

Permission was obtained on January 30, 1946 for the conversion of a former naval transport boat into a factory ship (SCAJAP-1050), and in February of the same year, a whaling factory ship with three catchers appeared for the first time after the war's end.

Later, Allied directive on June 22 of the same year (Memorandum SCAPIN-1033) extended the designated fishing area so as to cover the Bonin waters, rendering it unnecessary to obtain any special permission for whaling in those waters from that time on.

The Antarctic whaling was permitted by the General Headquarters (6-Aug-1946 SCAPIN-1103), in spite of the objections by other whaling countries concerned in order to relieve acute food shortage of Japan at that time.

Of her 6 whaling fleets, Japan had lost all factory ships and most of the catchers in the war. So, for the first expedition, two fleets of 2 factory ships refitted, from 10,000 ton class tankers, 12 catchers and 7 carriers were sent to the designated area.

In the 1947-48 season, the Memorandum of June 21, 1947 (SCAPIN-1737) allowed an expedition on almost the same scale (2 factory ships, 12 catchers and 13 carriers). A similar permission has been given for the 1948-49 season.

II. Actual Conditions of Whaling

(1) Control

The Allied Authorities, before permitting whaling in the near waters of the Bonin, issued a Memorandum dated 3 November 1945 (SCAPIN-233), directing the Japanese Government to observe strictly the 1931 Geneva Convention, the 1937 London Agreement and the 1933 London Protocol. Two additional Memoranda of 24 August 1946 (SCAPIN-1154) and 26 September 1947 (SCAPIN-1785) called the Japanese Government's attention to the conventions concluded after the war, directing strict observance thereof.

In compliance to these Allied directives, the Government revised on September 30, 1946 the Whaling Control Ordinance and the Factory-ship Fishery Ordinance respectively, incorporating therein provisions identical with those of the international whaling agreements.

Finally, however, the Memorandum dated 23 November 1948 (SCAPIN-1942) directed the Japanese Government to observe henceforth the "International Convention for the Regulation of Whaling signed at Washington D.C. 2 December 1946," which established a renewed system of international regulation for the whale fisheries on the basis of the principles embodied in the provisions of the foregoing agreements on whaling. Therefore, the Japanese Government lost no time to revise again her domestic regulations mentioned above in the light of the Convention which prescribes more strict limitations on whaling. The revised regulations were put into effect on 14 December 1948.

Furthermore with regard to coastal whaling, a rigid control measure has been enforced against the breach of the regulations since June 1948.

In the Antarctic whaling, together with Allied inspectors 3 Japanese inspectors are on board every factory ship (the Convention required only 2 inspectors) to supervise the operation. On the coastal whaling also, inspectors are dispatched to principal land stations, though whaling conventions do not necessarily require it (3 inspectors in 1947; 5 in 1948).

(2) The Catches

In the Antarctic, altogether 1,165 whales were taken during 1946-47 season; and 1,320 during 1947-48. Details of the catch are shown in the following table.

	1946-47 Expedition			1947-48 Expedition		
	1st Fleet	2nd Fleet	Total	1st Fleet	2nd Fleet	Total
Blue whale	294	396	690	274	436	710
Fin "	185	239	474	211	397	608
Sperm "	1		1	2		2
Total	480	685	1,165	487	833	1,320

The second expedition showed splendid results. The average length of blue whales taken by the first fleet (the Hashidate-maru) and the second fleet (the Nisshin-maru No. 1) reached respectively 79.01 and 79.89 feet; and the size of fin whales captured demonstrated a good measure of technical improvement over the first expedition.

The Average Length of Whales Taken

(in feet)

	1946-47 Expedition		1947-48 Expedition	
	Blue whales	Fin whales	Blue whales	Fin whales
1st Fleet	77.09	65.26	79.01	68.85
2nd Fleet	77.99	65.97	79.89	68.77

The killing against the international regulations, of such whales as lactating or undersized animals throughout the first and second expeditions, amounted to only 0.6 per cent of the total haul—a noteworthy figure in comparison with the records of other nations (Note 10).

Catch of Prohibited Whales in Antarctic Expeditions

Season		Undersized whales							Milk-filled whales	Grand Total
		1	2	3	4	5	6	7		
		Total								
		foot feet feet feet feet feet feet								
1946-47	1st Fleet	B1							1	1
	2nd Fleet	B2							B1 3	B2 5
1947-48	1st Fleet	B1	B1	B1				3	F2 5	
	2nd Fleet	B1							1	B1 3 F1

(B—Blue whales)
(F—Fin whales)

By whaling in the home waters, 1,863 and 1,992 whales were taken in 1946 and in 1947 respectively, of which 6 per cent of the former (113)

(Note 10)

At the meeting held on June 25, 1948 concerning Japan's Antarctic whaling in the 1948-49 season by representatives from the Allied Headquarters, the Ministry of Agriculture and Forestry and the whaling companies, Lieutenant Colonel H. G. Schenck, Chief of Natural Resources Section said:

"During the last expedition, compliance with the International Whaling Conventions and accepted whaling practices was generally satisfactory. It is my desire that the fleets operating during the 1948-49 season do even better."

And Mr. W. C. Neville, speaking for the Chief of Fishery Section stated: "the number of violations of the International Whaling Agreement during the 1947-48 expedition was 0.6 per cent of the total catch. This proportion compares favorably with the record of other nations."

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and 17 per cent of the latter (350) were caught in the Bonin waters. The details are as follows.

Catches in Home Waters

	Number of Whales Taken					
	1946			1947		
	Bonin Islands Waters	Other Areas	Total	Bonin Islands Waters	Other Areas	Total
Sperm Whales	72	957	1,029	195	960	1,155
Sei "	29	546	575	150	333	533
Humpback "	12	8	20	1	12	13
Others		239	239	4	287	231
Total	113	1,750	1,863	350	1,642	1,992

(3) Treatment of Carcass

Besides the use of whale meat for food as stated above, we are making efforts to utilize all parts of the carcass, including internal organs, skin and bone, whereas other nations attach the importance only to oil extraction. Therefore, while we fall somewhat behind other nations as to the quantity of oil produced per whale, we stand far above them in the percentage of utilization of whale carcasses.

In the Antarctic whaling, the average amount of oil produced from one blue whale unit is about 20 tons in general, while our factory ships derived 13 tons in the average in the first expedition and a little over 17 tons in the second. If whale meat and other items are added, our products will total 37 tons in the first expedition and 44 tons in the second. We are endeavoring now to realize the mark of 50 tons in future.

In this connection, at the press meeting at the Allied Headquarters on April 16, 1948 concerning the second Antarctic whaling expedition, Mr. C. M. Adams of the Natural Resources Section made the following statement:

"During the season no serious accidents or untoward incidents occurred with the exception of engine trouble which curtailed the activities of some of the catcher boats.

This engine trouble was partly responsible for the expedition not

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obtaining its goal of taking and processing 1,700 whales. Actually 1,321 whales were taken. This figure is 379 less than the programmed figure. However, the efficiency of operations of the two factory ships was so high that the goal of production of whale oil and meat was almost realized. An average production of 43 metric tons of all products per blue whale unit was obtained. Accurate statistics upon which to base a comparison are not available, but it is believed that this average production is a new record for complete utilization of whale carcasses."

Results of Post-war Antarctic Whalings

(in metric tons)

	1946-47 Expedition			1947-48 Expedition		
	1st Fleet	2nd Fleet	Total	1st Fleet	2nd Fleet	Total
Products						
Whale Oil	3,700	8,560	12,260	6,765	11,065	17,830
Salted Meat, Blubber and Ventral Grooves	10,557	9,777	20,334	7,372	10,129	17,501
Frozen Meat, Blubber and Ventral Grooves	—	1,832	1,832	2,237	6,605	8,842
Salted Liver	50	—	50	—	—	—
Liver Oil	—	4.5	4.5	7.3	6.5	13.8
Baleen	—	6.3	6.3	31	131	162
Others	—	—	—	532	514	1,046
Sperm Oil	—	—	—	10	—	10
Total	14,307	20,179.8	34,486.8	16,954.3	28,450.5	45,404.8
Number of Whales Taken in Blue-whale Unit	387	541	927	380	635	1,014
Average Amount of Products per Blue whale	36.9	37.3	37.2	44.6	44.8	44.7
Average Amount of Oil produced per Blue-whale	9.5	15.8	13.2	17.3	17.4	17.5

The International Whaling Convention prescribes that whale carcass should be taken up on the deck of the factory ship for treatment within

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33 hours from the time of killing. As a matter of fact, Japanese ships take much less time owing partly to the necessity of acquiring fresh meat. In the 1947-48 expedition, the second fleet (the Nisshin-maru) established a record—5 hours and 46 minutes on an average for treatment of a blue whale and 4 hours and 18 minutes for a fin whale.

Whales taken in the home seas and the Bonin Islands waters are treated first of all for food. Moreover, all the parts of the carcass are utilized by every possible method. Especially studies in the field of scientific processing are being conducted, for extraction of insulin from pancreas, special use of blood and other purposes. The results of the whaling in the Bonin Islands waters and the home waters in 1946 are as follows:

Results of Whaling in Bonin Islands Waters in 1946

No. of whales Taken	Kind	Products	
		Quantity (in metric tons)	Total
113	Sperm Oil	20	1,005.4
	Meat	487.4	
	Blubber	302.0	
	Others	106.0	

Results of Whaling in Home Waters (Excluding Bonin Islands Waters) in 1946

No. of Whales Taken	Kind	Products	
		Quantity (in metric tons)	Total
1,750	Whale Oil	972.18	22,839.98
	Meat, Blubber, etc. (for food)	18,701.83	
	Bone-meal	629.60	
	Bone	52.61	
	Baleen	50.58	
	Others	2,433.18	

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CONCLUSION

As stated in Chapter I, the whaling, especially the Antarctic whaling, is of the utmost importance for our nation as a source of protein and of fats and oils. Thanks to the valuable assistance and guidance rendered by the Allied Headquarters, Japan's whaling has recovered steadily after the war's end.

From the technical viewpoint, Japan achieved results as satisfactory as any shown by her precursors in this field in point of the average size of whales taken, the percentage of utilization, the time required for treatment, etc. It is encouraging that the second expedition was more successful than the first. Improved techniques combined with better control, reduced almost to the minimum the cases of violation of the International Convention in both the first and second expeditions. Our object of whaling consists not so much in the number of whales taken as in the fullest possible utilization of the carcass. This is shown by the number of whales hauled in our Antarctic whaling,—namely 927 blue whale units in total in the first expedition and 1,014 in the second, which amounted to only 5.7 and 6.3 per cent of the total number of 16,000 blue whale units allowed for the year under International Regulation.

Japan's whaling fleets comprise many more auxiliary vessels than those of other countries because of the manifold phases of our whale treatment. Especially for the present, the fact that we are not permitted to call at foreign ports for fuel and other supplies on the way to and from the Antarctic necessitates unusually large fleets. And because of their size, the sphere of operation of our fleets is necessarily limited.

Such being the case, Japan's participation in the Antarctic whaling presents no serious menace to other countries. It is hoped therefore that the continuation of Japanese Antarctic whaling will be approved by all nations concerned.

Japan is ready to adhere at any time to the International Whaling Convention, on the basis of which our related laws and regulations have already been revised as an internal measure.

**DAMAGE CAUSED TO JAPAN
BY THE PACIFIC WAR
AND
MATERIAL DAMAGE CAUSED
BY THE ATOMIC BOMBS
IN
HIROSHIMA AND NAGASAKI**

**MINISTRY OF FOREIGN AFFAIRS
JAPANESE GOVERNMENT**

APRIL 1949

This is a summary of the general report prepared in February 1949 by the Investigation Section, Planning Division of the Economic Stabilization Board.

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INTRODUCTION

1. It is impossible to compile a complete statistics of the War damage sustained by Japan in the Pacific War owing to the loss or destruction of much of the basic data in airraids and in the post-sur-render confusion of the country.

The present Report furnishes only a partial picture, containing the verified figures based upon existing records and documents. The damages to intangible assets such as copyrights and patent rights, as well as the property losses in former Japanese possessions such as Korea and Formosa are omitted. The loss of national property for military purposes such as warships and airplanes is cited only for reference.

The war damage is divided into two parts: human losses and material damages. Civilian casualties are tabulated according to cause (airraid, or naval bombardment), and to prefectures, cities and towns, while the losses among the armed forces are classified according to branches and types of service (army or navy, servicemen or service civilians). Losses of civilian properties are classified according to kind and cause, direct or indirect. Damages to production equipment and capacity are shown according to divisions of industry.

2. The following tables give summaries of human losses and material damages.

Table I. Human Losses

A. Total Losses		
Total	2,538,023	(100%)
Killed	1,834,793	(73%)
Injured and Missing (Note 1)	678,232	(27%)
B. Losses of Civilians (Note 2)		
	Figures	Proportion to Total Population of Japan Proper as of February 1944
Total	668,315(100%)	0.9% (1 for every 111)
Killed	299,485 (45%)	0.4% (1 for every 250)
Injured and Missing	368,830 (55%) (Note 1)	0.5% (1 for every 200)

(1)

(For Reference)

Victims of Airraid

and Naval Bombardment 8,754,041 12.1% (1 for every 8)

C. Losses of Servicemen and Service Civilians (Note 3)

Total	1,864,710	(100%)
Killed	1,555,308	(83%)
Injured and Missing	309,402	(17%)

Note 1: As to the number of injured servicemen and service civilians, only those receiving the "injured serviceman pension" are counted.

Note 2: Figures ascertained up to May 1948.

Note 3: Total figures for the period from 1912 up to the end of 1948. As to the injured and missing, the figure accounts for soldiers and army service civilians known up to December 1945, so that considerable number is yet left out.

Besides, there are some 240,000 army men of whom no information is obtainable, and who are also excluded from the above figures.

Table II. Material Damages

A. Damages to National Wealth

Damage to National wealth (Note 1)	Total Amount of Damage	Direct Damage (Note 6)	Indirect Damage (Note 7)
Total	¥ 65.3 billion (4,244.6 billion)	¥ 49.7 billion (3,228.7 billion)	¥ 15.6 billion (1,015.9 billion)
Damage to General Asset National wealth (Note 2)	64.3 billion (4,178.1 billion)	48.7 billion (3,162.2 billion)	15.6 billion (1,015.9 billion)
Damage to Other National wealth	1.0 billion (66.5 billion)	1.0 billion (66.5 billion)	—
Rate of Damage (Note 3)	25%	19%	6%
Per Capita Damage to Japan's Population as of 1 Aug. 1948	814 (53,000)	619 (40,000)	195 (13,000)
Damage per Square Kilometer	220,000 (1,464,000)	170,000 (11,140,000)	50,000 (3,500,000)

(2)

(For Reference)			
Damages to Warships and Airplanes (Note 4)	40.4 billion (2,624.3 billion)	35.9 billion (2,200.6 billion)	6.5 billion (424.2 billion)
Total Damages to National Wealth, including those to Warships and Airplanes	105.7 billion (6,869.4 billion)	83.6 billion (6,429.3 billion)	22.1 billion (1,410.1 billion)
Rate of Damage (Note 5)	36%	28%	8%
Per Capita Damage to Japan's Population as of 1 Aug. 1948	1,317 (86,000)	1,011 (68,000)	276 (18,000)
Damage per Square Kilometer	360,000 (18,800,000)	290,000 (18,720,000)	70,000 (4,970,000)
General Asset National Wealth Remaining Intact at the War's End	185.2 billion (12,275.1 billion)	An increase of 1.1% as compared with 1935	
Total of General Asset National Wealth in 1935	186.8 billion (12,188.8 billion)		

B. Damage to Production Equipment and Capacity

Highest Rate of Damage	58% (petroleum refining industry)
Lowest Rate of Damage	0.7% (staple fibre plants)

Note 1: Figures do not indicate replacement prices, but the valuation of actual damages made at the war's end by taking depreciation into consideration. If valued in terms of replacement prices, the total damage would amount to 1.5 times as much, or 98 billion yen (6,300 billion yen). The figures in parentheses are the values as of the end of 1943, that is, 65 times as much of the war's end value. Black-market prices are not considered. All figures are derived out of valuation upon official prices, or their equivalents when there are no official prices.

Note 2: Rate of damages only to general asset national wealth.

Note 3: Warships and airplanes remaining at the war's end are regarded as indirectly damaged properties.

Note 4: Rate of damages only to asset national wealth.

Note 5: Damages caused by airraid and naval bombardment, etc.

Note 6: Damages due to scrapping, thinning out of buildings and to inadequate repair and maintenance.

I. HUMAN LOSSES

1. Home Population Losses

(1) General Losses

The home population losses refer to the casualties among the civilian population in Japan (with her territories defined as at present) caused directly by airraids and naval bombardments. The figures given below are as of May, 1948.

A breakdown of the losses follows:

Table III. Losses of Civilian Population

By Kind of Losses and Area	Total Number of Victims	Losses by Airraids	Losses by Naval Bombardments, etc.
Killed	Urban	280,705	1,280
	Rural	18,780	459
	Total	299,485	1,739
Severely Wounded	Urban	140,369	280
	Rural	5,835	78
	Total	146,204	358
Slightly Wounded	Urban	156,692	746
	Rural	10,626	81
	Total	167,318	827
Injured	Urban	28,912	0
	Rural	2,336	312
	Total	31,248	312
Missing	Urban	23,320	17
	Rural	690	29
	Total	24,010	46
Total	Urban	629,998	2,323
	Rural	38,317	959
	Total	668,315	3,282

The above list shows that the casualties among population totaled slightly over 668,000, of which no less than 99.5 per cent was caused by airraids and the remaining 0.5 per cent only by other causes, mainly naval bombardments.

The following list shows the comparative percentages of losses due to airraids and to naval bombardments and other causes, as classified by kind of losses:

Table IV Comparative Percentage of Human Losses by Causes

Kind of Losses	Total	By Airraids	By Naval Bombardments, etc.
	Per cent	Per cent	Per cent
Killed	44.81	44.55	0.26
Severely Wounded	21.88	21.82	0.06
Slightly Wounded	25.04	24.91	0.13
Injured	4.68	4.64	0.04
Missing	3.59	3.58	0.01
Total	100.00	99.50	0.50

The above Table IV shows the overwhelmingly large percentage of the deaths caused by airraids.

As classified by area, the urban areas account for over 94 per cent (630,000 persons out of a total of 668,000) of the losses, and the rural areas for slightly less than 6 per cent (38,000 persons). Comparative percentages follow:

Table V. Comparative Percentage of Human Losses by Urban and Rural Localities

Kind of Losses	Total	Urban	Rural
	Per cent	Per cent	Per cent
Killed	44.81	42.00	2.81
Severely Wounded	21.88	11.00	0.88
Slightly Wounded	25.04	23.45	1.59
Injured	4.68	4.33	0.35
Missing	3.59	3.49	0.10
Total	100.00	94.27	5.73

It will have been seen from the above that the heaviest losses of the home population were caused in urban communities by airraids, the number of persons involved being 628,000, or 94 per cent of the total losses. Even in the case of the killed alone, the losses in urban communities account for 42 per cent (279,000 persons) of the total.

(2) Losses Classified by Prefecture

Below is given a list of Prefectures whose respective victims exceed 10,000 in number. The figure for each prefecture represents the number of the casualties that occurred therein, and the victims are not necessarily its residents.

Table VI. Prefectures Whose Victims Exceed 10,000 in Number

	Total: No. of Persons	Per cent on Whole Country	Killed: No. of Persons	Per cent on Whole Country
Whole Country	668,315	100.0	299,485	100.0
Tokyo-to	216,988	32.4	97,091	32.4
Hiroshima Prefecture	147,207	22.1	86,141	28.7
Nagasaki Prefecture	69,298	10.4	26,238	8.8
Osaka-fu	39,436	5.9	11,089	3.7
Hyogo Prefecture	32,865	4.9	11,246	3.8
Aichi Prefecture	27,120	4.1	11,324	3.8
Kanagawa Prefecture	22,839	3.4	6,637	2.2
Shizuoka Prefecture	16,301	2.4	6,473	2.1
Total of Preceding Prefectures.	572,054	85.6	254,179	85.5
Others	96,261	14.4	45,306	14.5

It is natural that heavy losses occurred in Tokyo, Osaka and Hyogo, while the fact that Hiroshima and Nagasaki Prefectures sustained the heaviest losses next to Tokyo is due to the atomic bomb raids. The above-mentioned eight Prefectures, both in the total number of casualties and in the number of the killed alone, account for no less than 86 per cent of the figures for the whole country. The wounded in Tokyo-to comprise 32 per cent (also 32 per cent in the killed) of the total for the whole country, testifying to the devastating blow the city has suffered.

(3) Losses Classified by City

The classification of losses by city is made on the basis of the number of casualties occurring in each area, as in the case of classifications by Prefecture in (2) above. Here, however, the figures are as of May, 1948.

Below is given a list of cities where heavy casualties occurred, with the Tokyo-to area coming first, followed by atomic-bombed Hiroshima and Nagasaki. All cities other than those given in the list had casualties less than 10,000 each in number.

Table VII. Human Losses by Cities

	Total: No. of Persons	Per cent	Killed: No. of Persons	Per cent
Total of All Cities	629,998	100.0	280,705	100.0
Tokyo-to Area	211,804	33.6	95,374	31.0
Hiroshima City	129,558	20.6	78,159	27.8
Nagasaki "	65,680	10.4	23,753	8.5
Osaka ..	35,467	5.6	9,216	3.3
Kobe "	23,353	3.7	6,789	2.4
Yokohama "	18,830	3.0	4,616	1.6
Nagoya "	18,759	3.0	8,076	2.9
Total of Preceding Seven Cities	503,451	79.9	226,004	80.5
Others	126,547	20.1	54,701	19.5

As seen from the above, victims in the seven cities mentioned above amount to slightly less than 80 per cent (slightly over 80 per cent in the number of the killed) of the total urban casualties, the Tokyo-to area alone accounting for 210,000, or slightly less than 34 per cent of the totals.

2. Losses in Servicemen and Service Civilians

(1) General

The "losses in Servicemen and Service civilians" comprise only those resulting directly from warfare regardless of whether they occurred in home territories or overseas. However, the killed do not include those who were sentenced to death or who died of accidents or illness. The numbers of casualties given below have been arrived at by collating the figures covering the period from 1942 to 1948.

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According to these figures, the total losses among servicemen and service civilians in the Pacific War number 1,860,000, or about three times the civilian losses. Of those losses, the killed alone number 1,560,000, which is as many as five times the killed by the war among the civilian population in the home islands.

The losses of servicemen and service civilians are classified below by service and by the kind of casualties. It will be seen that Army deaths show the highest percentage against the total number of casualties.

Table VIII. Losses of Servicemen and Service Civilians Classified by Service and Casualties

	Total:		Killed:		Wounded & Missing:	
	No. of Persons	Per cent	No. of Persons	Per cent	No. of Persons	Per cent
Army	1,435,376	77	1,146,429	61	295,247	16
Navy	423,034	23	411,879	22	14,155	1
Total	1,861,710	100	1,555,308	83	309,402	17

From the above figures, the ratio between the killed on one side and the wounded and missing on the other works out at 79 to 21 for the Army and at 97 to 3 for the Navy. Thus the ratio of the killed in the Navy is much higher than that in the Army. This is because Navy casualties were caused mainly by the sinking of ships.

It has to be added that the term "wounded", as used here, means recipients of pensions for wounded and disabled, and consequently their number is quite limited. Further, the above figures do not include the Army men, who are unaccounted for and who are estimated to about 240,000.

(2) Army

There were no adequate data showing the losses of Army servicemen and service civilians, owing to the difficulties encountered in making investigations concerning them. To make matters worse, the basic statistics that had been collected to meet immediate purposes were, for the most part, lost during the wartime and in the post-war confusion. It is practically

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impossible, with the scanty materials now available, to present accurately all the aspects of the enormous losses sustained over so extensive areas. In the circumstances, it is unavoidable to resort to assumption in some cases. Among the rest, figures for the war wounded are based on the statistics compiled by the First Demobilization Ministry as of December, 1945. These statistics are vitiated by considerable omissions, it being estimated that the actual number of war wounded is far larger than is reported by the Ministry. Moreover, unaccounted for persons, who are not included in the figures here, as already stated, number 240,000.

With these preliminary explanations, the Table IX is given below, setting forth the classification of losses by territory and by kind of casualties:

Table IX. Army Losses Classified by Casualties and Occupied Areas

	Total:		Killed:		Wounded:	
	No. of Persons	Per cent	No. of Persons (as of Dec. 21, 1945)	Per cent	No. of Persons (as of Dec. 1945)	Per cent
Total	1,435,676	100.0	1,140,329	100.0	295,217	100.0
U.S. Zone	520,396	36.6	485,717	42.6	34,679	11.7
British Zone	317,251	24.2	268,026	18.2	139,225	47.2
China	291,878	20.3	202,558	17.8	88,920	30.1
Australia	214,511	15.0	199,511	17.5	15,000	5.1
French Indo-China	8,803	0.6	2,803	0.2	6,000	2.0
Manchuria & Soviet Russia	12,124	0.8	7,483	0.7	4,641	1.6
Others	23,388	1.6	23,388	2.0	—	—
Total of Preceding Countries	1,418,351	93.8	1,129,886	99.0	288,465	97.7
Homeland	17,325	1.2	10,543	1.0	6,782	2.3

Losses in territories other than the homeland were for the most part directly to fighting. The U.S. zone of war shows the highest rate of the killed (34 per cent of total), followed by the British Zone (14 per cent), and China (also 14 per cent). Losses in the homeland were caused

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principally by airraids, the persons involved numbering a total of 17,000, and slight in comparison with most other territories.

For information, it may be stated that, as against the Army forces (6,412,655) at the end of 1944, the total losses stand at 23 per cent; the killed at 18 per cent; and the wounded at 5 per cent. In addition to the losses mentioned above, persons who became ill while in war service numbered 7,960,000, (counting repeated cases), of whom roughly 40 per cent required hospitalization.

(3) Navy

The losses of Navy servicemen and service civilians, as of December, 1943, reached a total of 430,000 persons, or 23 per cent of the total losses of servicemen and service civilians of both the entire armed forces. De-numbered 7,960,000, (counting repeated cases), of whom roughly 40 per cent of casualties, are given in the following tables:

Table X. Navy Losses.

A. Total Losses of Navy Servicemen and Civilians

	Killed	Wounded & Missing	Total
Total	414,879	14,155	429,034
Tokyo	41,663	746	42,409
Yokosuka	135,572	4,076	139,648
Kure	107,965	4,005	111,970
Sasebo	89,022	3,922	92,944
Maizuru	37,238	1,297	38,595
Chinkai	15	8	23
Takao	3,314	101	3,445

B. Losses of Navy Servicemen

	Killed	Wounded & Missing	Total
Total	300,386	12,275	312,661
Tokyo	10,153	251	10,404
Yokosuka	98,792	4,076	102,868
Kure	84,026	3,143	87,169

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Sasebo	73,630	3,521	77,151
Maizuru	33,785	1,284	35,069
Chinkai	—	—	—
Takao	—	—	—

C. Losses of Navy Service Civilians

	Killed	Wounded & Missing	Total
Total	114,493	1,880	116,373
Tokyo	31,510	495	32,005
Yokosuka	36,780	0	36,780
Kure	23,939	802	24,801
Sasebo	15,392	401	15,793
Maizuru	3,513	13	3,526
Chinkai	15	8	23
Takao	3,344	101	3,445

As the ratio of casualties between servicemen and service civilians stands at 7 to 3, while in the kind of casualties, servicemen also account for almost all the killed, or about 97 per cent, as shown below.

Table XI. Navy Losses Classified by Servicemen and Civilians

	Total:	Servicemen:	Service Civilians:
	Per cent	Per cent	Per cent
Killed	96.7	70.0	26.7
Wounded & Missing	3.3	2.9	0.4
Total	100.0	72.9	27.1

By jurisdictional area, the heaviest casualties are registered for the area under the jurisdiction of the Yokosuka Naval Station, with about 30 per cent of the total, followed by Kure and Sasebo.

As against the total Navy force (1,265,211) at the end of 1914, the respective Navy losses stand in the following ratios:

Losses of Servicemen 34 per cent (killed, 33 per cent).

Losses of Service civilians 25 per cent (killed, 24 per cent).

It may be added that persons who became ill while on duty numbered

27,475 (of whom, 20,630 were servicemen), and those taken prisoners 3,800 (of whom, servicemen numbered 1,561).

II. MATERIAL DAMAGES

1. Damages to National Wealth

(1) General

The term "damage to national wealth", as employed in this report, means the damage sustained by such various kinds of non-military property as are enumerated hereunder, including all damages whether caused directly by air raid, naval bombardment, etc., or indirectly by scrapping, evacuation removal, inadequate maintenance and repair, etc.

- Buildings—Including general dwelling-houses, factories, warehouses, railroad stations, shrines, temples, schools and all others, exception, however, those buildings designated as national treasures.
- Harbors and Canals—Quays, water-breakers, piers, stone embankments, mounds, etc.
- Bridges—All bridges, including not only those for ordinary thoroughfare but also special ones such as for access to harbors, excepting, however, bridges exclusively for railroad.
- Machines and Tools for Industrial Use—Machines and tools used in various kinds of industry.
- Railroad and Tramways—Tracks, bridges, tunnels and blocking signal equipment, etc.

6. Vehicles—Railroad rolling stock, such as locomotives, coaches, freight cars, electric cars, etc., automobiles including small-size cars and autobicycles, ox or horse wagons and all other conveyances.
7. Vessels—All vessels, from steamers down to lighters, excepting naval vessels.
8. Electric and Gas Supply Equipment—All facilities and equipment necessary for the production and supply of electricity and gas.
9. Telegraph, Telephone and Radio Equipment—All telegraph, telephone and radio facilities and equipment, whether for general or for special use.
10. Water Service Equipment—Including water supply and sewerage facilities and equipment.
11. Chattels
 - Personal—Subdivided into the following three categories: furniture and other household effects; products; and coins and gold, silver and other precious metals. In "furnitures and other household effects" are included those in general dwelling houses, and furnishings and supplies for office use as well. "Products" mean finished goods, unfinished goods and raw materials wherever they may be. "Other precious metals" include platinum, palladium, rhodium, iridium, etc.
12. Miscellaneous—Machines and tools other than for industrial use, river structures, fire-engines, hand driven fire extinguishers and books kept in libraries, etc.
13. Unclassifiable—Such indirect damages as are not readily classified because their details are not known. Assets dis-

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posed of by the National Rehabilitation Bank (Kokumin Kosei Kinko) and metals collected under special or extraordinary metal collection measures, etc.

14. Forests and Trees—"Forests" are those under jurisdiction of Ministry of Agriculture and Forestry, including government-owned, private-owned and crown forests; and "Trees" those under jurisdiction of other Ministries than the Agriculture and Forestry.
15. Roads—Both public roads and special ones for access to harbors.
16. National Treasures, Historic or Scenic Spots, Objects d'arts, Buildings, etc.

As to the manner of classification given above, categories 1 to 14 follow the classification and definitions adopted in 1935 at the time of the investigation of national wealth, and 15 and 16 have been newly added.

The items under 1 to 13 en bloc are regarded in this report as general asset national wealth, as distinguished from national wealth in the form of natural resources, and are treated differently from those under 14 to 16.

In explaining damages caused to the national wealth, importance is attached to direct damages. Direct damages are tabulated according to Government-owned, public-owned and private-owned properties. Religious establishments are treated as private-owned properties.

In estimating damages to national wealth, where ledger value of the damaged property is available, it is converted into the value as of August 1945, the time of the termination of the war, by referring to the price index number and by deducting the depreciation according to the lapse of years; where the ledger value of the damaged property is not available, official price of the same property at the time of the termination of the war, minus depreciation, is taken. Black-market prices are entirely left out of consideration in the estimation of damage or as to keep the figures written rigidly authentic bounds. It may be added

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that the price index number used here is that of the average wholesale prices in Tokyo taken by the Bank of Japan, and that the value of a superannuated property is fixed at 10 to 30% of the converted original value.

The following table summarizes the damages sustained by the national wealth.

Table XII. Summary of Damages to National Wealth

(Unit: ¥1,000,000)

Damage to National Wealth	Grand Total	Direct Damage				Indirect Damage			Insufficient Repair and Maintenance
		Total	Government-Owned	Public-Owned	Private-Owned	Total	Scrap-ping	Evacuation Removals, etc.	
Total Amount	65,302	49,678	4,819	2,244	42,610	(15,629)	(4,402)	(3,636)	(7,591)
General Asset National Wealth	64,278	48,649	3,800	2,244	42,605	15,629	4,402	3,636	7,591
Buildings	22,220	17,016	1,516	1,307	14,193	5,204	—	2,337	2,867
Harbors and Canals	132	17	12	3	2	115	—	—	115
Bridges	101	55	55	—	—	45	—	—	46
Machines and Tools for Industrial Use	7,904	4,684	221	—	4,463	3,301	1,501	103	1,706
Railroad and Tramsways	881	194	88	—	16	780	31	5	744
Vehicles	639	364	102	4	258	275	16	—	259
Vessels	7,359	6,564	95	19	6,450	796	—	—	795
Electric and Gas Supply Equipment	1,618	893	53	—	845	720	62	—	658
Telegraph, Telephone and Radio Equipment	293	243	170	63	10	50	—	—	50
Water Service Equipment	366	271	—	119	152	95	—	—	95
Chattels Personal	17,433	17,446	1,037	575	15,814	47	47	—	—
Furniture and Other Household Effects	9,558	9,558	849	566	8,143	—	—	—	—
Products	7,864	7,864	208	9	7,647	—	—	—	—
Coins, and Gold, Silver and Other Precious Metals	71	24	#	—	24	47	47	—	—
Miscellaneous	1,243	987	431	164	402	256	—	—	256
Unclassifiable	3,936	—	—	—	—	3,936	2,745	1,191	—
Other Items of National Wealth	1,024	1,024	1,019	—	3	...	...	...	...
Forests and Trees	6	6	1	—	5	...	...	...	...
Roads	243	243	243	—	—	...	...	...	...
National Treasures, Historic Spots and Scenic Beauties	775	775	775	—	—	...	...	...	...

Remarks: The mark # indicates 8,000 yen.