug 44		
Seaplane tender	Akitamashim class	Chihaya	1	Jul 42 to Oct 42 (suspended)	Work suspended	
Oil tanker	Kagahaya class	Kagahaya and others	4	2	Oct 42 to Apr 44	
	(Large)			1	--	Construction suspended
	(Small)			1	--	Construction cancelled
Escort ships(class A)	Remodeled Shimashim class	Etorofu & others	14	Feb 42 to Feb 44		
Escort ships(class B)	Mihura-class Umru-class	Mihura & others	16	Oct 42 to Nov 44		

Chart 5 -- Urgent Armanent Plan (Cont'd)

Type of Vessel	Class	Name of Vessel	Number of Vessels	Period of Construction	Remarks
Destroyers(class A)	Yugumo class	Hayasami & others	16	8 Jan 42 to May 44	
	Yugumo class			8 --	Construction cancelled
Destroyers(class B)	Akitsuki class	Shinotsuki & others	10	6 Jul 42 to Apr 45	
	Akitsuki class	Mitsutsuki & others		1 Jan 44 to Mar 44 (suspended)	Work suspended
	Akitsuki class	Kiyotsuki & others		3 --	Construction cancelled
Submarine(class B)	Type I-15	I-40 and others	6	Mar 42 to Feb 44	
Submarine(class C)	Type I-16	I-46 and others	6	3 Dec 42 to Aug 44	
	Type I-16	I-49 and others		3 --	Construction cancelled
Submarines(Medium)	Type Ro-35	Ro 44 and others	12	8 Feb 42 to Sep 44	
	Type Ro-35	Ro 51 and others		4 --	Construction cancelled
Submarines(Small)	Type Ro-100	Ro 109 and others	9	May 42 to Jan 44	
Minesweepers	Type No 19	No 25 and others	28	11 Apr 42 to Jul 44	
	Type No 19	No 31 and others		17 --	Construction cancelled

Chart 5 -- Urgent Armanent Plan (Cont'd)

Type of Vessel	Class	Name of Vessel	Number of Vessels	Period of Construction	Remarks	
Subchasers	Type No 13	No 40 and others	20 {	19	Feb 42 to Jul 44	
	Type No 13	No 59		1	--	Construction cancelled
Light minelayers	Remodeled Hirashima class	Ajiro	14 {	1	Sep 43 to Jul 44	
	Ajiro class	Kamishima & others		13	--	Construction cancelled
Auxiliary minelayers	Type No 1	No 7 and others	16	Feb 42 to Oct 44		
Auxiliary subchasers	Type No 1	No 1 and others	100	Dec 41 to Mar 44		
Motor torpedo boats	Type A	No 10 and others	18 {	8	Jul 42 to Feb 45	
	Type No 10	No 18 and others		9	Mar 44 to Jun 44 (suspended)	Work suspended
	Type No 10	No 21 and others		7	--	Construction cancelled

As only three months had elapsed since a part of the Fifth Armament Replenishment Plan (air section) had been put into effect, and that only after long deliberation and preparation, it was considered impossible to establish another supplementary plan to further augment air strength without causing confusion. As the Fourth Armament Replenishment Plan was progressing smoothly, it was decided to advance the date of completion of this plan by one year, the plan to be completed by the end of the 1942 fiscal year instead of 1943. The remarkable success of the Japanese Navy Air Force at the beginning of the Pacific War, and the idea of giving priority to air armament which resulted from the above decision, not only enabled the general completion of the Fourth Armament Replenishment Plan within the prescribed time, but also led to the realization of the Revised Fifth Armament Replenishment Plan.

#### Second Requisition and Equipment of Vessels

The vessels obtained through the First Requisition were almost completely equipped and were steadily being added to the fleet strength. Under the firm policy adopted in the summer of 1941, it was decided that an additional 600,000 tons of vessels would be requisitioned for use as converted vessels or for increasing the number of supply and transport vessels.

Included in the vessels requisitioned in accordance with this plan was the Nitta Maru, which was converted into the aircraft carrier Chuyo, and such ships as the Aikoku Maru and the Hokoku Maru, which later distinguished themselves as converted cruisers



raiding merchant shipping. Most of these vessels were completely equipped by the end of 1941, but, because it was to be used to carry the mission dispatched for the conference between President Roosevelt and Premier Konoye at Juneau, Alaska, the equipping of the Nitta Maru was not started until June 1942. It was completed as the converted aircraft carrier Chuyo (15,000 tons) in the latter part of November 1942.

### Acceleration of Other War Preparations

The activation of the wartime organization of the Imperial Japanese Navy was proclaimed on 1 September 1941, and the Fleet rose to unprecedented strength.

Following this, all vessels were subject to necessary repair before going into action. It was scheduled that, because of the state of emergency, this work would be completed by the end of November. The greatest problem in connection with the execution of the Expeditionary Preparation Plan was the lack of war materiel. The war materiel stockpile planned during peacetime was virtually nothing compared to the quantity required by the huge number of units organized and for the vessels to be constructed under this plan. There was available only 10 to 30 percent of the required quantity of such materiel as large bombs, Type 91 torpedoes, 20mm. machine guns and ammunition, all of which were vital to air war. Moreover, as the output of these items was very slow, it was believed that, within several months after the outbreak of war, stockpiles would be completely exhausted. Consequently, efforts

were made by the Navy Ship and Ordnance Department to increase the production of large bombs by converting shells of 16-inch guns, aircraft torpedoes and machine guns. At the same time, in order to increase the production of the Navy's weapons, and also to produce the strength called for in the Fifth Armament Replenishment Plan, preparations were made for the establishment of a number of Navy plants.

Although it was planned that the facilities for producing Type 93 torpedoes for surface vessels would be converted into those for Type 91 torpedoes for aircraft, such a conversion required a complete change-over of materials, parts, machinery, etc. As no plans had been made during peacetime for this change-over, it was expected that there would be a blank period of several months before the increased production of Type 91 torpedoes could be achieved. However, this precaution prevented the disruption of supplies in regard to air operations after the outbreak of war.

#### War Preparations Upon Decision to Go to War

At the conference in the Imperial Presence held on 5 November 1941, a decision was reached on the "Outline for the Execution of the National Policy of the Empire," the main point of which was "to continue negotiations with the United States, but, in case no accord can be reached, a resolution to declare war will be adopted and preparations for operations will be undertaken. If a diplomatic settlement cannot be reached by the beginning of December, the decision to declare war will be made immediately."

As a result of this decision, actual responsibility concerning Navy war preparations was shifted from the naval administration authorities to the Supreme Command. In preparation for the unprecedented operations against the United States and Great Britain, the strongest and wealthiest nations in the world, in a theater covering almost the entire Pacific area, the Navy Ministry and all sections in charge of construction, repairs, replenishment and supply had to make all-out efforts under conditions of top secrecy.

With the launching of the United States' Stark Plan, Japan intended to set up the Sixth Armament Replenishment Plan. Just when the problem of how to adjust this plan with the Fifth Armament Replenishment Plan was being studied, the decision to declare war was reached. The Japanese Navy, therefore, ordered the construction of 32 submarines and one bombing target ship to be included in the Fifth Armament Replenishment Plan. At the same time, they ordered the increased production of both operational and training aircraft.

It was decided that an additional 500,000 tons of vessels, including the Yawata Maru, would be requisitioned for the purpose of supplementing the lack of all types of ships. Work was begun on the Yawata Maru in January 1942, and toward the end of May it was completed as the converted aircraft carrier Unyo (15,000 tons).

### Organization of Special Naval Units

#### Construction Battalions

Eight construction units were organized for the purpose of

constructing airfields in occupied territories. The plan was to dispatch five units to the Philippines, two to the Fourth Fleet area (Inner South Seas Area) and one to the Malay area. Regular officers had no experience in this type of work. The units, therefore, were composed mostly of nonmilitary men who were compelled to carry a large amount of equipment with them. It was extremely difficult under the circumstances to conduct preparations and transportation at a top secret level. A meeting to discuss the duties of the leaders was delayed until after 10 November, and the men were dispatched toward the end of the month in order to join their assigned units in time for the operations.

#### Special Landing Units

Two units were organized and trained in each naval district. They were assigned to the respective invasion forces and dispatched rapidly.

The airborne units which were being trained in the Tateyama Sector under the command of the Yokosuka Naval District were the first of their kind in Japan. They were well trained and on 20 November were assigned to the Combined Fleet.

#### Fuel Exploitation Unit

As it was presumed that all oil refining facilities would be destroyed by the authorities in the Dutch East Indies, the 101st Naval Fuel Depot was established for the purpose of restoring such facilities speedily and effecting the greatest output in production. It was planned to send this unit to Dutch Borneo simultaneously

with the occupation of that area. As a large quantity of machinery was necessary and technical aid from commercial firms was required, it was especially difficult to maintain secrecy with this project.

#### Other Units

Preparation for the dispatch of fire-fighting units for oil fields, personnel for military post offices and weather units was undertaken simultaneously. No great difficulty was encountered with these units.

On 5 November 1941, the Chief of the Naval General Staff issued directives to all naval operational forces to commence defensive preparations in conformity with plans regarding their deployment. All surface units strove for the early completion of the planned emergency war preparations and all Naval Districts made efforts to intensify security patrols by organizing garrison units, comprised of members of the former naval barracks.

#### Progress of Armament and Other War Preparations at the Time of the Outbreak of War

Prior to the outbreak of war, successive supplementary armament and other war preparations had been undertaken and their completion had been accelerated to the utmost. The resultant progress in ship construction at the time of the outbreak of war on 8 December 1941 was generally as shown below. In addition, the Fourth Armament Replenishment Plan was almost completed and such preparations as the requisitioning and completion of converted vessels, strengthening of ground and port defenses, and procurement and

transportation of equipment and the necessary war materials were in progress.

Number of Ships at the Time of the Outbreak of War

Battleships	10	301,400 tons
Aircraft Carriers	10	152,970 tons
Heavy Cruisers	18	158,800 tons
Light Cruisers	20	98,855 tons
Destroyers	112	165,868 tons
Submarines	65	97,900 tons
Others	156	490,384 tons
Total	391	<u>1,466,177 tons</u>

Ships under construction

Battleships	2	128,000 tons
Aircraft Carriers	4	77,860 tons
Light Cruisers	4	42,700 tons
Destroyers	12	27,120 tons
Submarines	29	42,554 tons
Others	37	57,225 tons
Total	88	<u>375,459 tons</u>

Requisitioned Vessels

By the middle of 1940, the vessels requisitioned for the purpose of continuing the China Incident amounted to 200,000 tons.

At the end of 1940 it was decided to requisition an additional 1,650,000 ship tons and to continue to convert these vessels until the outbreak of war. At the time of the outbreak of war, the state of these vessels was:

Completely equipped converted vessels	522	approximately 1,150,000 tons
Converted vessels being equipped	41	approximately 170,000 tons
Vessels to be converted or equipped	180	approximately 290,000 tons

Requisitioned vessels which  
would not be converted

approximately 200,000 tons

Total

approximately 1,810,000 tons

### Air Strength

Details of air strength at the time of the outbreak of war are shown on Chart 6.

### Naval Personnel

The number of naval personnel at the time of the outbreak of war was as shown hereunder:

	Active Service	Recalled	Reserve	Total
Officers	10,000	506	1,338	11,844
Special Duty Officers	2,997	775		3,772
Warrant Officers	5,262	3,415		8,677
Petty Officers and men	238,235	60,312		298,547
Total	<u>256,494</u>	<u>65,008</u>	<u>1,338</u>	<u>322,840</u>

The number of officers, according to their rank and branch of service, is shown on Chart 7.

Chart 6 -- Air Strength at time of Outbreak of War

Details	Operational Air Group				Training Air Group		Shipborne		Total	
	Outer Combat Force		Inner Combat Force		O	R	O	R	O	R
Fighters	O*	R*	O	R	O	R	O	R	O	R
Interceptors	180	51	36	12	50	31	149	10	415	104
Night fighters										
Carrier bombers	9	5	36	12	38	19	135	9	218	99
Carrier attack planes	6	2	42	14	165	83	189	9	402	108
Land reconnaissance planes	18	6							18	6
Land bombers										
Land attack planes	255	84	80	20	4	2			339	106
Patrol planes										
Transports	38								38	
Fighter Seaplanes										
2-seater reconnaissance seaplanes	10	4	28	14	24	12	99	12	161	42
3-seater reconnaissance seaplanes	16	7	28	16	40	20	74	11	158	54
Submarine reconnaissance planes										
Flying boats	36	12	13	5					49	17
Land trainers					286	286			286	286
Seaplane trainers					94	94			94	94
Utility trainers					84	84			84	84
Total	568	171	263	93	785	631	646	45	2262	940

O - Operational  
R - Reserve



Chart 7 -- Roster of Naval Officers at Time of Outbreak of War

	LINE			ENGINEER			PAYMASTER		MEDICAL		PHARMACY	SHIP-BUILDING	ENGINE MANUFACTURING	ORDNANCE MANUFACTURING	TOTAL			TOTAL	
	Active	Recall	Reserve	Active	Recall	Reserve	Active	Recall	Active	Recall	Active	Active	Active	Active	Active	Recall	Reserve		
Admiral	11																	11	11
Vice-Admiral	62	4					3		3			2	1	1	72	4			76
Rear-Admiral	151	21					16		18			5	1	8	199	21			220
Captain	492	232		185	11		84	12	73			15	13	49	911	255			1,166
Commander	695	26		316	2		112	2	90		4	22	13	35	1,287	30			1,317
Lt Commander	720	33	12	338	4		112	2	208	27	7	19	13	52	1,469	66	12		1,547
Lieutenant	887	8	273	338	1	77	263	2	382	112	14	38	36	170	2,128	123	352		2,603
Lt(Jr Grade)	455	1	461	144		115	427		468	6	29	55	122	288	1,988	7	576		2,571
Ensign	636		240	157		158	62		45		8	14	49	244	1,215		398		1,613
Midshipman	440			96			47					6	30	101	720				720
Total	4,549	325	988	1,574	18	350	1,126	18	1,287	145	62	176	278	948	10,000	506	1,338		11,844

## Chapter II

### Outline of the Fifth and Sixth Naval Armament Replenishment Plans

The Fifth Naval Armament Replenishment Plan was deliberated with the object of counteracting the Third Vinson Plan, but, in consideration of the huge scale of the Third Vinson Plan, and the fact that the United States had been adopting supplementary plans each year, calling for considerable strength, it was impossible for Japan, from the standpoint of her economic and industrial power, to establish a plan to counteract these plans. The Japanese Navy studied the situation carefully during 1940, and finally an understanding was reached between the Navy Ministry and the Navy General Staff around May 1941, to execute a plan starting from simple and prepared armament. At the same time, it was decided that, in regard to the budget, formal steps would be taken later.

Details of the strength of vessels and air armament included in armament preparations requested in a preliminary discussion between the Navy Ministry and the Navy General Staff are shown in Chart 8.

The Navy Ministry studied these requests and decided that, in view of the budget, the materials on hand and the production facilities available, the plan for ship construction should be a 9-year plan starting in 1942 and ending in 1950. The necessary expenditure was estimated at ¥1,400,000,000 (¥1=\$1). Although it was difficult to estimate the completion date of the air armament program, it was believed that it would require a shorter period

Chart 8 — Fifth Armament Replenishment Plan

Vessel strength requested

Battleships (Yamato-Class)	3	
Super cruisers (new Type)	2	
Aircraft carriers (Taiho Class)	3	
Seaplane tenders	2	
Flying boat tender (Large)	1	
Flying boat tenders (Small)	6	
Cruisers (Medium)	5	
Cruisers (Light)	4	
Submarine tenders	2	
Minelayers	2	
Netlayer	1	
Destroyers (Class A)	16	
Destroyers (Class B)	16	
Submarines (Class A)	2	
Submarines (Class B)	12	
Submarines (Medium)	9	
Submarines (Small)	9	
Submarines (Navy Type large)	10	
Submarines (Supply)	3	
Gunboat (Large)	1	
Gunboats (Small)	2	
Escort ships (Class A)	4	
Minesweepers	10	
Subchasers	18	
Light minelayers	8	
Naval auxiliaries (Transport)	3	
Naval auxiliary (Survey)	1	
Naval auxiliary (Provision)	1	
Naval auxiliary (Icebreaker)	1	
Naval auxiliaries (Repair)	2	
	<hr/>	
Total	<u>159</u>	650,000 tons

Chart 8 -- Air strength requested (cont'd)

Operational Air Group

<u>Type of aircraft</u>	<u>Number of Units</u>	<u>Number of aircraft</u>
Land fighters	14	336
Fighter-bombers	10	240
Land reconnaissance planes	2	48
Fighter seaplanes	12	288
Bomber seaplanes	2.5	40
Flying boats (Medium)	10	120
Flying boats (Large)	8	96
Patrol planes	6.5	104
Transports	2	48
Total	<u>67 units</u>	<u>1,320</u>

The grand total at the time of completion was 132 units.

Fifth Armament Replenishment Plan (Cont'd)

Training Air Group

<u>Type of aircraft</u>	<u>Number of Units</u>	<u>Number of aircraft</u>
Land trainers	10	240
Seaplane trainers	9.5	228
Utility trainers	21.5	516
Land combat planes (Small)	22.5	608
Combat seaplanes (Small)	11	198
Land combat planes (Medium)	10.5	252
Combat seaplanes (Medium)	8	96
Total	<u>93</u>	<u>2,138</u>

The grand total at the time of completion was 156 units.

of time than the ship program. The estimated amount required for the air armament program was ¥2,000,000,000.

As a tremendous amount of expansion would be required in both land and sea installations to cope with this program, ¥1,900,000,000 was set aside for installations for increasing production capacity and ¥500,000,000 for training installations.

In order to achieve this objective, it was necessary for naval armament preparations to receive priorities in regard to securing personnel and materials, and the Army was asked to make concessions in this regard.

In accordance with the above, the Navy Ministry decided to convert two of the three Taiho-class aircraft carriers into Hiryu-class vessels and to support the over-all plan of the Navy General Staff.

In July 1941, just when various plans were gradually taking shape after the basic plan of the Fifth Armament Replenishment Plan was informally decided, the United States suddenly announced the Stark Plan, with its astronomical naval armament plans. This clearly demonstrated the United States' determination to dominate the seas. The plan was a great shock to the Japanese Navy and a quick counter-plan was sought. The Navy Ministry and the Navy General Staff conferred in regard to the over-all adjustment of the Fifth and Sixth Armament Replenishment Plans, and, toward the end of October, the Navy General Staff formally presented the Fifth and Sixth Armament Replenishment Plans simultaneously to the Navy Ministry. The Navy Ministry replied that utmost efforts would be

made for the execution of both plans in accordance with the decision to declare war, although nothing definite could be said about the Sixth Armament Replenishment Plan. In the meantime, air armament and the completion of 32 submarines of the Fifth Replenishment Plan would be undertaken, while other armament preparations contained in the same plan would be conducted after the budget of the following fiscal year was approved.

Immediately after the outbreak of the Pacific War, successive war preparation projects were undertaken. Japan was faced with a basic revision of the ratio between air and sea strength. Equipment of large ships called for in the ship plan was suspended and efforts were concentrated on small vessels and local strength. The Fifth Armament Replenishment Plan was first changed to the Revised Fifth Armament Replenishment Plan and later to the Third Stage Revised Armament Production Plan. The details of this revision are given in Monograph No 169, "Situation from Outbreak of War to Revised Fifth Armament Naval Armament Replenishment Plan."

The strength requested by the Navy General Staff of the Navy Ministry for the Sixth Armament Replenishment Plan was:

Ship strength: 197 vessels totaling approximately 800,000 tons, including 4 battleships, 4 super cruisers, 3 aircraft carriers, 12 cruisers, 34 destroyers and 67 submarines.

Air strength: 68 operational air groups (making a total of 200 groups after completion.)

Despite the fact that nothing definite was established in regard to such matters as the budget, because details of strength

had not been decided, the Navy Ministry acknowledged the Sixth Armament Replenishment Plan. When war broke out, however, through battle experiences, a complete revision of plans for shipbuilding was brought about and the Sixth Armament Replenishment Plan ended as a mere paper plan.

As a condition of going to war, the Navy requested 1,450,000 tons of steel (including the priority allotment of secondary materials) and received an allotment of 1,100,000 tons as compared to the Army's 700,000 tons. This was tantamount to national priority being granted to naval armament preparation, and greatly contributed to the acceleration of naval armament in preparation for war.