

1 p (3)

THE UNITED STATES
STRATEGIC BOMBING SURVEY

The Reduction
of
Wake Island

NAVAL ANALYSIS DIVISION
MARSHALLS-GILBERTS-NEW BRITAIN PARTY

1 July 1946

THE UNITED STATES
STRATEGIC BOMBING SURVEY

The Reduction
of
Wake Island

NAVAL ANALYSIS DIVISION
MARSHALLS-GILBERTS-NEW BRITAIN PARTY
1 JULY 1946

"This report was written primarily for the use of the U. S. Strategic Bombing Survey in the preparation of further reports of a more comprehensive nature. Any conclusions or opinions expressed in this report must be considered as limited to the specific material covered and as subject to further interpretation in the light of further studies conducted by the Survey."

The United States Strategic Bombing Survey was established by the Secretary of War on 3 November 1944, pursuant to a Directive from the late President Roosevelt. Its mission was to conduct an impartial and expert study of the effects of our aerial attack on Germany, to be used in connection with air attacks on Japan and to establish a basis for evaluating the importance and potentialities of air power as an instrument of military strategy, for planning the future development of the United States armed forces, and for determining future economic policies with respect to the national defense. A summary report and some 200 supporting reports containing the findings of the Survey in Germany have been published.

On 15 August 1945, President Truman requested that the Survey conduct a similar study of the effects of all types of air attack in the war against Japan, submitting reports in duplicate to the Secretary of War and to the Secretary of the Navy. The officers of the Survey during its Japanese phase were:

FRANKLIN D'OLIER, *Chairman.*

PAUL H. NITZE,

HENRY C. ALEXANDER,

Vice Chairmen.

WALTER WILDS, *Secretary.*

HARRY L. BOWMAN,

J. K. GALBRAITH,

RENSIS LIKERT,

FRANK A. McNAMEE,

FRED SEARLS, JR.

MCMROE SPAGHT,

DR. LOUIS R. THOMPSON,

THEODORE P. WRIGHT, *Directors.*

The Survey's complement provided for 300 civilians, 350 officers, and 500 enlisted men. The military segment of the organization was drawn from the Army to the extent of 60 percent, and from the Navy to the extent of 40 percent. Both the Army and the Navy gave the Survey all possible assistance in furnishing men, supplies, transport, and information. The Survey operated from headquarters established in Tokyo early in September 1945, with subheadquarters in Nagoya, Osaka, Hiroshima and Nagasaki, and with mobile teams operating in other parts of Japan, the islands of the Pacific, and the Asiatic mainland.

It was possible to reconstruct much of wartime Japanese military planning and execution, engagement by engagement and campaign by campaign, and to secure reasonably accurate statistics on Japan's economy and war production plant by plant, and industry by industry. In addition, studies were conducted on Japan's over-all strategic plans and the background of her entry into the war, the internal discussions and negotiations leading to her acceptance of unconditional surrender, the course of health and morale among the civilian population, the effectiveness of the Japanese civilian defense organization, and the effects of the atomic bombs. Separate reports will be issued covering each phase of the study.

The Survey interrogated more than 700 Japanese military, government, and industrial officials. It also recovered and translated many documents which have not only been useful to the Survey, but will also furnish data valuable for other studies. Arrangements are being made to turn over the Survey's files to a permanent government agency where they will be available for further examination and distribution.

INTRODUCTION

As part of this over-all plan, the Marshalls-Gilberts-New Britain Party of the United States Strategic Bombing Survey was organized in September 1945, under the leadership of Brig. Gen. Lewie G. Merritt, USMC, commanding general of the Third Marine Air Wing. This party was assigned the task of examining five specific island areas—Wake Island, and Wotje, Jaluit, Malcelap, and Mille Atolls in the Marshall Islands, where certain air components of the Army, Navy, and Marine Corps of the United States only, had been brought to bear. In addition, it was given the responsibility of surveying conditions at Rabaul on New Britain Island in the Bismarck Archipelago, against which the combined effort of certain air units of the United States, Australia, and New Zealand had operated.

In the early stages of the war, Wake, together with the above-mentioned Marshall Islands, were centers of considerable Japanese strength. Their possession and continued development by the Japanese presented a very definite threat to Allied forces operating in the South and Southwest Pacific Ocean Areas. It was well within estimated enemy capabilities to utilize these atolls as staging points or bases for attacks directed toward the east and south, against friendly bases or supply lines. The development of American strategy in the Central Pacific Area resulted in a gradual diminution of this threat. With the successful accomplishment of primary objectives in the Gilbert Islands and Marshall Islands Campaigns, the Japanese bases remaining in these areas were partially neutralized. Finally, after the successful campaign in the Marianas, those bases remaining in Japanese control in the Marshalls-Gilberts Area were reduced to virtual impotence and relegated to the status of "bypassed islands."

In most respects Rabaul had little in common with the Central Pacific island areas studied by the survey. Far removed geographically from them and completely different in its physical features, Rabaul was a center of more intensive development and more inherent power than any of the islands studied. Yet in one important respect it was similar; for as a result of successive Allied operations in the Solomon Islands, New Guinea, the Admiralty Islands, and the Philippines, it too became a bypassed base.

Against all of these enemy bases, the aerial offensive, in its first phase, was designed to destroy the enemy's offensive power. Once the bases were bypassed, that offensive, in its second phase, sought to maintain their neutralization and to enforce their isolation by aerial blockade. It was hoped that unremitting attacks would gradually undermine Japanese morale and induce surrender without the necessity of costly invasion.

The over-all purpose of the survey conducted by the Marshalls-Gilberts-New Britain Party was, therefore, to study the progressive development of the Allied strategic plan as it affected these targets. More specifically, the party undertook to investigate the effects of our air attacks with reference, not only to physical damage inflicted, but also to the direct and indirect consequences on military installations, repair and maintenance facilities, and food stocks. Not the least part of its purpose was to study the effects of aerial attacks upon enemy morale and to chart the progressive sapping of the enemy's will to resist.

In assembling the material for the present report, the Marshalls-Gilberts-New Britain Party, immediately after the Japanese surrender, visited each of the target areas and conducted a field examination. For purposes of this investigation the party was organized into five fact-finding divisions as follows:

I. *Military and Naval Studies Division.*—This division was concerned primarily with the tactics of the air attack proper, the operational factors involved, and the over-all effects of the attack upon Japanese operations and the Japanese strategic plan.

II. *Physical Damage Division.*—This division was concerned specifically with the damage inflicted upon Japanese ground installations of a defensive character.

III. *Transportation Division.*—This division studied the extent to which Japanese transport and communications were impaired by our aerial attacks and the burden imposed on the Japanese defenders in their attempts to maintain their system in working order.

IV. *Area Studies Division.*—This division paid special attention to damage inflicted upon such

maintenance facilities as machine shops, repair shops, power plants, water distillation units and food stocks, and in addition, tabulated casualties inflicted upon the defending forces.

V. *The Morale Division.*—Under the direction of a medical officer, this division investigated the over-all political and morale effects of the air attacks and attempted to assess the effect of the bombing upon civilian and military health.

In addition to studying the physical evidence afforded by the terrain, each of the working divisions utilized the operations orders, action reports and war diaries of the Army, Navy, and Marine Corps of the United States and Allied units, which had conducted operations against the assigned areas. Japanese records were, for the most part, not available, having been destroyed before the surrender of the garrisons. A large part of the information included in this report, however, is the result of intensive interrogation of Japanese military and naval personnel in the areas studied.

The present report reflects the findings, and outlines the conclusions, of the five working divisions. In the interest of clarity, the findings for each target-area have been presented in narrative fashion, and in as brief scope as possible. The supporting evidence is appended in the annexes which form the bulk of the report.

The personnel of the Marshalls-Gilberts-New Britain Party was as follows:

CHIEF OF PARTY

Brigadier General Lewis G. MERRITT, USMC

STAFF

Executive Officer—Colonel Marion L. DAWSON, USMC

Intelligence Officer—Major C. L. T. GABLER, USMCR

Medical Officer—Commander John W. KOETT (MC), USN

Adjutant and Service Officer—Warrant Officer Harry C. SHORT, II, USMCR

HEADQUARTERS SECTION

Warrant Officer Harry C. SHORT, II, USMCR

Master Technical Sergeant R. R. MARTIN, Jr., USMCR, Senior NCO-Clerk-Stenographer

Technical Sergeant P. R. BRICKMAN, USMCR—Clerk-Typist

Corporal R. L. HALL, USMCR—Driver

Private First Class J. D. KEARNEY, USMCR—Clerk-Typist

EDITORIAL SECTION

Captain R. H. GRIFFIN, USMCR

Captain G. A. CRAIG, USMCR

Technical Sergeant D. W. HARDIN, USMCR—Clerk-Stenographer

Private First Class D. D. SELLERS, USMCR—Clerk-Typist

INTELLIGENCE SECTION

Major C. L. T. GABLER, USMCR

Second Lieutenant G. H. WILLIAMS, USMCR

Staff Sergeant F. R. COLBERT, USMCR

Sergeant W. S. PAYSON, USMC

PHOTOGRAPHIC SECTION

Major C. L. T. GABLER, USMCR

Photographer Mate 3d Class W. B. CHAMBERS, USNR

Photographer Mate 3d Class N. D. GORMAN, USNR

Photographer Mate 3d Class B. J. CURTIS, USNR

AREA STUDIES DIVISION

Major C. L. T. GABLER, USMCR

Lieutenant N. E. THORLAKSSON, USNR—Interpreter

First Lieutenant M. M. SUTHERLAND, USMCR

MILITARY AND NAVAL STUDIES DIVISION

Lieutenant Colonel L. B. ROBERTSHAW, USMC

Major W. B. HAGENAH, USMCR

Major R. E. HATTON, USMCR

Major W. H. POWELL, USMCR

Captain E. A. T. WILLIAMS, USMCR

Lieutenant (junior grade) P. S. GILMAN, USNR—Interpreter

Sergeant C. H. DUNIGAN, Jr., USMCR—Clerk-Stenographer

Yeoman 2d Class R. G. CARNILLA, USNR—Clerk-Stenographer

Yeoman 3d Class N. J. RAINS, USNR—Clerk-Typist

MORALE DIVISION

Commander J. W. KOETT, (MC), USN

Lieutenant (junior grade) Henry GARDINER, USNR—Interpreter

Private First Class J. D. SHAW, USMCR—Clerk-Typist

PHYSICAL DAMAGE DIVISION

First Lieutenant M. A. PORTER, USMCR

First Lieutenant E. P. FRIEDBERG, USMCR

Lieutenant (junior grade) G. H. SHEEKS, USNR—Interpreter

Technician Third Grade J. A. MATHIAS, AUS—Engineer

Technician Fifth Grade W. F. DONOGHUE, Jr., AUS—Engineer helper

Corporal C. GOULSTON, USMCR—Clerk-Stenographer

Private First Class J. W. H. PAI, AUS—Draftsman

TRANSPORTATION DIVISION

Lieutenant Colonel L. B. ROBERTSHAW, USMC

Second Lieutenant J. P. COTTON, Jr., USMCR

TABLE OF CONTENTS

	Page
Introduction	1
I. Geographical Description	5
II. The Development of Japanese Strength on Wake: ..	
A. The Japanese Strategic Plan	5
B. The Development on the Base (1942-43)	6
III. The American Offensive:	
A. The Pattern of the Campaign Against Wake	10
1. The Plan	10
2. The American Forces Available Against Wake	11
3. The Development of the Attack	11
4. Tactics and Operational Limitations	12
B. The Results of the Campaign Against Wake	13
1. The Destruction of Japanese Air Power	13
2. Bombing Effects	14
a. Casualties	14
b. Anti-Aircraft and Coastal Defenses	15
c. Auxiliary Defense Facilities	15
d. Beach Defenses	15
e. Surface Installations	15
f. Fuel Stocks	16
g. Utilities	16
h. Transportation	16
i. Some Notes on Ordnance	17
j. Overall Effectiveness	17
3. The Japanese Problem of Supply	18
4. Japanese Health and Morale	18
a. Medical Facilities	19
b. Food and Water	19
c. Morale	20
5. Summary	21
IV. Conclusions	22

ANNEXES

	Page
A. Administration	25
B. Wake Island	
Section 1. Interrogations	29
Section 2. Maps	29
Section 3. Photographs	55
Section 4. Drawings	65
Section 5. Tables	111
	121

THE REDUCTION OF WAKE ISLAND

MARSHALLS-GILBERTS-NEW BRITAIN PARTY

I. GEOGRAPHICAL DESCRIPTION

Wake Island, located at 19 degrees, 18 minutes north latitude, and 166 degrees, 36 minutes east longitude, lies 304 miles north-northwest of Po-kaakku Atoll, the northernmost of the Marshall Islands. Properly an atoll, Wake consists of three coral islets with a connecting reef and occupies an area about 4 miles long by 2.5 miles wide. The three islets, Wake, Peale, and Wilkes, are arranged in a rude V-shaped pattern concave toward the northwest.

Wake, largest of the three islets, has maximum lengths of approximately 15,700 feet in a north-south direction and 15,800 feet in a northwest-southeast direction. Its greatest width, measured in a northwest direction from Peacock Point to the lagoon, is 6,300 feet. The dimensions of the two smaller islands, Peale and Wilkes, are respectively 7,800 feet by 3,100 feet and 7,650 feet by 1,800 feet. The islets are generally level in surface configuration and form a coral tableland with an average elevation of 12 feet. Maximum natural elevations do not exceed 21 feet. The fringing and connecting reef is generally steep-to. Shores consist of discontinuous beaches of coral sand separated by boulder beaches and strips of bare coral rock. The coral islets, together with the reef on the northwest side of the atoll, enclose a lagoon having maximum depths of 1 to 1.5 fathoms in its northwestern portion. A natural channel, deepened by dredging, exists between Wilkes and Wake Islets and is navigable by boats and by ships up to at least 95 tons.

Higher portions of the islets are covered by a fairly heavy growth of umbrella trees, scrub brush, vines, and grasses, although the soil is thin and poor. In spite of the fact that rainfall is reasonably abundant, amounting to some 34 inches per year, the sizes and configuration of the islands and the porous nature of the coral rock underlying the surface have not permitted the formation of fresh water streams or ponds. Principal source of fresh water is rainfall, although wells, during rainy seasons, are capable of producing a limited amount. The groundwater table, at its deepest point on the higher portions of Wake, is at a depth of approximately 12 feet. Elsewhere it is shall-

lower and probably averages some 9 feet throughout the tableland areas of the islets.

Approximate distances in nautical miles from Wake to key Pacific bases are shown in the following table:

	Miles
Pearl Harbor	1,994
Midway	1,028
Yokohama	1,720
Saipan	1,200
Guam	1,310
Marcus	700
Truk	1,100
Ponape	800
Kwajalein	620
Wotje	635
Malolap	670
Jaluit	800
Rabaul	1,680

II. THE DEVELOPMENT OF JAPANESE STRENGTH ON WAKE

A. The Japanese Strategic Plan

Wake Island was one of the objectives of the initial Jap assault of 7 December 1941, and, after a heroic defense by United States Marines and civilian workers, capitulated on 23 December. In the following year, the main American effort in the Pacific was devoted to reinforcing its remaining bases and repelling further Japanese expansion to the east, south, and southeast. Japanese possession of Wake was therefore virtually unchallenged. The island was hit in late January 1942, when an American carrier force struck at Japanese outposts in the Gilberts and Marshalls; but, for the most part, the Japanese were left alone to develop their newly won base and make plans for its future use.

The original Japanese plans for Wake are not yet wholly clear.¹ They seem, however, to have been extensive and to have been influenced, first, by the island's favorable position and, second, by

¹Complete knowledge of Japanese strategic plans with respect to Wake will be possible only when the records in Imperial Headquarters are made available to American researchers. Any records which may have been kept on Wake itself were destroyed before the Japanese surrender. The estimate of Japanese intentions presented above is based on physical evidence existing in the form of naval and military installations and on the statements of selected military personnel remaining on the island. It should be noted that none of the officers questioned admitted having served on Wake prior to December 1942, and that no aviation personnel were available for interrogation.

the continued success of Japanese arms in 1941 and most of 1942. When it passed into Japanese control, Wake had become the base nearest to Midway and the Hawaiian Islands. In any Japanese advance toward these holdings, it would have an important role.

Certainly the Japanese were thinking in 1942 in terms of a continued offensive, and their first consideration, in planning for Wake, was the building of a formidable air establishment there. Existing evidence indicates that the island was to be developed as a *point of origin, a staging base, or both, for bombing attacks against Midway.*² Moreover, *extensive aerial reconnaissance* was intended, *to disclose American shipping routes and to discover convoys and task units* which could then be taken under attack by bombers based on Wake or Truk.³ The original plans also seem to have contemplated a *strong force of fighters, which would fly short sector searches, maintain combat air patrol, and serve as escort for Japanese attacks and interceptors during possible American raids.*⁴

Because of extremely limited anchorages at Wake, the Japanese could not hope to establish extensive naval facilities there. However, there is evidence to indicate that they considered using the island as an *advanced submarine base*, although this project seems to have been abandoned early in 1942.⁵

Finally, it was believed that Wake could be developed into an important link in the Japanese communications system. Because of its advanced position, the island could become a "*listening post*," transmitting to higher command vital information concerning Allied surface shipping routes.⁶

B. The Development of the Base (1942-43)

Whatever the expectations of the Japanese High Command with respect to the strategic potentialities of Wake, those potentialities ultimately fell short of realization. During 1942, however, the Japanese made considerable progress and laid the foundation for their air establishment on the island.

²See below, Annex B, Section 1, Interrogation, Chiba, questions 10, 20, and Sakaibara, question 124. It is understood that shortly before the attack on Midway, an intercepted Japanese message requested the landing at Wake of road-building equipment which was to be used at Midway.

³See below, Annex B, Section 1, Interrogation, Chiba, questions 21, 24 and Sakaibara, question 130.

⁴See below, Annex B, Section 1, Interrogation, Chiba, question 21.

⁵See below, Annex B, Section 1, Interrogation, Chiba, questions 16, 17, and 19. Admiral Sakaibara, however, expressed ignorance of such plans. See Interrogation, Sakaibara, question 121.

⁶See below, Annex B, Section 1, Interrogation, Sakaibara, questions 131, 132, and 133; Chiba, questions 22, 23, and 24.

Prior to Japanese occupation, important facilities had been, or were being, developed on Wake by American naval forces and by private American commercial enterprise. These included the three-runway airfield, with accompanying repair and maintenance services, on Wake Island, and a seaplane ramp and servicing accommodation on Peale Island. Barracks and other permanent housing capable of sheltering 3,000 men were located on Wake and Peale Island. These facilities, together with warehouses, power plants, fuel storage tanks, underground magazines, and miscellaneous structures, were served by a well-developed coral-surfaced road system.

Although many of these installations were damaged during the Japanese campaign to occupy Wake, few were completely destroyed, except a large Pan-American Airways Hotel that had been constructed on Peale Island. It was destroyed by fire. It was possible, however, for the Japanese to repair and utilize the other existing facilities during the early days of their occupation.

With respect to fundamental facilities necessary for the operation of any base—such as housing, water supply, fuel storage, power plants, and roads—the Japanese were in a relatively good position. On Peale Island, for instance, they found the United States Administration Building, cold storage, general warehouse and maintenance buildings, and a power plant. Some of these structures were incomplete, consisting only of concrete foundations and, in some instances, of steel girder frameworks. During 1942, when the Japanese were free from any threat of intensive bombardment, they were able to utilize undamaged buildings and to construct new ones on the old foundations. Cement foundations were used in some instances for bulk storage, and there is one known case in which cellars were used for the billeting of troops.⁷ The northwestern section of Wake Island had been the main American shop and repair area; and the Japanese were able to salvage approximately 30 percent of the American equipment.⁸ Here also was located the camp area of the American civilian workers. In 1942, the Japanese used these buildings, and the Bachelor Officers' Quarters which had been constructed for the United States Marines at Heel Point, for troop quarters, supplementing them with seven enlisted men's barracks and one new Bachelor Officers'

⁷Throughout 1942, for instance, the Japanese stored rice on the foundations of Pan-American buildings.

⁸See below, Annex B, Section 1, Interrogation, Tokuda, question 8.

building with a combined capacity of 900 persons.⁹ The undestroyed and the repaired American buildings, together with the new Japanese construction, had, by the end of 1942, placed at the disposal of the Island Commander some 40,000 square feet of usable floor space.¹⁰

In the matter of water supply, the Japanese were forced to rely initially upon the two water distillation units left by the United States forces. These two plants—one at the southwest end of Wake Island, the other, also on Wake Island, near the causeway leading to Peale Island—were capable of operating at a rate of 480 gallons per day. This supply was supplemented by rainwater and water from brackish wells. It is probable that water from these latter sources did not exceed 7,600 gallons per day. Some bulk water storage tanks and cisterns seem to have been built in 1942 on Wake and Wilkes Islands. Physical evidence indicates, however, that the total available water supply never exceeded that necessary for a few days' normal use.

American workers on Wake had, before Japanese occupation, completed construction of two 10,000-barrel fuel oil tanks, two Diesel oil tanks of 1,000 and 5,000 barrels, and eight gasoline storage tanks of 25,000 gallons each. Piping and pumping facilities included a pipe line terminating at the end of the fuel pier located off the southwestern tip of Wake Island. The main tanks were installed near this pier. Aerial reconnaissance indicated that six of the 25,000 gallon gasoline storage tanks were being used by the Japanese in 1942. In the course of their construction program in the same year the Japanese constructed a number of smaller tanks dispersed over the islands. Four small tanks were constructed in the vicinity of the former Marine Camp in the southwestern section of Wake Island. Four 10 by 25 feet horizontal tanks were installed in the plane parking area in the vicinity of the airfield. In addition, three fuel tanks, 15 by 50 feet, were constructed in the area south of the former United States Administration building on Peale Island.

Although, as has been noted above, the Japanese garrison on Wake was well provided with fuel storage facilities, there is evidence to indicate that some, at least, of these facilities were not used. The six usable 25,000 gallon gasoline storage tanks were covered with sand, and it is apparent that the Japanese at least contemplated their em-

ployment. There is no indication, however, that the pier fuel pumping units were ever used to deliver bulk shipments of fuel to the island. Rather, it appears that fuel deliveries were intermittent and not up to their expectations. At the peak of Japanese operational strength on Wake in early 1943, the following fuel stores were on hand:¹¹

	Tons
Motor gasoline	140
Aviation gasoline	1200
Diesel oil	320

The main American power plant was located on Wake Island near the dock at Wilkes Channel. This plant, of frame construction and corrugated steel roof, housed two boilers. It was damaged during the Japanese assault but was later repaired and put to use by them. Power supplied by this unit was supplemented early in 1942 by new Japanese construction. Their central power plant was a large reinforced concrete structure, located in the northeastern section of Wake Island, housing three 125-kilowatt generators. Supplemental power units were located on the two other islands. Three 30-kilowatt generators were dispersed on Peale Island, and two or three of this same model generator were used on Wilkes Island.¹²

All of the base facilities enumerated above were linked by a well-developed road net. The very nearly level topography of Wake Island and the general excellence of surface drainage presented few problems of road construction. The location of roads was dictated primarily by consideration of service and defense needs. The Japanese inherited from the Americans a good coral-surfaced road around the islands, and had, in addition, a bridge connection between Wake and Peale Islands. They also supplemented this existing road system with an extensive network of secondary and connecting roads. At its maximum development, the Japanese road system on Wake included 16 miles of primary roads, 6 miles of secondary roads and cross-connections—a total of 22 miles.¹³

With respect to defensive installations, the Japanese were not so fortunate as they had been in the case of the above facilities, and they fell heir to very little American equipment that was operational. Only four workable guns were left on the island at the time of the Japanese occupation—two

¹¹See below, Annex B, Section 1, Interrogation, Tokuda, questions 31, and 33.

¹²See below, Annex B, Section 1, Interrogation, Tokuda, question 2.

¹³For an explanation of the Japanese road system, see below, Chapter III, Section B-2-b, "Transportation."

⁹See below, Annex B, Section 1, Interrogation, Tokuda, question 27.

¹⁰See below, Annex B, Section 1, Interrogation, Tokuda, question 22.

5-inch coastal defense guns at Peacock Point, and two 3-inch guns at Heel Point.¹⁴ The building of a strong defensive system, therefore, became a prime necessity, and the Japanese made every effort to accomplish this task in the 12 months which followed their initial landing. At the end of the period, and at its point of maximum effectiveness, the coastal and anti-aircraft defenses of the island were as follows:¹⁵

- 4 coast defense 20 cm, 8 inch, located on Wake and Peale Islands.
- 4 coast defense 15 cm, 6 inch, located on Wake and Peale Islands.
- 8 twin mount 12.7 cm, 5 inch AA, located on Wake Island.
- 8 anti-tank 12 cm, 4.5 inch, located on Wake and Wilkes Islands.
- 4 8 cm, 3.2 inch AA, located at Peacock Point.
- 1 dual purpose 8 cm, 3.2 inch, located on Peale Island.
- 6 dual purpose 5 inch guns, located on Wake Island.
- 9 3 inch AA, located on Wake, Peale and Wilkes Islands.
- 24 twin-mount 25 mm machine guns, located on Wake and Peale Islands.

The Japanese were never able, even at their state of greatest strength on Wake, to procure enough machine guns to satisfy their defensive needs. Those which were available were placed around the heavier gun positions to defend them against strafing attacks and to fire on secondary targets. The larger guns had director fire control. There were no radar controlled guns on the island.¹⁶ All guns were serviced by ammunition bunkers located in their immediate vicinity.

The main purpose of the Japanese in the year 1942 was to develop their air strength and facilities on Wake to the highest possible degree. The airfield, not wholly completed at the time of Japanese occupation, when finished occupied the southeastern section of Wake Island and consisted of three runways as follows:

	Feet
"A" East-West	5,500
"B" Northeast-Southwest	4,870
"C" North-South	1,680

A trapezoidal area, 1,100 feet by 350 feet, lying

¹⁴Crews manning the American guns not only thought well of them, but claimed scoring hits on at least one American cruiser and 2 planes.

¹⁵See below, Annex B, Section 1, Interrogation, Sakabara, question 50; Chikabari, questions 29, 33, and 95; and Section 5, Table V.

¹⁶See below, Annex B, Section 1, Interrogation, Sakabara, question 60.

south of runway "A" and east of the narrow southward extension of runway "B," served as the main parking and servicing area.¹⁷ Shop and service facilities were housed in some 19 buildings located in the eastern and southern sides of this area. Good facilities therefore were available for service and upkeep of aircraft; however, as will be seen below, the place was never adequately equipped with planes.

The Japanese claim that some six fighter-type revetments suitable for plane dispersal and parking, remained when they took the island, and that they were located on the southern side of runway "A" in the area to the west of its extension from runway "B." These revetments, originally somewhat damaged, were, according to the Japanese account, repaired and used by them. It is probable that American plans would have included a further northward extension of runway "C." This was never accomplished by the Japanese. The existing foundations for this extension, were utilized by them in the development of a bomber dispersal area. Two taxiways—one of 3,000 feet and the other of 1,800 feet—were constructed leading into this area from the northern end of runway "B." Along these taxiways were dispersed a total of 23 semi-octagonal bomber revetments.¹⁸

In addition to the facilities for land-based aircraft, seaplane accommodations also were available to the Japanese. The former Pan-American Airways base, including concrete ramp and service apron, was located on the south shore of Peale Island. Dredging operations conducted by the Americans had deepened the northwestern part of the lagoon, between Peale and Wilkes Island, to a depth of 6 feet providing excellent shelter and take-off lengths, as follows:

	Feet
East-West	5,500
North-South	3,000
Northwest-Southeast	7,000
Northeast-Southwest	6,700

There is no evidence that the Japanese attempted to develop these seaplane facilities further.

Communication between the various facilities on Wake was established by means of an underground system of 16 mm (32 wire) telephone cables. The connection with Wilkes and Peale Islands was under water. The former did not prove successful and was replaced eventually by an overhead cable extending across Wilkes Channel.

¹⁷See below, Annex B, Section 2, Map 4.

¹⁸See below, Annex B, Section 2, Map 4.

Because of its advanced position, Wake was a forward communications point of considerable importance to the Japanese. Radio transmission and reception conditions were excellent, and Wake was able to establish and maintain radio communication with higher echelons of command in the Marshall and Gilbert Area. Wake was provided with four short-wave radio sets—two Type 95, Model 3 and two Type 95, Model 4. In addition, there was present one Type 92, Model 3, long-wave radio set. Utilization of these radio facilities enabled the island occupants to transmit and receive messages to and from Kwajalein, the communications center for the Marshall-Gilbert-Wake area.

As a navigational aid, the Japanese apparently continued to operate the United States Department of Commerce radio captured on Wake. In one instance in early 1943, its beam, with on-course signal, was intercepted 230 miles from Wake on a direct bearing to Midway. A radio direction finder station was constructed in 1942 by the Japanese on the northern part of Peale Island. It was apparently their intention to use this installation in establishing the location of Allied surface shipping, thus aiding them in the determination of Allied shipping routes.¹⁹

The Japanese apparently intended to employ radar as an early warning device complementing other base defense installations. For this purpose, they were provided with two Type II (Model unknown) radar sets. One of these was erected in the southeastern section of Wake Island near Peacock Point, the other near Kuku Point on Wilkes Island. The over-all performance of Japanese radar on Wake was not inspiring. The set at Kuku Point had a range of only 75 miles so that its "early-warning" value was comparatively small. The set at Peacock Point was emplaced at too low an elevation to secure the maximum 75 mile range. Further complications resulted from the masking of certain sectors of search by neighboring vegetation. These two sets were supplanted in June 1944, by two Type III radars which were installed, one at Heel Point and the other on the north part of Peale Island. These sets were effective for full 360° traverse and at ranges up to 120 miles.

In view of the strategic possibilities envisaged for Wake at the time of its capture, it appears strange that, in the development of the base, more air strength was not assigned to the island. All

existing evidence indicates that enemy air strength on Wake was never a powerful factor; that it grew very slowly to its peak in April 1943, and then dwindled until its final destruction by American air power in the latter part of that year.

The first Japanese air unit to be based on Wake was a Navy bombing unit of the 752 Kokutai which established its headquarters on the island at the beginning of 1942, was approximately 10 bombers of the Betty type. These planes were quite capable of bombing Midway. No attempt to increase the number of bombers on Wake was made in the course of 1942, as far as can be determined from interrogation. This failure may have been caused, to some extent, by the Japanese repulse at Midway in May-June 1942. At any rate, when Admiral Sakaibara became Island Commander in December 1942, he found a total plane complement of about 10 bombers.²⁰ The main duties of these planes were to patrol sectors in the direction of Midway and to carry out 360° searches around the island in an effort to detect the presence of American shipping. Any plans for the establishment of a seaplane base in the lagoon had now apparently been abandoned, and the only flying boats on Wake were occasional visitors of the Mavis type from other islands.²¹

During 1942 no fighter planes had been based on the island. The absence of these planes was probably due to two factors: first, the belief that the defense of the island did not require them, and second, the general scarcity of fighters in the Central Pacific area during that year. The Japanese Central Pacific Plan apparently contemplated that Wake, like other islands, could request fighter planes, when they were needed, from the twenty-second and twenty-fourth Air Fleets which were based at Truk.

The first fighter contingent to arrive at Wake was a 15-plane unit from Truk which flew to the island in February or March 1943. From that period onward, a unit from either the twenty-second or twenty-fourth Air Fleet was always present at Wake, being relieved every 3 weeks.²² The stationing of fighter planes at Wake was intended to give added protection against attack and to maintain around the island a patrol that in some

²⁰Annex B, Section 1, Interrogation, Sakabara, questions 9, and 10.

²¹Annex B, Section 1, Interrogation, Sakabara, questions 177, and 178.

²²Annex B, Section 1, Interrogation, Sakabara, questions 171, and 174.

ways resembled our Combat Air Patrol, but does not seem to have been flown continually day or night. The coming of the fighters perhaps reflects, also, a growing realization on the part of the Japanese that Wake was, in the future, to play a purely defensive role in Pacific strategy.

Replacement planes, both bomber and fighter, arrived infrequently after the beginning of 1943. The maximum number of planes based at any time on Wake was between 55 and 60 aircraft, with a bomber-fighter ratio of two to one.²³ This peak was reached in April 1943, just before American bombing got under way. Flying personnel, at its maximum, seems to have varied between 200 and 250 officers and men.

There is some evidence for the belief that the Japanese contemplated a combined Army and Navy garrison of approximately 4,400, exclusive of aviation personnel.²⁴ If this were so, these plans also fell short of realization. At the time of Admiral Sakaibara's arrival on the island in December 1942, there was an approximate total of 2,700 Japanese personnel on the island—1,000 Navy troops, 600 Army troops, 1,000 Navy Pioneers and 100 flying personnel. This number was augmented somewhat by the arrival of the fighter contingent in early 1943, but the Island Commander's request for additional ground troops was not granted until January 1944, when 1,000 Army troops arrived.²⁵

The disposition and uses of the aviation facilities and ground troops on Wake were complicated by a relatively inefficient command set-up. Whereas both naval and air forces and a joint Army-Navy garrison were responsible for the defense of the island, the Island Commander had authority to command only the joint ground forces. Naval air forces, operating under an Air Commander Wake, were completely outside the Island Commander's jurisdiction, being responsible to the Air Division Commander at Roi on Kwajalein. Thus, although—as the chart below shows—both aviation and ground forces operated under the over-all supervision of the Fourth Fleet at Truk, on Wake Island itself there was no close cooperation between those forces, and the Island Commander could not even order planes to intercept attacks.²⁶

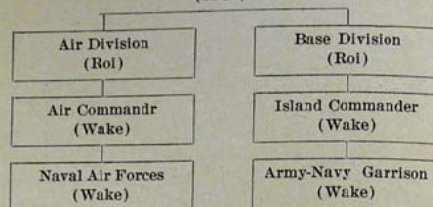
²³ See below, Annex B, Section 1, Interrogation, Chiba, question 9.

²⁴ See below, Annex B, Section 1, Interrogation, Chiba, questions 54, 55, and 59 and Chiba, questions 4, and 5.

²⁵ See below, Annex B, Section 1, Interrogation, Sakaibara, questions 105-109, Chiba, questions 54, 59, and 62.

²⁶ See below, Annex B, Section 1, Interrogation, Sakaibara, questions 115-117.

4th FLEET (Truk)



By the end of 1943 the Japanese had made considerable progress with the development of the base at Wake. The island, however, did not become a potent factor in the realization of the optimistic strategic thinking which was apparent at the beginning of the previous year, for the following reasons:

First, it was woefully short in bombing planes, and, thus, handicapped in serving as an initial point for any forward thrust.

Second, it lacked patrol planes and other aircraft suitable for scouting. This reduced materially its effectiveness against American shipping.

Third, it was never equipped with proper radio installations to give satisfactory service as a listening post.

The defensive ability of the island was jeopardized—

First, by a serious deficiency of fighter planes which made effective resistance impossible.

Second, by a lack of sufficient guns to form a well balanced all-around ground defense.

Third, by inadequate radar facilities and a generally weak warning system; and

Fourth, by an acute man-power shortage.

These deficiencies were serious in 1942 when the island was almost wholly free from American raids; they became alarmingly serious in 1943 when American bombing became frequent and intensive.

III. THE AMERICAN OFFENSIVE

A. The Pattern of the Campaign Against Wake

1. The Plan

The Japanese progress in the development of Wake during 1942 was possible, as has been stated above, because the island was relatively free from attack during that year. American strategy during most of 1942 made impossible the diversion of any considerable portion of force against the island. With the initiation and successful progress

of American offensive operations in 1943, however, Wake began to receive its share of attention.

It should be noted at the outset, that, in the American Strategic Plan, Wake was never regarded as an objective of major importance. As will be seen below, Wake was always hardest hit when American operations were proceeding in adjacent areas, so that even the most important strikes against it were diversionary or protective in nature. For the rest, attacks on Wake were intermittent and of a harassing type. Even so, these sporadic attacks against the islands were in sufficient strength to destroy everything the Japanese had accomplished there in 1942. The raids of 1943 destroyed its air power completely; the strikes of 1944 gravely weakened its defensive strength; and the simultaneous air and naval blockade subjected the defenders to a campaign of attrition which reduced them in the end to a state of practical exhaustion.

2. The American Forces Available Against Wake

The attacks on Wake were accomplished entirely by American power, no other Allied forces being directed against Wake at any time.

Available for, and shown by the records to have taken part in, the assault on Wake Island were the following Army units flying B-24s:

- The 24th Bombardment Squadron.
- The 26th Bombardment Squadron.
- The 27th Bombardment Squadron.
- The 38th Bombardment Squadron.
- The 98th Bombardment Squadron.
- The 392nd Bombardment Squadron.
- The 431st Bombardment Squadron.

As far as can be ascertained, these squadrons were based at Midway, and in some cases at Oahu staging through Midway, and in the later phases of the campaign, at Kwajalein and Engebi.²⁷

Available for, and shown by the records to have taken part in the assault on Wake Island, were the following Navy shore based squadrons:

- VPB-133—flying PV-1 Venturas
- VPB-121—flying PB4Y-1 Liberators and PB4Y-2 Privateers
- VPB-144—flying PV-1 Venturas
- VPB-23—flying PB5A Catalinas

²⁷ Available records, which appear to be incomplete, show several other attacks against Wake by B-24s, as well as many B-24 reconnaissance flights. However, these records fail to identify the squadron or the unit making the flight. In this connection also, Japanese officers interrogated on Wake Island stated that they fired anti-aircraft guns against B-17s. No B-17 attacks are shown in the records. It is possible that the Japanese observers, accustomed to seeing Army B-24s and Navy PB4Y-1s were surprised by the appearance, late in the campaign, of PB4Y-2s, and thought they were B-17s.

Navy patrol bombers flew from bases at Eniwetok and Roi.

In addition to attacks by land based units, the island was hit on several occasions by Navy squadrons operating from carriers that played a roving role in this part of the Pacific. The following carriers are known to have struck Wake:

- U. S. S. *Essex*
- U. S. S. *Wasp*
- U. S. S. *San Jacinto*
- U. S. S. *Intrepid*
- U. S. S. *Cabot*

Finally, Wake Island was under attack by surface ships on numerous occasions. Included in these surface attacks were those by Task Force 14 (composed of Task Groups 14.2, 14.5, 14.6, 14.12, and 14.13), Task Force 57, and Task Group 58.6. In addition there were bombardments at various times by the U. S. S. *Pennsylvania*, U. S. S. *New Jersey*, U. S. S. *Salt Lake City*, U. S. S. *Biloxi*, and several destroyers.²⁸

3. The Development of the Attack

On 8 July, 1943, 8 Army B-24s, based at Midway, struck at shore installations on Wake Island, dropping three hundred 30-pound fragmentation bombs, seven 500-pound general purpose bombs, and three 650-pound depth charges. *This was the first recorded land-based strike of 1943.* Before the month of July was over, the B-24s had struck twice more, and thereafter land-based raids against the island's installations were a frequent occurrence.

As has been indicated above, however, major strikes against Wake generally coincided with American landing operations in the Central Pacific. Thus, the island first felt the full force of American power when the Gilbert Islands campaign was inaugurated. On 6-7 October 1943, Wake was attacked by Task Force 14. Carrier based aircraft flew 510 sorties, dropping 340 tons of bombs, while fleet units bombarded the island with 3,198 rounds of 5-inch and 8-inch projectiles. In the same way, in the preparatory stages of the Marshall Islands Campaign, the island was again subjected to heavy raids by carrier-based aircraft and its shore installations were bombarded by units of Task Force 57. During this latter campaign, and its mopping-up phase, both Army and Navy land-based bombers harassed the island. In the period December 1943-May 1944, an estimate total of 996 sorties were flown against the island, dropping

²⁸ All recorded attacks will be found listed in the table in Annex B, Section 5, Tables III, and IV.

ping 1,079 tons of bombs, and in addition 7,092 rounds of 5-inch and 6-inch shells were fired. It is significant to note that over half of the total tonnage of bombs dropped on Wake during the Japanese occupation were dropped in this 6-month period.

After mid-1944, Wake was sufficiently weakened that the air and naval blockade alone was considered enough to maintain its neutralization. Bombing raids now became more frequent but, at the same time, in diminished strength. The defenses of the island had become so weak that it was considered a suitable target for training operations by roving carrier task units.

The last recorded attack on Wake Island was by six Marine planes which bombed coastal defense guns on Peacock Point on 13 August 1945.

4. Tactics and Operational Limitations

American air attacks against Wake Island normally followed current tactical orders and doctrine for the type aircraft and unit involved.

Briefly, *heavy bomber high-altitude strikes*, both Army and Navy, were flown at altitudes ranging from 10,000 to 20,000 feet with the planes turning and climbing on retirement. Open V formations were used and the total planes involved seldom, if ever, exceeded 24. In addition, harassing missions at night and reconnaissance flights were flown by one or two planes.

Carrier strikes also followed prescribed attack doctrine. Flight formations were stepped down, flying almost line abreast and with guns uncovered throughout their effective arc of fire. Six-plane divisions in 2 three-plane sections for VB and VT, and four-plane divisions operating in 2 two-plane sections for VF was standard flight doctrine.

Dive bombing attack groups consisted of between 12 and not more than 24 planes operating in tactical units of 6 planes with an optimum dive angle of 70°. The approach was from 10,000 to 20,000 feet with a high speed approach when the target was about 10 miles distant, at which point deployment by divisions was executed. The divisions approached the push-over point from different angles and the escort VF remained with each division until retirement. Pull out was between 1,500 and 2,500 feet.

Glide bombing followed the same tactical organization as prescribed for dive bombing with the optimum glide angle at 45°. Attacks were initiated from above 4,000 feet and the planes began a high speed descent after the first dive bomber

entered its dive. The final aiming glide by individual planes began between 8,000 and 4,000 feet altitude.

Low-level bombing attacks with coordinated strafing attacks made a high speed approach to minimum altitude generally following immediately after dive bombing attacks.

All fighters which were not part of the escort group conducted strafing ahead of all other types of attacks.

*Japanese counter-tactics*²⁹ employed in the defense of Wake Island consisted of interceptions and anti-aircraft fire. Because of the lack of an efficient radar air warning system, the interception of our heavy bomber strikes was never very successful. During the period December 1942 to 6 October 1943, interception was attempted four to six times but, by the time the Jap fighters were airborne, our bombers generally were overhead dropping their bomb loads. Consequently, allowing for an estimated 5 to 10 minutes to get the fighters in the air, they seldom were able to do anything except chase the bombers on retirement. Furthermore, because of the bombers' speed and coordinated fire power, no fighter kills were claimed. However, if one heavy bomber was flying alone, the Japs found they could approach fairly close, preferably using a frontal attack from about 11 o'clock or 1 o'clock. On the earlier interceptions our bombers' armor seemed to withstand Jap attacks and for that reason the calibre of their guns was increased.

The fighter interception phase of Japanese defense was terminated on 6 October 1943. On this date all serviceable fighters (between 15 and 20) took off to intercept an American carrier strike. None returned.³⁰

From the standpoint of *anti-aircraft defense*, the Japanese considered American high-altitude bombing attacks most effective for two reasons: *first*, because the aircraft were commonly at or near the effective vertical range of Japanese heavy anti-aircraft weapons; and *second*, because the open V formation generally assumed by the planes made it difficult for the Japanese to concentrate a heavy volume of fire on more than a few target aircraft.

The Japanese experienced difficulty in combatting strikes by carrier based aircraft because of the

careful utilization of cloud cover and sun position by the American pilots, and because of the coordination of simultaneous attacks on different target areas. The latter had a tendency to disrupt anti-aircraft defenses since the guns could not be traversed rapidly enough to cover all incoming aircraft.

No difficulty was encountered by the Japanese in adjusting anti-aircraft fire to dive bombing attacks, although no aircraft was ever observed in a dive of more than 55°. The Japanese believed, however, that planes such as fighters, fighter bombers, and rocket planes—in even shallower dives—were more difficult to hit. Both heavy and medium anti-aircraft gunners believed the steeper the dive the better the target.³¹

The island defenders experienced difficulty in meeting strafing attacks against their gun positions. The exposed position of the shell magazines on the top of the 25 mm guns made these weapons extremely vulnerable and, when hit, the resulting explosion generally killed most of the gun crew. Whenever the raiding planes were able to knock out the 25 mm guns, as at Peacock Point, the resulting bomb damage in the immediate vicinity was greatly increased.

Generally speaking, the Japanese were handicapped in their anti-aircraft defenses by a lack of radar fire control. Tracking or continuously pointed fire was directed only against seen targets. Therefore, aircraft hidden by clouds and darkness were not taken under fire.³² On three or four occasions Wake was bombed through a solid overcast with considerable resultant damage.³³

Most heavy guns were dual purpose and had to be placed around the shoreline to repel possible landings. Dispersal, therefore, was of secondary importance. Machine cannon and light machine guns were placed around the larger guns so that one type of weapon could fire on one target, while the others were engaging a second. When strafers and bombers were attacking simultaneously, the anti-aircraft guns would fire at the bombers, while the machine guns engaged the strafers.³⁴

²⁹ Annex B, Section 1, Interrogation, Sakaibara, questions 34-46. The Japanese showed considerable interest in and respect for our rocket attacks, although not enough rocket attacks were made against Wake to permit any accurate appraisal. See Interrogation, Chibabari, questions 19-14.

³⁰ This was partly due also to a Japanese desire to conserve ammunition. See Annex B, Section 1, Interrogation, Sakaibara, questions 61, and 62.

³¹ Annex B, Section 1, Interrogation, Sakaibara, questions 65, and 67.

³² Annex B, Section 1, Interrogation, Sakaibara, question 166.

The Island Commander directed fire from his command post. The nature of the fire depended upon the situation, but, generally, anti-aircraft opened up at the following ranges:

Heavy _____ app. 30,000 feet
Medium _____ app. 10,000—12,000 feet (Sighting gear was old and ineffective so firing started only when hits seemed likely.)
Light _____ app. 6,000 feet for broad side targets
app. 12,000 feet for oncoming targets

Until the time the Jap directional finder control was damaged, area anti-aircraft fire was concentrated on a single target, but thereafter sector fire was assigned to each battery.³⁵

Naval forces on the island estimate that 40 American planes were shot down by anti-aircraft fire. Only 6 or 7, however, are claimed as certain, since most probables disappeared out of visual range of the island. All planes claimed were carrier-borne, with the exception of one B-24 and one PB4Y.³⁶ Army forces claim an additional 7 or 8 planes.

B. The Results of the Campaign Against Wake

1. The Destruction of Japanese Air Power

The first casualty of the American offensive against Wake was the Japanese Air Force. As has already been pointed out in Section II, B, even at its peak strength it was not imposing. Moreover, Japanese tactical employment of what aircraft they had was inefficient. This fact became sufficiently clear in the American raids of late summer 1943, and it was apparent that Japanese strength would be incapable of coping with a strong American strike. Such a strike overwhelmed Japanese air power in October 1943.

In April 1943, the air contingent comprised about 35 bombers of the Betty type and 15 to 20 fighters. During the next 5 months, however, the bomber strength, in particular, sank to a precariously low level. The failure of planes to return from bombing and scouting missions and losses due to operational failure had reduced the island's bomber strength to approximately 5 planes by the beginning of October 1943. On 6 October, more than 20 Bettys started from Roi to Wake. En route, these planes were intercepted by elements of the initial fighter sweeps from the carriers of Task Force 14, bound for Wake, and 4 or 5 were shot down.

³⁵ Annex B, Section 1, Interrogation, Sakaibara, questions 52, 55-59.

³⁶ Annex B, Section 1, Interrogation, Sakaibara, questions 156, and 157.

The rest arrived safely, but their arrival coincided with the beginning of the 2-day strike by Task Force 14. With the approach of the American fleet units, the Japanese Air Commander ordered all his serviceable fighters, between 15 and 20, into the air. None returned. A few hours later, American carrier planes appeared over the island, strafed the airstrip at an altitude of 50 to 100 feet, and destroyed the total bomber contingent. When Task Force 14 retired, after having inflicted severe damage upon shore installations and the facilities of the airfield, there was not a single operational plane left on the island.

The Japanese made a last futile attempt to build up their air strength on Wake during November 1943, and some new planes were flown in. In December, however, the entire air complement, consisting solely of 10 Bettys flew to Truk because the situation on Wake was becoming extremely difficult and, in addition, because Japanese air strength in the entire Central Pacific was hard pressed and these planes were needed more urgently elsewhere.³⁷ Aviation personnel remaining on Wake was evacuated in January 1944.³⁸

After December 1943, no aircraft were based regularly on Wake. An occasional plane would visit the island with supplies or personnel, but even this ceased after June 1944. In short, American air power had accomplished its first objective and, by destroying Japanese aviation on Wake, had made possible increasingly effective American attacks on the island. In the future, American air forces could bomb the island with no fear of air-to-air opposition, while surface forces could now indulge in close range bombardment with virtual impunity.

2. Bombing Effects

During the 44 months of Japanese occupation of Wake the garrison on that island was subjected to a total of 1,982 tons of bombs, and several thousand rounds of naval gunfire by combined American forces. In addition to the complete destruction of Japanese air power described above, their shore installations, defenses and personnel suffered considerable damage.

Before discussing the specific results of the American attacks, certain general statements

³⁷ For a graphical description of Japanese air strength on Wake, see Annex B, Section 5, Table No. VII.

³⁸ Some 30 maintenance men remained behind. These were eventually evacuated in July 1945, by hospital ship, Annex B, Section 1, Interrogation, Tokuda, question 19.

should be made. It is not within the intention of the present report to formulate principles of general application concerning the relative effectiveness of various types of aerial attacks. On the other hand, with regard to Wake Island itself, both physical evidence and the statements of Japanese military personnel lend weight to certain conclusions; namely,

(1) That medium or high-level bombing while more difficult for Japanese anti-aircraft, placed a smaller percentage of its tonnage in the small target areas presented on an atoll like Wake than did dive or glide bombing;

(2) That dive bombing, while more vulnerable to Japanese defensive fire, was more accurate than high-level bombing;

(3) That glide bombing, considered by the Japanese to be the least vulnerable form of attack, had approximately the same degree of accuracy as dive bombing; and

(4) That the effectiveness of both dive and glide bombing was enhanced considerably by the extreme accuracy of American strafing, which—according to the Island Commander—not only inflicted serious damage on parked aircraft, light materiel and personnel, but also drove gun crews from their stations, during bombing attacks.

a. *Casualties.*—Total casualties inflicted upon Japanese troops on Wake by combined aerial bombing and Naval gunfire amounted, by Japanese estimate, to 700 or 800 persons. The largest loss of life from a single raid occurred during the carrier assault of 6-7 October 1943, when between 300 and 400 persons were killed. During this raid a direct hit was scored upon the concrete foundation of an unfinished Pan-American building on Peale Island, killing 80 Korean labor troops who had taken refuge in an excavated area underneath.³⁹

Following this raid of October 1943, air raid shelters were added and improved so that loss of life in subsequent raids was much reduced.⁴⁰

The following is an approximation of the number of men killed by strikes:⁴¹

³⁹ For photographs of this building, in which a 3 years' supply of rice was destroyed during the same raid, see below, Annex B, Section 3, numbers 57, and 58. For loss of life among American Prisoners of War on Wake, see Annex B, Section 1, Statement of Lt. Comdr. Tachibana.

⁴⁰ See Annex B, Section 3, Photos 5, 45-47.

⁴¹ The large number of casualties in the June 1945, strike may be attributed in large part to the poor physical condition of the men. See below, Chapter VI, Section B-4-b, "Food and Water."

October 1943*	300-400
May 1944*	20-30
June 1945*	300
18 July 1945*	30
1 August 1945	10
6 August 1945	14
8 August 1945	10

* (These were the months of the strongest carrier attacks.)

b. *Anti-Aircraft and Coastal Defenses.*—The Japanese made up for the insufficient number of guns on Wake by careful disposition of emplacements and elaborate construction.⁴² Nevertheless, American bombing effectiveness against these guns was high. Before the first strong American attacks on the island, the defenses consisted of a total of 68 guns—8 coastal defense guns, 7 dual purpose guns and 53 anti-aircraft guns. Of these, a total of 22 were no longer operational by the end of Japanese occupation—46 percent as the result of aerial bombing, 36 percent of naval bombardment, 9 percent because of operational malfunctions and lack of spare parts.⁴³ In this connection it should be noted that surface forces were able to approach the island and inflict the high percentage of damage noted above, primarily because American air power had, by the end of 1943, cleared Wake Island of enemy aircraft.

Although none of the 20 cm ammunition for coastal defense guns and little of the 12.7 cm ammunition for heavy anti-aircraft guns were lost during American action, approximately 30 to 40 percent of their small arms and medium caliber anti-aircraft ammunition was destroyed.⁴⁴

c. *Auxiliary Defense Facilities.*—Of the nine fortified command posts and fire control centers on the island, six were destroyed or seriously damaged.⁴⁵ Twelve searchlights were present on Wake. Of these, six were damaged or destroyed by bombing and rocket fire.⁴⁶ The enemy made use of the steel frames of two old United States buildings, one on Wake Island and one on Peale Island, to mount their radar installations up and away from blast or fragment damage and to gain height for radar operational range. These radars were both under frequent attack without sustaining any serious damage although they were hit several times by strafing attacks. Shortage of

⁴² For examples of defenses, see below, Annex B, Section 3, Photos 1-4, 6-23.

⁴³ For photographs of destroyed or damaged anti-aircraft guns and emplacements, see Annex B, Section 3, Photos 19-23. For photographs of damaged and destroyed coastal defense guns, see Annex B, Section 3, Photos 1-5, 8-14, 17-18.

⁴⁴ See table of bombing effects, Annex B, Section 5, Table V.

⁴⁵ See Annex B, Section 3, Photos 48-50.

⁴⁶ See table of bombing effects, Annex B, Section 5, Table V.

fuel for power and shortage of tubes were the limiting factors to the use of this equipment.

d. *Beach Defenses.*—Little damage was done to beach defenses since they were never regarded by American forces as targets of first priority.⁴⁷

e. *Surface Installations.*—With respect to other surface installations, the first significant reaction of the Japanese to American attacks on Wake was to utilize the resources of the terrain to minimize bomb damage. The raid of 6-7 October destroyed about 90 percent of the buildings on the island, including such air facilities as hangars and repair shops, a building on Heel Point used for food storage, and an appreciable number of barracks buildings. In ensuing months, the Japanese sought to make further serious losses of this kind impossible, either by constructing buildings countersunk in the coral bedrock to roof level, or by reinforcing and protecting existing surface structures by coconut logs, concrete, and coral sand and gravel.

In describing the effects of the American bombing after the raid of October 1943, therefore, it is necessary to regard the Japanese buildings as falling into three classes:

- Buildings of heavy construction built on the surface and covered with a thick layer of coral sand or gravel.
- Structures countersunk to roof level in the ground, either in trenches or in individual excavations.
- Structures left on the surface with no external protection against air attacks, either of reinforced concrete or simple frame construction.

Against structures falling under Class I, above, American bombing and naval gunfire was generally ineffective; unless direct hits were scored. Existing evidence indicates that the greatest tonnage of bombs dropped on Wake was of the general purpose type; and, had maximum accuracy been attained, this type of bomb would have destroyed

⁴⁷ The Japanese, who seem to have feared an American invasion after October 1943, built elaborate beach defenses consisting of:

(1) Under-water and surface anti-boat and anti-tank mine fields of irregular pattern.

(2) Two rows of barbed wire entanglements.

(3) A row of closely spaced, sharp-pointed brush sticks, 10 feet thick.

(4) Two anti-tank ditches approximately 10 feet deep and 12 feet wide.

(5) Numerous, revetted and well fortified machine gun positions.

(6) Heavy steel and concrete (1½ feet thick) pillboxes, housing 37 mm anti-tank guns.

(7) An elaborate system of zig-zag trenches with well fortified dug-outs and bomb shelters.

(8) Numerous well prepared secondary positions.

For typical examples of beach defenses, see Annex B, Section 4, Photos 6 and 7.

the structures on the island. The one exception to this rule was the Navy Headquarters and Communications Center on Wake Island. This is a huge structure consisting of a ground floor supported by heavy timbers and steel I beams covered with a very thick layer of coral sand and surmounted by the admiral's observation post.⁴⁸ The structure was capable of sustaining hits by very large bombs without material damage. A 1,000-pound general purpose bomb striking on the north side did only superficial damage and caused the occupants no concern. One large bomb in the past put some stress on the ground floor structural members which were then strengthened with angle braces.⁴⁹ This structure was nearly invulnerable to air attack. Had repeated hits been scored with 1,600-pound armor piercing bombs, there is no doubt that the command post would have been demolished; but, in order to attain this probability of hits, it is likely that an exorbitant number of such bombs would have had to be dropped.⁵⁰

Another example of Class I structures was the fuel storage warehouse near the air strip, of heavy reinforced concrete construction covered with coral, and with access road and entrance heavily revetted.⁵¹ Many bomb craters were observed in the immediate vicinity, but there were no direct hits and no damage to this installation. An example of this type of building which was completely destroyed by American bombing was the air raid shelter near Navy Headquarters, a heavy timber structure covered with 8 to 10 feet of coral, which was demolished by direct hits by 1,000-pound bombs. Of the islands' 11 large air raid shelters of this type, however, this was the only one destroyed.⁵²

With regard to structures of the second class, the Japanese had, by the end of the war, constructed approximately 7,300 square feet of underground shop space and,⁵³ in addition, 19,900 square feet of living quarters and messing facilities which had been countersunk to roof level. The fact that these buildings were generally concentrated in massed areas might have made them vulnerable to large

scale pattern bombing. However, since this type of attack was never attempted on Wake, most of them escaped damage. A few such structures were destroyed or damaged by attacks directed against more important or more clearly visible targets located in the same area.

Bombing attacks and most of the gunfire had better results against buildings of the third class, even when they were reinforced. The most important building of this type on the island was the main power plant near Navy Headquarters on Wake Island.⁵⁴ A two-story building of reinforced concrete construction, this was the subject of repeated bombing attacks and was finally put out of operation on 6 August 1945, by a large caliber shell from naval gunfire which struck a steel wall column, and broke a 12-inch x 12-inch stringer that allowed the second story to collapse on Diesel-electric units. The reinforced concrete water distillation plant on Wake Island⁵⁵ and the steel frame torpedo warehouse on Peale⁵⁶ also examples of this class—were hit and damaged by general purpose bombs but remained operational.

American bombing of unprotected frame buildings was highly successful. For example, the water distillation plant⁵⁷ in the dock area on Wake Island was completely destroyed by blast and fragmentation effect. It should be noted, however, that of the 3 small RDF towers⁵⁸ only one was destroyed.

f. *Fuel Stocks.*—The following tabulation gives an indication of fuel losses suffered from air raids in relation to fuel on hand:

	Motor gas	Aviation gas	Diesel oil
Tons on hand, June 1943	140	1200	320
Tons destroyed, June 1943 to V-J day	12	4	50
Tons on hand, V-J day	7	600	55

The insignificance of the percentage of loss caused by bombing is perhaps a tribute to Japanese methods of dispersal.⁵⁹ Nevertheless, the Japanese stocks, in themselves, were insufficient for normal needs, and shortages in the end caused the curtailment of operation in both water distillation plants and radar.

g. *Utilities.*—Wake Island had few utilities in the accepted sense of the word. It has already been

indicated above that the water distillation system on the island suffered some damage from bombing. In the same way, the local telephone system was frequently disrupted,⁶⁰ and extensive repairs were necessary after every raid. In the matter of power, however, the Japanese were singularly fortunate. The largest power plant on the island was still operating as late as 6 August 1945, when it was finally knocked out, as previously indicated. A sound conclusion seems to be that the main limiting factor in power production was lack of fuel.

h. *Transportation.*—The Japanese had constructed a very extensive road net on Wake and Peale Islands. Roads along the best landing beaches on Wake Island were constructed on each side of parallel inland defensive positions. This assured road communication among the secondary defenses in case an enemy over-ran the main line of resistance and forced the Japs to fall back to their final protective lines and relinquish control of the roadway between the two. Damage to this road net by aerial bombing was negligible, and in any event, repairs could be made in from 1 to 3 hours. A large bomb hole on the Wilkes Island road had been poorly repaired with soft sand and was a snag in motor transportation and a source of excessive wear and tear on vehicles. In the latter stages of Japanese occupation, the weakened condition of the troops had reduced road maintenance to a bare minimum. About one-tenth of the road net was passable only at slow speeds, but, still, lack of maintenance had not reached a critical point, as operations had been at a minimum.

A possible source of interrupted operations for the Japs would have been the loss of the wooden bridge connecting Peale and Wake Islands. This was only hit twice by rockets, probably 5-inch, and was easily repaired. The causeway paralleling this bridge received a direct hit from a large aerial bomb and was put out of commission.⁶¹ Traffic between Wake and Peale was never interdicted by aerial bombing.

Of an original total of 68 motor vehicles on Wake, the Japanese lost 18 as a result of air attack.⁶² An additional 28 were rendered useless because of an insufficient supply of spare parts.⁶³ Excellent use of camouflage and revetments prolonged the lifetime of the remaining vehicles.⁶⁴

It appears that at no time did the Japanese suffer materially from being unable to move supplies and equipment by trucking. Activity, training and operations declined by virtue of shortage of food stocks and resultant malnutrition and therefore the requirements for transportation and the need for trucks diminished at the same time that available motor transportation declined.

Of the seven garages on Wake devoted to the maintenance of vehicles, none received a direct hit during an aerial attack. One or two were slightly damaged by near-misses, but were not put out of commission.⁶⁵

For inter-island transportation the Japanese had three launches (MCLs) and one small motorboat. These were used primarily to service Wilkes Island and to maintain liaison with Wake Island. One MCL was damaged in three separate attacks and finally sunk shortly before the Japanese surrendered.

Aircraft destroyed about 75 percent of all the barges and small boats at Wake. As improvised means of getting supplies ashore from ships and submarines failed, the loss of small boats adversely affected unloading operations. Unloading operations were further hampered in late 1943, when an F6F sunk a large lighter in the channel, causing its use, especially at night, to be slow and hazardous. The wreckage was finally removed in pieces and unloading operations returned to normal. Two large American barges, recovered by the Japanese, were destroyed by aerial attack. All three Japanese torpedo boats and six or seven small scouting vessels were also destroyed by bombing.⁶⁶

i. *Some Notes on Ordnance.*—As noted above, the bombs generally dropped on Wake were of the general purpose type. There is no evidence that armor-piercing bombs were ever used, and, in view of the nature of the targets on the island, their employment would have been uneconomical.

When discussing the relative effectiveness of the various types of ordnance actually used against Wake, it should be noted that all types were effective when used against proper targets, with accuracy. For example, before the defenders of Wake went underground, which was immediately after the destructive raids of October 1943, our attacks with incendiary bombs of the type available to us at that time—(M-69)—could be considered effective. Their use resulted in many fires and the destruction of a considerable amount of food stores

⁴⁸ For drawing and photographs of this structure, see Annex B, Section 3, Photos 24-31 and Section 4, Drawings 4 and 5.

⁴⁹ See photo., Annex B, Section 3, No. 29.

⁵⁰ It is estimated that in order to attain 4 direct hits on the command post, approximately 450 to 500 by 1,600 AP bombs would have had to be dropped. This would have equalled 20 percent of the total tonnage dropped on Wake.

⁵¹ For drawing of this structure, see Annex B, Section 4, No. 6.

⁵² For a picture of a shelter similar to the one destroyed, see Annex B, Section 3, Photo 5.

⁵³ For a plan of the extensive underground machine shop area, which remained virtually undamaged until the end of the war, see Annex B, Section 4, Drawing 7. See also Section 3, Photos 36-39 and Section 1, Interrogation, Tokuda, question 24.

⁵⁴ See Annex B, Section 3, Photos 31-35.

⁵⁵ See Annex B, Section 3, Photos 63 and 64.

⁵⁶ See Annex B, Section 3, Photos 61 and 62.

⁵⁷ See Annex B, Section 3, Photos 40-44.

⁵⁸ See Annex B, Section 3, Photos 59 and 60.

⁵⁹ A map showing gasoline and oil dispersal areas will be found in Annex B, Section 2, Map 6. See also Section 1, Interrogation, Tokuda, questions 10-13.

⁶⁰ Annex B, Section 1, Interrogation, Tachibana, questions 1 and 2. Inter-island communication also suffered, but the main cause was the fall of the closest relay center, Kwajalein, in February 1944.

⁶¹ See Annex B, Section 3, Photo 78.

⁶² See Annex B, Section 3, Photo 72.

⁶³ See Annex B, Section 3, Photo 73.

⁶⁴ See Annex B, Section 3, Photo 76.

⁶⁵ See Annex B, Section 3, Photos 72, 74 and 75.

⁶⁶ See Annex B, Section 1, Interrogation, Sakibara, question 162. See also Annex B, Section 5, Table VI.

and supplies. After these stores and supplies were placed underground, incendiaries were no longer effective.

In like degree, bombs with instantaneous fuzing were effective against open, unprotected lightly constructed targets, such as planes, open or inadequately revetted gun positions, above-ground supply storage and repair shops, and targets that could be damaged by blast effect and fragmentation. When used against such targets, the 500-pound and 1,000-pound general purpose bombs with instantaneous fuzing were most effective, especially in their destruction of medium AA gun positions. However, *little or no effect resulted in their use against well constructed, reinforced underground installations.*

Delay fuzing in general purpose bombs was effective against underground targets of light and medium weight construction materials.

Because of the nature of the bed rock on the island a great deal of the mining effect of near-misses was lost. Coral is porous and therefore absorbed a great deal of the blast effect that would have otherwise resulted.⁶⁷

The number of V.T. or aerial burst fuzes was insufficient to allow an accurate determination of their effectiveness. Too few rockets were used to assess accurately their effectiveness against gun installations and gun crews.⁶⁸ *Strafing against gun emplacements, radar installations, storage tanks, vehicles, parked aircraft, and range finders, because of the accuracy of this type of attack, was most effective, and extensive damage was noted from this source.*

j. *Over-all Effectiveness.*—It was estimated by Japanese personnel interrogated that 70 percent of the physical damage at Wake Island resulted from air attacks and 30 percent from naval shelling. Physical evidence indicates that the most effective form of aerial attack was dive bombing, although this may in part be due to the preponderance of this type of attack. The usual effectiveness of low-level torpedo bombing attacks was somewhat reduced because of relatively intense and accurate medium and small caliber anti-aircraft fire. High-level attacks generally were not directed against pin-point targets but, rather, against congested target areas. Furthermore, many of the high-level missions were of a purely harassing nature.

⁶⁷ For an example of cratering by a near-miss without resultant damage to a gun position, see Annex B, Section 3, Photos 19 and 23.
⁶⁸ For photographs showing rocket damage to gun installations, see Annex B, Section 3, Photos 17 and 18.

Surface raids, during which the defenses of Wake were subjected to bombardment by naval gunfire, were effective in destroying several of the island's major installations.⁶⁹ The Japanese Commander, indeed, considered that his greatest qualitative damage came from naval gunfire. A study of the island installations in their present state of destruction, however, clearly indicates that by far the greatest amount of over-all damage was inflicted by bombs. This was due to the great preponderance of bombs dropped as compared to shells fired.

The greatest success of American bombing of Wake Island was the reduction of the garrison's fire power by 20 percent—a heavy loss in view of the island's normal weakness in defensive strength. There is no doubt, also, that the casualties produced by air attack were serious, as was the fact that the frequent strikes *forced the island command to spend a large amount of time and labor in dispersing facilities and putting them underground.*

It is true, of course, that many of the most important ground installations remained undamaged until the end of the war, and that such things as power plants and fuel stores were in usable condition. It should be remembered, however, that, for the last 18 months of Japanese occupation, Wake was a bypassed area subject only to "nuisance raids" and to sporadic and isolated carrier strikes mounted for the purpose of training. Had Wake been of prime importance in the conduct of the war it would have been subjected to an altogether different type of attack.

3. The Japanese Problem of Supply

Admiral Sakaibara, the Island Commander, stated on one occasion, with regard to the island's state of ineffectiveness, that he would attribute 10 percent of his difficulties to our air and naval attacks and 90 percent to the effects of blockade.⁷⁰ Because of the American blockade instituted after the fall of Kwajalein, all regular Japanese surface communications with the island came to an end in February 1944. The last supply ship to reach Wake was the *Akagi Maru*, which brought supplies in January of that year. It is known that the same ship made two subsequent attempts to run the American blockade. They were unsuccessful

⁶⁹ See Annex, Section 3, Photos 32-35, 48-51.

⁷⁰ Admiral Sakaibara further pointed out that the estimates of his several officers would be closer to 30 percent due to air and naval attack and 70 percent to blockade. See below, Annex B, Section 1, Interrogation, Sakaibara, question 152.

ful and the final fate of the *Akagi Maru* is unknown.⁷¹

During the last 18 months of Japanese occupation, the only supplies to reach Wake came by submarine. These arrived at intervals of 1 month or 6 weeks, bringing medical supplies, mail and small stocks of food and ammunition. The amount of supplies brought in this manner did not succeed in slowing the rapid diminution of stocks on the island. The last submarine to reach the island arrived on 28 June 1945, and, thereafter, it was completely isolated.⁷²

4. Japanese Health and Morale

a. *Medical Facilities.*—In the early days of the Japanese occupation of Wake medical facilities were adequate. So far as can be determined from interrogation, the garrison had a full complement of medical officers and hospital corpsmen. The initial landing force brought with it a full year's supply of medicinals, and this stock was supplemented by a large quantity captured from the Marines. The garrison, moreover, was well equipped with hospital facilities. The Navy operated two underground hospitals—one on Wake Island, and one on Peale Island—which were equipped to do major surgery. The Army had two small underground surgical rooms capable of handling minor cases and relied for the treatment of major surgical cases upon the Navy hospital on Wake Island. Had the island been able to receive normal replenishment of supplies, medical facilities might have remained adequate, especially in view of the small size of the island's garrison. But, at the same time that American attacks were destroying existing supplies, the American blockade effectively disrupted all regular communication with the homeland. As a result, by the end of 1943, the health services on the island were seriously impaired.

The blockade, for instance, made impossible both any systematic rotation of medical personnel and any attempt to replace losses. Thus, at the time of the Japanese surrender of Wake, there were present on the island only 4 Navy and 5 Army medical officers, together with 30 Army and 13 Navy hospital corpsmen. During the preceding

⁷¹ Annex B, Section 1, Interrogation, Chiba, question 39.

⁷² Annex B, Section 1, Interrogation, Chicabari, questions 85, 86. Testimony on submarines was contradictory and unsatisfactory. Personnel interrogated differed as to the date of the last submarine to arrive, some holding that the date was 18 April 1945. See, for instance, the statement of the senior medical officer, quoted below, in Section B-4-c, "Morale."

2½ years, there had been no dental officer on the island, although the Army had one enlisted dental technician who had practiced dentistry before his induction.

As a result of American bombing, existing medical installations received irreparable damage and supplies were destroyed to a serious extent. Thus, in the air raid and surface bombardment of October 1943, the underground hospital on Wake Island was so completely demolished that very little equipment could be salvaged. Among the items of equipment thus destroyed was the X-ray machine which could not be repaired and was never replaced.

The effects of blockade and destruction upon medical treatment will be readily apparent. The raid of October 1943, for instance, destroyed considerable quantities of medicinals, particularly those employed in the treatment of the various types of dysentery, including amoebiasis. Consequently, many cases became chronic. The total number of amoebic dysentery cases amounted to approximately 25, and the daily sick report regularly recorded approximately 10 cases of various types of diarrhea. At the same time, there were numerous fatalities from wounds which could have been cured had it been possible to procure adequate supplies of sulfa drugs and plasma. Indeed, this situation became so serious in the Navy hospitals that, during the last 15 months of the Japanese occupation on Wake, many enlisted men who were seriously wounded were left to die. Officer personnel, when sick or wounded, were treated with the best means available, but unless an enlisted man held a key job which made his future services essential he was not treated.⁷³

To a like degree, conditions of hospitalization became primitive during the last 2 years of Japanese occupation. An American inspection trip in September 1945, revealed mute evidence of what had been accomplished by American attacks and blockade for the past 18 months. The sick bay inspected was a dilapidated shack approximately 20 by 60 feet set in a large crater so that the overhead was level with the ground. The beds consisted of wooden frames and platforms with no springs. There were a few mattresses and these were grossly soiled, torn and ragged. Nondescript

⁷³ The above information pertains to the Navy only. In the Army, the doctors did whatever possible to treat their men and made no distinction in rank. Japanese medical officers of both services denied having at any time shot patients who, they felt, had no chance of survival.

pieces of material were used for sheets, pillows, and blankets. Scattered about the deck were the personal gear of the patients, such as ragged and torn clothing, worn out shoes, broken down mess gear, and other items. Flies were present in abundance. The heads were approximately 10 feet to the rear of the building, and other sanitary facilities did not exist. There were 2 officers and 20 enlisted men hospitalized in this building. The majority of the patients were malnutrition cases; there were several dysentery patients and in addition 4 from whom either an arm or leg had been amputated. In summary, the picture was one of marked depletion and impoverishment.

When the Japanese surrendered Wake, the garrison received ample supplies of all types of medicals from the United States forces. It is indicative of the complete demoralization of the Japanese medical service on the island that these supplies were grossly misused. The aforementioned American inspection trip found surgical dressings soiled and unchanged, needles and syringes unsterilized, inefficient handling of fracture cases, and misguided segregation of patients.

b. *Food and Water.*—For the first 20 months of their occupation, the food for the Army and Navy personnel was the prescribed full ration, consisting of approximately 720 grams of rice per man per day, plus side dishes of fish, beans, and other comestibles amounting to approximately 3,200 calories per day. After the fall of Kwajalein in January 1944, however, the daily ration gradually decreased. Kwajalein had been the island's main source of food stocks, and its capture was a serious blow to the garrison.

Even so stocks were sufficient to prevent any real shortage until May 1944, when rationing had to be instituted.⁷⁴ At this time the rice was cut down from 720 grams per day to 410 grams daily. The main side dish was fresh fish. During the ensuing months, the ration was further reduced and, in July 1945, it reached an all time low of 37 grams of rice per day. During the progressive lowering of the daily ration, an attempt was always made to give additional rations to key personnel.⁷⁵

⁷⁴A large building and its contents of rice and canned goods was destroyed in the raid of October 1943. Aside from this, there was little damage to provisions from subsequent attacks.

⁷⁵During the period 25 March 1945 to 19 April 1945, when the daily rations consisted of 240 grams of rice, the following supplementary ration was given to key personnel:

Communication and code personnel.....	100
Fishing personnel.....	100
Special work personnel.....	100
Medical personnel.....	40
Bicycle messengers.....	40
Headquarters telephone operators.....	40
Peacock Point 12.7 cm AA gun crews.....	40
Heel Point 12.7 cm AA gun crews.....	40
Other AA gun crews.....	40
25 mm machine gun crews.....	40

The food allowance also varied according to the rank of the individual. A non-commissioned officer received more than a private; a warrant officer received more than a non-commissioned officer; and all commissioned officers received the same.

After the fall of Kwajalein, the island was visited by a submarine on an average of once every 5 to 6 weeks. This submarine brought a limited amount of food, together with some mail and medical supplies. However, the Jap soldiers and sailors were encouraged to grow their own vegetables and to become, in a sense, self-sustaining.⁷⁶ Fishing parties were also organized and, in the beginning, results were good. However, as the fishing gear became worn, and as the nets rotted and the small boats were destroyed, the catch dropped to such a low level that it was not considered worth the effort. In addition to fish, some men caught and ate island birds, but the yield here also dropped in the last months, as men became weakened from malnutrition.

Rats were also eaten whenever caught. Admiral Sakaibara said that on one occasion the island garrison made a run on rats and in one single day killed 40,000 and ate them. On at least one other island difficulty was had with individuals eating the flesh of men who were killed in battle. On Wake however, nothing of this sort was reported.

The only time a shortage of water prevailed was after the air raid and surface shelling of October 1943. During the raid many of the water tanks were destroyed and many other water installations damaged. After the raid, rain water was used and there was a scarcity, but most of the equipment was repaired and the garrison did not suffer too much during the recovery period. In all, water supply did not present a problem.

The lowered resistance of the garrison resulting from the growing food shortage was reflected immediately in the standard of their work. The normal working day for the garrison at the time of Japanese occupation was 10 hours, and it remained at this level until May 1944, when it was

⁷⁶The growing of food was not made mandatory. It has been estimated that combined garden plots on Wake would cover an area 100 feet square. The individual plots consisted of tomatoes, squash, melons, cucumbers, and turnips. They were fertilized by human excreta and enclosed by salvaged strips of tin, glass, and other materials to keep out the rats.

reduced to approximately 8 hours. By August of this same year it had fallen to approximately 4 hours and, by January 1945, to 2. In the last months of Japanese occupation, the men were incapable of working for more than 1 hour a day and, in the performance of their military duties, had become ineffective to a high degree.

Casualty figures also were increased as a result of shortage of food. As has been seen above, a total of about 725 men were killed on Wake as a direct result of air and surface bombardment. Three hundred of these casualties were caused by the strikes of June 1945. Many of this number were men who received minor injuries but died because of their poor physical condition. More serious was the number of deaths caused directly by starvation. Japanese medical authorities on the island estimated that approximately 1,500 men had died as a result of malnutrition since May 1944, 800 of them in the months of June and July 1945. In the latter month, 997 malnutrition cases were evacuated by a Japanese hospital ship.

c. *Morale.*—The morale of the garrison was excellent until January 1944. With the fall of Kwajalein, however, both officers and men became concerned about the final outcome of the war and some, at least, began to question the invincibility of the Japanese war machine. The recapture of Guam and the fall of Saipan caused real alarm on the island and heightened the impending sense of defeat. But again it was food shortages which did most to weaken Japanese morale on Wake.

Thus, when questioned concerning loss of faith in Japanese teachings and lowering of morale during the last 15 months of Japanese occupation, the senior medical officer on the island made the following statement:⁷⁷

"The men of course became dissatisfied because of the lack of supplies, but the officers did all they could to keep their courage up by telling them food and supplies were on the way. In September 1944, the submarines no longer came regularly and the men were, on the whole, low and dissatisfied, but the officers heard no complaints from the men, principally because of rank. On April 18, 1945, the last submarine came with mail, food and supplies. Once the Army went without food for 1 day, the 24th of March. For about 10 days in June the Navy was issued only 37 grams of rice per day.

⁷⁷In this respect, see also the statements of enlisted men questioned on this subject, Annex B, Section 1, Interrogation, Shirata and Kurihayashi.

All the men had the feeling that Wake Island would be the next island to be attacked, and naturally they were all restless and spirits were not too high generally."

It cannot be said definitely that there was ever a serious morale problem on the island. In the whole period of Japanese occupation, there were only two cases of psychoneurosis and four suicides. But there was the increasing restlessness cited above and the growth of a doubting attitude toward the chances of ultimate victory. In this connection, it is interesting to note that officers, questioned concerning the amount of faith which they placed in broadcasts emanating from Tokyo, answered: "We listened to the Tokyo, Melbourne, and San Francisco Japanese language broadcasts and drew our conclusions and deductions from all three."

5. Summary

In summarizing the coordinated American attacks against Wake Island, the following is a tabulation of outstanding results. In order to emphasize the relative effectiveness of the various tactics employed against Wake, these results have been classified according to the type of attack. It should be stated at the outset that this tabulation is a necessarily rough indication of results achieved and is not intended to be complete.

Type of Attack	Primary Effects	Secondary Effects
1. CARRIER AIRCRAFT a. Glide and Dive Bombing —	a. Destroyed Japanese air power in the raids of October 1943. b. Destroyed most of the installations above ground — i.e., barracks, shops, warehouses, and supply depots. c. Destroyed 10 CD and AA guns no longer operational in Sept. 1945. d. Destroyed or damaged three CPs or fire control centers — or 33 percent of those on the island. e. Accounted for more than 70 percent of the damage to surface installations of all kinds. f. Destroyed one year's food supply for 1,000 men (Oct. 1943) with resultant hardship to the garrison.	a. Forced dispersal and the construction of underground facilities, thereby decreasing the efficiency of the garrison.
b. Rocket-Fire —	a. Knocked out two heavy dual purpose guns. b. Destroyed one searchlight.	

Type of Attack	Primary Effects	Secondary Effects
1. CARRIER.— Continued AIRCRAFT.— Continued c. Strafing	a. Was highly effective against parked aircraft fuel tanks and other air facilities, notably in the raids of Oct. 1943. b. Knocked out two light anti-aircraft positions. c. Was highly effective against light materiel and personnel.	a. Decreased the accuracy of guns by driving crews from their stations during bombing attacks.
2. HIGH LEVEL BOMBING	a. In the period before the Japanese went underground, was effective in destroying food and bivouac areas by incendiary and GP bombs.	a. Harassed the island periodically, thereby reducing the efficiency of the garrison. b. Inflicted incidental but important damage during "nuisance raids."
3. NAVAL BOMBARDMENT	a. Destroyed vital installations by pinpoint bombardment (i.e. destruction of power plant in August 1945). b. Destroyed 8 CD and anti-aircraft positions—or 36 percent of guns no longer operational in September 1945. c. Destroyed at least one CP and one ammunition dump.	a. Administered a serious blow to Japanese morale on the island, by demonstrating its impotence to repel close-range attacks.

IV. CONCLUSIONS

At the time of its surrender to American forces in September 1945, Wake Island, originally con-

ceived of by the Japanese as a key base in their program of expansion toward the east, had become a lonely outpost, severed of all communication with the homeland, with negligible defenses and a dying garrison. Of the air base, few facilities and no planes remained. The defensive position had been deprived of 20 percent of its fire power and, in any event, was impotent when manned by a garrison which was capable of working only a few hours a day and had long given up normal operations.

The offensive and defensive capabilities of Wake could not have been more effectively reduced had it been the object of sustained American campaign or invasion. Yet, in effect, operations against the island were desultory in character. The first fierce attacks during the period of the Gilberts and Marshall campaigns had completely nullified the offensive value of the base. The period that followed was mainly one of attrition and blockade which reduced both the defensive ability and the defensive will of the island.

The Japanese garrison on Wake Island was not forced to surrender. However, American airpower, by assisting in blockade and by bombing and machine gunning, was largely responsible for reducing the island's defenses to such a state of ineffectiveness that a successful landing could have been made with a minimum effort—a fact attested to by the Island Commander, who stated that by June 1945 his forces could no longer have repelled an invasion.

U. S. STRATEGIC BOMBING SURVEY MARSHALLS-GILBERTS-NEW BRITAIN PARTY

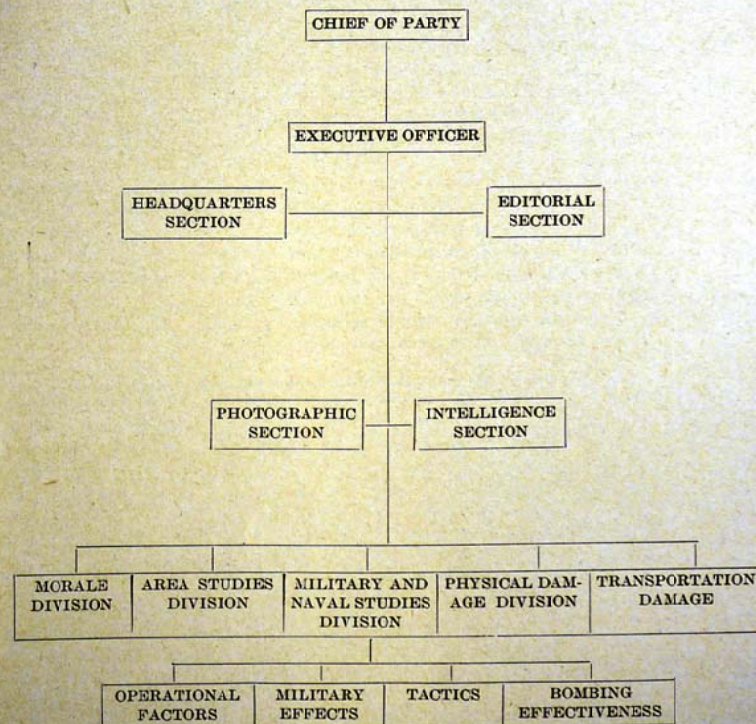
REPORT No. 1 — WAKE ISLAND

ANNEXES

ANNEX A — ADMINISTRATION

Section 1. — Organization of Marshalls-Gilberts-New Britain Party

U. S. STRATEGIC BOMBING SURVEY
MARSHALLS-GILBERTS-NEW BRITAIN PARTY



ANNEX A — ADMINISTRATION

Section 2. — Chronology of Investigation

19 September 1945.....	Marshalls—Gilberts—New Britain Party departed Oahu, T. H.
21 September 1945.....	Party arrived Kwajalein, Marshall Islands.
21–23 September 1945.....	Organization, outfitting, preliminary research.
26 September 1945.....	Party departed Kwajalein aboard <i>U.S.S. Rednour</i> .
28 September 1945.....	Party arrived Wake Island.
28 September–2 October 1945.....	Field investigation, Wake Island.
2 October 1945.....	Party departed Wake Island.
5 October 1945.....	Party arrived Majuro, Marshall Islands.
5 October–2 November 1945.....	Field investigations, Wotje, Maloelap, Mille and Jaluit Atolls. ¹
2 November 1945.....	Party departed Majuro.
2 November 1945.....	Party arrived Momote, Los Negros, Admiralty Islands.
2–7 November 1945.....	Preliminary research on Rabaul.
7 November 1945.....	Party departed Momote aboard <i>U.S.S. Wantuck</i> and <i>U.S.S. Stockdale</i> .
8 November 1945.....	Party arrived Simpson Harbour, Rabaul, New Britain.
8 November–18 November 1945.....	Field investigation, Rabaul. ²
18 November 1945.....	Party departed Rabaul.
20 November 1945.....	Party arrived Oahu, T. H.
20 November–28 November 1945.....	Preparation of final divisional reports.
28 November 1945.....	Editorial and Photographic Sections departed Oahu, T. H.
30 November 1945.....	Editorial and Photographic Sections arrived Washington, D. C. for preparation of final reports.

¹This investigation was the basis for the second report of the Marshalls-Gilberts-New Britain Party.

²This investigation was the basis for the third report of the Marshall-Gilberts-New Britain Party.

ANNEX B

Section 1. — Interrogations

	<i>Page</i>
1. Interrogation of SAKAIBARA, Shigematsu, Rear Admiral, IJN.....	29
2. Interrogation of CHICABARI, Shigeharu, Colonel, IJA.....	38
3. Interrogation of TACHIBARA, Soichi, Lt. Commander, IJN.....	42
4. Interrogation of CHIBA, Kenjiro, Lieutenant, IJN.....	43
5. Interrogation of TOKUDA, Sutematsu, Lieutenant, IJN.....	45
6. Interrogation of NAKAZATO, Hisao, Lieutenant, IJN.....	47
7. Interrogation of ASAH, Masaaki, Lieutenant, IJN.....	49
8. Interrogation of SHIRATA, Kimeo, Seaman 1/c, IJN.....	50
9. Interrogation of KURIHAYASHI, Kumasabura, Seaman 2/c, IJN.....	51
0. Statement of TACHIBARA, Soichi, Lt. Commander, IJN.....	52

1. Interrogation of Sakaibara, Shigematsu, Rear Admiral, IJN.

Duty: Island Commander.

Arrived Wake Island: 13 December 1942.

Age: 50 years.

Service: 30 years.

I. General.

1. Q. Whom did he relieve? — A. He relieved Captain Kawasaki, Susumu, the Island Commander.

2. Q. What officer personnel arrived on the island the same time he did? — A. Lt. Nakazato, Hisao, the supply officer. There were others who came with him, but they came just for sight seeing and they returned the next day.

3. Q. Does he remember who they were? — A. Just he (Admiral Sakaibara) and Nakazato stayed.

4. Q. What military and naval units were on the island when he arrived? —¹ A. When the admiral arrived there was the Sixty-Fifth Naval Guard Unit. There was an Army Battalion which, he believes, was the Second Battalion of

the One Hundred and Seventieth Infantry Regiment, which had been in New Guinea. There was one part of the Fourth Naval Pioneer Battalion, of about 1,000 men, and the Naval Air Unit which, he believes, was the Twenty-Second or the Twenty-Fourth Air Fleet. These units used to change back and forth, and sometimes it was the Twenty-Second and sometimes the Twenty-Fourth.

5. Q. How did the admiral arrive at Wake? — A. He came from Kwajalein by plane.

II. Aviation: General.

6. Q. What type of fighter planes were on the island when he arrived? — A. He says the fighters were Zeros, but he doesn't know what model.

7. Q. How many were here at that time? — A. When the admiral arrived here, there were no fighter planes on the island.

8. Q. Did the fighter planes arrive afterward? — A. The fighter planes were very scarce and therefore moved around a great deal in the Marshall-Gilberts Group, so he doesn't remember when they came. He is not sure but he thinks they arrived in the Spring of 1943.

9. Q. Were medium bombers here when he arrived? — A. Yes.

10. Q. How many? — A. About 10 planes or less.

¹Some confusion will be noted here and in question 6, in view of the admiral's later statement (question 7), that there were no fighters on Wake at the time of his arrival. See the clarifying questions 171-178, below.

11. Q. What type? — A. They just called them medium bombers. Some that had been burned are still here. He thinks they are "Betty's."

12. Q. What was the largest number that were ever here at any one time? — A. Less than 20 fighters.

13. Q. What was the maximum number of bombers? — A. On the same day as the October 1943 raids about 20 medium bombers arrived from either Roi or Wotje.

14. Q. How many did that make altogether? — A. About 20. The rest had been destroyed on the strips, etc.

15. Q. Was the maximum number of bombers on the island just 20? — A. It was the largest number, but more were sent out later and he believes that they were shot down.

16. Q. Did the types of planes ever change? — A. New and improved models may have come, but to all outward appearances the types were the same, but there may have been newer models.

III. Interception.

17. Q. How often during the time he was here did Japanese fighters attempt to intercept our strikes? — A. Anywhere from four to six times.

18. Q. What tactics were used on those strikes? — A. The bombers at that time were B17s (probably confused with B24s) and would come from Midway and would bomb the airstrip. No warning system was available and it did not give the fighters enough time to get into the air. The admiral thinks that B17s would do about 250, and believes the Zeros were not fast enough to catch up with them.

19. Q. Did they shoot down any planes? — A. He believes that no B17s or B24s were ever claimed shot down by Jap fighters.

20. Q. When did the radar arrive? — A. It was here when he arrived. There was one station here and it was too low and not very effective because of bushes, etc., and they moved it.

21. Q. Did they move it at that time to its present position? — A. They had two outfits; the first was down at the southeast corner of Peacock Point. Then they started to set up another at Kuku Point on Wilkes Island. The set on Kuku Point was disabled. On June 1943 they set up one at Heel Point and another along the north coast of Peale Island. The dates may be inaccurate.

22. Q. What date does he fix when radar became effective on the island? — A. About June 1943.

23. Q. Was interception ever attempted after that date? — A. Interception was attempted after the two radar sets became effective but due to the short range of the sets and the fact that it took quite some time to get the planes in the air they were not very successful. By the time the fighters got in the air the bombers were overhead.

24. Q. Give an estimate of the approximate time it took to get the fighters into the air after the warning? — A. He doesn't remember exactly, but he believes anywhere from 5 to 10 minutes.

25. Q. When was the last interception attempted? — A. 6 October 1943.

26. Q. Did the planes make contact at that time? — A. Yes, they engaged with our aerial patrol of carrier-borne fighters and bombers. It was dark and he could not see very well at the time. It was just before dawn when the planes took off. He doesn't know whether they tried to go out and were driven back, but at any rate not one plane returned.

27. Q. Out of how many? — A. He believes about 20 planes. It might have been 15.

28. Q. Did every serviceable plane take off? — A. Yes, all serviceable fighters took off. The bombers did not take off.

29. Q. What plane did the Jap pilots consider our most effective fighter? — A. The F6F was considered at that time very good.

30. Q. How did they think it compared with their Zeros? — A. He thinks that the F6F is a better plane. He thinks it has more speed.

31. Q. What was the Japanese pilots' estimate of American trained fighter pilots? — A. All the Japanese pilots failed to return so there was no way of finding out.

32. Q. When the Japanese fighter pilots chased the retiring B17s did they find the armament and the gunnery effective against their attacks? — A. When one of the heavy bombers was alone the Japanese fighter pilots found that they could approach fairly close but even though they hit them the armor seemed to withstand their guns and the calibre was increased on that account. When the bombers flew in a group formation it was very difficult because they (American Bombers) were able to concentrate all their fire power on the fighters.

33. Q. What approach or type of pass against single planes did the Japanese pilots like best? — A. A frontal approach a little bit to the right or little to the left. (11 and 1300). He doesn't know

the details of this but thinks the frontal attack cut down the time of approach. He says that all of our bombers would make a bombing run and head back to Midway. Several times the Japanese fighter pilots would fly along part of the way to Midway.

IV. Approaches.

34. Q. Would the bombers have the same approach to Wake Island as regard to direction? — A. He thinks that the ones that came from Midway came from the northeast, but it differed with the winds. The night attacks usually came in from about 140°.

35. Q. What formations did he consider the most effective? — A. He thinks the close-packed formation was not very good and the open V was most effective. The close-packed planes were shot down very easily. Once they shot down a B24 here. About the time they shot down the B24, it was flying at 1,200 feet parallel to the island from Heel Point to Peacock Point. If the planes are closely packed together, the anti-aircraft guns do some damage.

36. Q. Did the bombers seem to approach at a constant level or did they vary their altitude during the approach? — A. They used different altitudes. Later they kept going higher and higher. At first it was about 3,000 meters but gradually they kept increasing the altitude until it was about 6,000 meters. They just came in flying along straight and as soon as they released their bombs they turned around and gained more altitude.

37. Q. Did the heavy bombers seem to vary their course during the approach? — A. He thinks it was a zig-zag approach but if you don't follow them with glasses you can't tell.

38. How about radar? — A. The Japanese radar directional finder was not very good.

39. Q. From what direction did the carrier strikes generally arrive? — A. They came in from all directions. When the sun was rising in the morning, it rose between 40 and 60° and they would approach with the sun behind them and the same type of approach was used in sundown. They would also take advantage of clouds.

40. Q. Did the carrier strikes vary their altitude on the approach? — A. The ones that came from the carriers were dive bombers. The ones that came in the October 1943 raid would approach from 30 or 40° at an altitude of 1,000 meters, dive down on the target, and release their bombs.

41. Q. What was the usual angle of dive? — A. In the October 1943 raids they computed it to be

35°, but in later raids it was computed to be 50° and the planes that were using rockets decreased the angle.

42. Q. Did they make no distinction between the types of planes used? — A. The admiral did not understand very well because he doesn't know very much about planes. The TBFs were the most numerous in the October 1943 raids. He doesn't know very well but the ones with the square wing tips were the most numerous. (Apparently no distinction was made between TBF and F6F.)

43. Q. Did the SBD use the steeper dive? — A. He believes that none ever dived at an angle of more than 55°, as estimated by the angle of their guns.

44. Q. Did they consider the planes using the steepest dives the most effective against their installations? — A. He believes that the shallower dive was the most effective for the Americans, and the steeper dives were easier for the Japanese because they were able to shoot down the planes.

45. Q. Is that true of both heavy or medium anti-aircraft? — A. It is true of both.

V. Anti-Aircraft Defense.

46. Q. In a steep fast dive was it possible for their gunners to adjust their fire to the speed of the dive? — A. As they loaded they cut their fuzes fast enough.

47. Q. What is the heaviest anti-aircraft gun on the island? — A. 12.7 cm (127 mm). These guns would elevate only to 80°. The admiral studied gunnery and has been thinking a lot about this.

48. Q. Did he study at Tateyama? — A. No, it was at Yokosuka. Tateyama wasn't operating at that time.

49. Q. Did the carrier attacks seem to be coordinated? — A. He says they changed the attacks all through the raids. Sometimes they dove singly and sometimes the groups would attack individually.

50. Q. Did simultaneous attacks on different parts of the island disrupt anti-aircraft defenses? — A. They were very effective because they could not swing their guns around fast enough. Quite a few of the 25 mm machine cannon were hit on top and the ammunition exploded in the magazine, killing most of the members of the crew.

51. Q. What type of attack does he consider most effective from the standpoint of anti-aircraft? — A. He says he believes of all the methods we used this year (1945) the best brought in our fighter planes firing machine guns, rockets, and dropping bombs. (Still confusing plane types, particularly F6F and TBF.)

52. Q. Were the gunners ever assigned certain sectors of fire or were they free to select targets of opportunity? — A. When they originally used the directional finder control, they had all their guns firing on one target; but after it was damaged they assigned sector fire to different batteries. They had as much as possible placed the machine guns around the heavier gun positions so that in the event of an attack from two sides at once, when the anti-aircraft guns were engaging one target the machine guns could fire at another. They didn't have enough guns so they dispersed them as much as possible. The greatest need was for 25 mm machine cannons so that the loss of one was very great. At Peacock Point, when they were knocked out, much damage was done.

53. Q. In placing the guns did they try to fix their guns around the more important installations? Or did they try to use an all around defense? — A. The anti-aircraft guns were dual purpose and were to be used to repel landings so that they had to be placed around the shoreline. The machine cannon were placed around the gun positions. The larger positions were already constructed when the admiral arrived. Those at Peacock and Heel Points were already constructed when he arrived.

54. Q. Does he know what Napalm means? — A. He believes the fire bombs we used were hexagonal in shape (M-69) and that no Napalm were used.

55. Q. At what range were the gunners instructed to open heavy anti-aircraft on our strikes? — A. They used to open fire at about 10,000 meters but the admiral used to give the order to commence firing and if the target was too far away they didn't fire.

56. Q. Is this just heavy anti-aircraft? — A. It was just heavy anti-aircraft.

57. Q. How about medium (25 up to 90 mm)? — A. The sighting gear was very old and wasn't very good and they didn't open fire until they were sure of hitting the target.

58. Q. At what range? — A. About 3,000 or 4,000 meters. They would fire directly at the dive bombers approaching the admiral's headquarters.

59. Q. At what range would they open fire with light anti-aircraft? — A. They would open fire at broadside targets at 2,000 meters and at direct approaching targets at 4,000 meters.

60. Q. Any radar fire control? — A. No.

61. Q. Does he understand tracking (continuously pointed) fire? — A. Yes, he does.

62. Q. How did they track our planes with anti-aircraft when there was an intervening cloud cover? — A. When the planes were hidden by clouds they didn't fire. He says when the planes fly over clouds you can see a shadow on the clouds, but he does not think they fired on them. He says they had a shortage of shells and they tried to conserve them as much as possible.

VI. Radar.

63. Q. What was their greatest radar range regardless of elevation? — A. It depended upon the plane and weather conditions; about 120 miles under best conditions.

64. Q. Did any Japanese pilots ever use "Window"? — A. They didn't use it, but the Americans did.

65. Q. Did it seem to be effective in giving false readings? — A. He doesn't believe it was very effective. Unless it moves it is ineffective.

66. Q. Did he ever observe any bombing of Wake Island through a solid overcast, whether at night or day? — A. Yes, about three or four times.

67. Q. Was it very effective? — A. The bombs landed all over the place when they hit the island. Once one plane came from the north and made some hits along the south shore, hitting some torpedoes, mines, and air compressing gear and causing explosions and some damage. After the air compressor was damaged, they brought another unit from Roi.

VII. Reconnaissance.

68. Q. Were there any float planes ever based here? — A. No, they never had any here.

69. Q. Did the bombers ever fly sector patrols from the island? — A. It depended upon the need for searching areas for our task forces. They would fly about half way to Midway.

70. Q. How was briefing of pilots handled? Was it by pilots or by aviation ground officers? — A. He doesn't know anything about that.

VIII. Bombing Effects.

71. Q. How many times was this Island attacked by allied aircraft? — A. There were so many he couldn't estimate the number.

72. Q. Were there more attacks during the daylight or during the night? — A. Usually during the daytime; there were some at night, but only about five or six.

73. Q. Were the night attacks effective against installations? — A. Generally there was very little damage caused by night attacks.

74. Q. What type of attacks were the most accurate? High level, low level, or dive bombing? — A. He believes that high-level bombing is most effective because they cannot reach the planes with the anti-aircraft. The high-level attacks were usually carried out by a few planes whereas the dive bombing and low-level bombing were carried out by many planes. The greatest amount of damage is caused by the dive bombers.

75. Q. Were low-level rockets attacks more effective against fortified positions than low-level or dive bombing attacks? — A. He believes that dive bombing attacks were most effective against fortified positions. Maybe if the rockets were larger they could do more damage.

76. Q. What type of attack destroyed the most aircraft? High-level, low-level, or dive bombing? — A. He says dive bombing attacks were most effective. Low-flying planes going very fast were hard to fire at because you have to traverse your guns so rapidly.

77. Q. Which type of munitions were most effective in knocking out their airfield from the standpoint of disrupting activity on the airfield? Short delay or long delay fuzes? — A. When the runway was bombed they had no planes here. None of them caused much damage because as soon as the field was bombed they were able to fill the craters up again.

78. Q. Were any delayed time-bombs dropped? — A. There weren't people in the area at the time so they just waited until they exploded and returned. They would have been effective if there were any planes in the area. They would have been very effective if there were any planes there.

79. Q. During the raids between 12 July through 17 August 1945, was he advised of any difference in the size of the rockets used? — A. Last year when they were being attacked they didn't know just what we were using, and this year they discovered we were using rockets. He believes that the ones we used this year were larger than the ones we used last year, but he didn't notice the difference.

80. Q. Does he recall the raids of August 5th and 6th of this year? — A. Yes.

81. Q. Has he been advised of large size bombs which appeared to burst in the air about 50 feet from the ground? — A. Yes, some burst near him and they thought that an American plane had been hit by anti-aircraft.

82. Q. Was there any effect on installations? — A. None.

83. Q. How many did he see or hear? — A. Not very many. About three or four. One year before a similar explosion occurred.

84. Q. How many times was this island attacked by surface craft and naval bombardments? — A. He thinks about three times since his arrival.

85. Q. What were the dates? — A. The 6th of October 1943, May or September 1944 and June or July of 1945.

86. Q. How accurate was the naval gunfire, and what damage was inflicted? — A. Considerable damage was caused by naval shelling.

87. Q. What was the damage caused to their fortified positions? — A. The October 1943 raid knocked down and fired a considerable number of buildings, and gun positions were damaged.

88. Q. Did the aerial bombings and naval gunfire attacks prevent this garrison from accomplishing its primary mission? — A. It did partially prevent them from carrying out their functions.

89. Q. Did it materially impair his ability to prepare this garrison for the defense of the island? — A. Yes, it made it very difficult to prepare the defenses.

90. Q. Give the total maximum amount and type of guns that were set up for the defense of the island. — A. (The admiral's answer to this question is incorporated in the table of anti-aircraft guns, Annex B, Section 5, Table 5).

91. Q. Did bad weather interfere with air operations? — A. Yes.

IX. Administration.

92. Q. How long was he at Kwajalein before embarking for Wake? — A. One night.

93. Q. From where did he come before he came to Kwajalein? — A. He came from Yokohama, via Saipan and Truk.

94. Q. At Yokohama did he receive instructions as to the general strategical use Wake Island was to be put? — A. No. He had proceeded to Truk being attached to the Fourth Fleet Headquarters.

95. Q. How long did he remain at Truk? — A. About 5 days. When he left Yokohama it had not been definitely settled that he would come here.

96. Q. Was the administrative and strategic use of Wake under the Commander, Fourth Fleet? — A. The administrative set-up was at the Headquarters Fourth Fleet through Kwajalein Base Force.

97. Q. Who was the Commander of the Fourth Fleet? — A. Vice Admiral Samejima.

98. Q. Does he know whether he is still alive? — A. Yes, he thinks so.

99. Q. Is he still in command of the Fourth Fleet? — A. No.

100. Q. Who is in command of the Fourth Fleet now? — A. He doesn't know.

101. Q. After he arrived at Wake did he take orders from the Base Force, Kwajalein or from the Fourth Fleet? — A. His orders came via the Base Force at Kwajalein.

102. Q. Who was in command of the Base Force, Kwajalein? — A. Vice Admiral Akiyama.

103. Q. Did he receive his instructions for carrying out the job of Island Commander from the Commander of the Fourth Fleet at Truk or from the Commander of the Base Force at Kwajalein? — A. They sent him out here to Wake without orders and after he arrived here safely they sent him a message from Tokyo making him Island Commander. Before he left Truk he received verbal instructions that he was to be made Island Commander of Wake.

104. Q. In their plans for Wake how many naval personnel exclusive of aviation did they plan to have? — A. He doesn't know the general plan of how many planes they intended to place here, but when he arrived he sent word that there wasn't enough personnel to defend the island, and they sent him Army personnel which up to that time had been organized as a battalion but then organized themselves as a regiment.

105. Q. How many personnel were here when he arrived? — A. Over 1,000. When he arrived here there were 1,000 men of the Naval Pioneer group.

106. Q. In addition to them how many Navy and how many Army personnel came in response to his call? — A. One battalion, a little bit over 600.

107. Q. How many did he ask for? — A. He thinks he asked for 2,000.

108. Q. Was there any Army personnel here when he arrived? — A. Over 600 Army men were here when he arrived.

109. Q. There was a total of about 2,600—is that right? — A. A little bit more.

110. Q. Was there any Air Force when he arrived? — A. Yes.

111. Q. How many and what units? — A. Either the Twenty-Second or the Twenty-Fourth Air Unit from Roi Island. There was a medium

¹The units from the Twenty-Second and Twenty-Fourth Air Fleets were fighter units and did not arrive until the spring of 1943. See clarifying questions, 171 ff., below.

bomber unit called Chuko of over 100 men, and it might have been more.

112. Q. Did he ask for more aviation? — A. No, it doesn't concern him.

113. Q. As the Island Commander, was the admiral responsible for the air defenses or just the ground defenses? — A. The admiral had no connection with the air defenses.

114. Q. Who was responsible for launching the fighter planes? — A. The senior office of the Air Force.

115. Q. Was the air warning system under the direction of the admiral? — A. Yes, that was under the admiral's command.

116. Q. When he did pick up "Blips" on his radar, would he transmit the warning to the Air Force? — A. Yes, he would transmit it to the Air Force Commander.

117. Q. Did the Air Force Commander determine whether to launch the planes? — A. Yes.

(The admiral drew a diagram at this point of the interrogation showing an organization chart of the military and naval forces on the Island of Wake, with the next highest echelons. This diagram indicates that under the 4th Fleet is an Air Force and Base Force which are co-equal, and the base force, under which the island command is set, must request aircraft from the Air Forces, and the Island Commander has no authority over the aircraft based on his island. This chart is attached after question 178 below. The admiral further states that the Army is under the 4th Fleet but receives its orders from the admiral and that the Army was ordered to be under his command.)

118. Q. Is the lack of control on the part of the Island Commander over the Air Force based on the island typical of Japanese organization? — A. It is the same everywhere. He believes that this is a situation that must be changed. He thinks that it was set up like this because the Japanese Air Force was very low on planes. He thinks that if they had sufficient planes they would put them under the control of the Island Commander.

119. Q. Was the admiral responsible in any way for supplying the Air Force? — A. He had nothing to do with the supplies.

X. Strategy.

120. Q. Was it contemplated that Wake was to be developed as a seaplane base? — A. He thinks there was such contemplation.

121. Q. Was it contemplated that an anchorage be developed for submarines? — A. He doesn't know. He hasn't heard anything about it.

122. Q. Was any dredging of the lagoon undertaken? — A. He says that the American plan was to deepen the area, but he heard that the Japanese intended to make a larger area for a fairway for landing and taking off. He hasn't heard anything about dredging the lagoon for submarines.

123. Q. Was any provision made for the berthing, for the anchoring of submarines outside the lagoon? — A. He doesn't know.

124. Q. Where did the submarines surface and discharge their cargo? — A. Between Wake and Wilkes Islands. The submarines would surface some distance off the island and proceed to a point about 2,000 meters off the coast and then they would discharge their cargo by barge or landing craft.

125. Q. For what strategic use was the Island of Wake intended? — A. He doesn't know what the strategic use for the island was; and the people who would conduct any operations from here were at Headquarters, and such matters were kept secret.

126. Q. In his opinion was Wake to be used as the jumping off place for future assault on American held islands? — A. They used to receive signals from Tokyo instructing him to defend this place because it was a very valuable base which could be used in the coming offensive.

127. Q. Was the "coming offensive" prior to the American occupation of the Marshalls and Gilberts? — A. That answer is that signals had come through after the Americans had taken the Marshalls and Gilberts.

128. Q. Prior to the American entry into the Marshalls and Gilberts, what, in the admiral's opinion, was the strategy underlying in the occupation of Wake? — A. He thinks they were going to use it in taking Midway. He hasn't been let in on such plans. He thinks that only the Imperial Headquarters knew of the strategic plans.

129. Q. When did rumors indicate that an offensive against Midway might be undertaken? — A. There were no rumors about it.

130. Q. Did the presence of aircraft on Wake indicate to the admiral that it was intended as a base to raid allied shipping? — A. The admiral believes that the planes were based here to ferret out enemy task forces which were contemplating attacking Wake and they would seek them out and attack them.

131. Q. Were listening devices, either radio or radar, installed for the purpose of detecting mer-

chant and naval ship movements? — A. They had no listening gear on the island and there was a radio direction finder located on Heel Point which was used to take bearings on allied shipping.

132. Q. How many direction finders have you? — A. One. They had three before two were destroyed by bombing. Radio signals on several vessels would be received and their bearings would be transmitted to Tokyo, but they could not determine whether the ship was very close or very far away from here. There were two radar installations, one at Heel Point and one on the north shore of Peale Island. They were used only for intercepting aircraft. He doesn't know very much about this. The communications officer would know about it.

133. Q. How far out to sea was he able to verify the location of allied surface vessels after the receipt of a message from some radio direction finder located elsewhere? — A. He thinks they received signals from as far as Dutch Harbor.

134. Q. Did they have any listening device which would enable them to listen in on our messages in code? — A. They had no equipment for breaking down codes and they didn't receive our radio signals. They had none of our code books.

135. Q. Did they transmit our messages to Tokyo? — A. They did not take down our transmissions at Wake.

XI. Supplies.

136. Q. At all times did the Army and Naval forces have the same rations here on the island? — A. They were about the same.

137. Q. What was the normal naval ration in 1943? — A. The ration in 1943 was about 720 grams of rice per day, and of other foods such as meat, vegetables and so forth, the ration was about the same.

138. Q. When was the low point in food rations in the naval forces? — A. About March or April 1944.

139. Q. Does he recall what was the approximate ration? — A. He says the Supply Officer knows this in detail. Rice was about 240 grams and there was almost no extra food.

140. Q. How many rounds of rifle ammunition were available per man in 1943? — A. About 300 rounds per rifle.

141. Q. Did it ever get below that? — A. They didn't use rifle ammunition.

142. Q. Was any rifle ammunition destroyed by bombing? — A. Yes.

gun ammunition was destroyed by bombing? — A. About 30 percent of the ammunition was destroyed.

144. Q. Of the heavy machine gun ammunition, how much was destroyed? — A. About the same amount.

145. Q. Of the 25 and 40 millimeter? — A. So much of it was destroyed he doesn't know for sure and cannot give an answer; 30 percent would apply for the heavy kind.

146. Q. Including the heavy caliber? — A. The 20 mm ammunition was not damaged. There are two 20 mm guns on Peale Island and two on Heel Point.

147. Q. During what raids was the major portion of the ammunition destroyed? — A. It was destroyed so often that he cannot give a particular time.

148. Q. How much would he estimate that the military efficiency of the naval forces was reduced by reason of loss of food and ammunition, by bombing in general? — A. Sometimes to one-third and sometimes one-fifth. Sometimes it took five men to do the work of one. They had not trained for the 1 year due to the shortage of food.

149. Q. When would you say that the absolute low point of efficiency of the naval forces was reached? — A. June 1945.

XII. Miscellaneous.

150. Q. Had a landing force been attempted at that time, do you think you would have been able to repel it? — A. He thinks he could not have repelled an invasion at that time.

151. Q. How did the condition of your men on the day of surrender of the island compare to the condition on June 1945? — A. The men were in far better condition when American forces arrived on the island due to the fact that a submarine had arrived with provisions at the end of June 1945.

152. Q. If you were to assess the causes of the loss of efficiency as between aerial bombing and the loss of supplies through lack of shipping what percentage would you assign to each? — A. Ninety percent would be assigned to blockading and 10 percent to aerial bombings. This is his opinion; some would say 80 and 20 percent. The admiral's opinion is that the original figures he gave concerning percentage by attack and aerial bombings are correct, but in his opinion the consensus of opinion of his personnel would probably assign 70 percent and 30 percent.

153. Q. What percentage of the blockading is attributable to aerial action? — A. The admiral doesn't know anything about conditions existing between here and Yokosuka, but he is of the opinion that the conditions around the islands are generally the same. The air forces kept the islands blockaded during the daylight and the submarines blockaded it at night. Therefore, he would assign 45 percent to air forces and 45 percent to submarines.

154. Q. When did it become apparent to the admiral that the success of future operations in the Pacific was past as far as the island of Wake was concerned? — A. He figured that the success of future operations was past when Okinawa was taken.

155. Q. When did it become apparent to the admiral that the defense of the island was impossible? — A. From the beginning it was apparent that it would be very difficult to defend this island. The admiral has never thought that it would be impossible to defend the island. He has not thought about it too much but is of the opinion, and has been for some time, that if we ever came in force that we would be able to make a landing here.

156. Q. How many of our planes and what type did his command shoot down here? — A. He thinks a total of about 40 to 50 planes. One B24 is included in this number and it exploded in mid-air above here. One PB4Y-2 was flying along the coast at night and was hit by a 25 mm machine cannon and started trailing smoke and fire and flew around to the north end of the island where it crashed and was entirely destroyed. That would leave the rest all carrier based planes.

157. Q. How many is he sure were shot down? — A. The ones he is certain of are six or seven planes.

158. Q. Did any of our planes bomb any of their submarines or ships which were en route to, or retiring from, Wake? — A. He knows of three ships which passed by Truk and Kwajalein en route here and never arrived.

159. Q. Were any of his submarines forced to retire from here because of our aircraft? — A. He doesn't know of any incidents. Operations were never interrupted.

160. Q. What percentage of his transportation was destroyed by bombing? — A. About 70 percent.

161. Q. How many trucks did they have? — A. About 40 to 50 trucks.

162. Q. How many small boats and small lighters did he have? — A. They had two large barges which were left by the Americans which were destroyed. They had six or seven small patrol vessels and three torpedo boats. Of the small scouting vessels two were left. One is aground and one is destroyed. The three torpedo boats were destroyed by bombing.

163. Q. Did the Japanese Air Force claim to sink or damage any of our ships when operating from here? — A. Since the admiral has been here the Air Force claimed to have dropped bombs on an American submarine with unobserved results.

164. Q. What was the date? — A. It might have been before the admiral came here. About the middle of 1942.

165. Q. Were his gunners able to stay at their guns during strafing attacks? — A. They fired back at our planes.

166. Q. What were his instructions to his gunners when they were attacked simultaneously on the same target by strafers and bombers? — A. The anti-aircraft guns would fire at the bombers

and the machine guns would take the strafers. If they just had one machine gun, it would of course have to take one or the other of the planes.

167. Q. Why were they dredging the lagoon? — A. They weren't dredging the lagoon. They didn't use the dredge at all.

168. Q. Of the 30 percent of the ammunition destroyed was it attributable to one or two raids or was it over a period of time? — A. Ammunition was destroyed in all the raids.

169. Q. What type of radar did they have here? — A. He doesn't know.

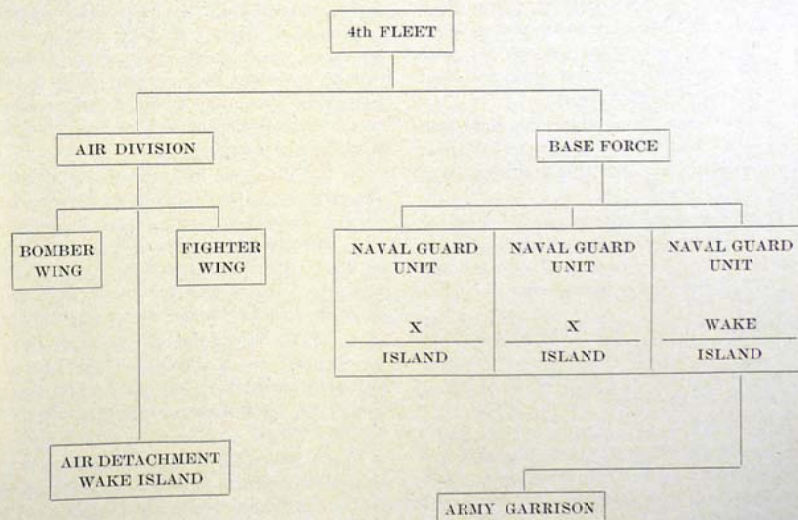
170. Q. Was it a United States or British adaptation? — A. He doesn't know, but it was one made in Japan; its efficiency was not very good.

XIII. Additional questions to clarify the air situation in 1942.

171. Q. What aircraft were stationed at Wake at the time of the admiral's arrival? — A. There were about 10 or 12 bomber planes from the 752 Kokutai. (He identified them, from a recognition handbook, as Bettys).

ORGANIZATION CHART DRAWN BY ADMIRAL SAKAIBARA

(See Question 117 above)



172. Q. Does the admiral know when those planes came to Wake? — A. He believes they came to Wake in 1942, early in 1942.

173. Q. Had there been more than 10 or 12 before he got here? — A. He believes there had been about that many planes all the time.

174. Q. Were there any fighter planes on Wake when the admiral arrived? — A. No.

175. Q. When did the fighter planes come to Wake? — A. Early in the spring of 1943. They came from either the Twenty-Second Air Fleet or the Twenty-Fourth Air Fleet. The admiral does not remember just which one. The headquarters of these air fleets were at Truk, and some of their planes were at Ructo (Roi) Island. About 15 planes came here early in 1943 from Roi. After a few weeks they were relieved by planes from the other air fleet. They took turns. That is, both the Twenty-Second and the Twenty-Fourth Air Fleets had fighter planes here at different times.

176. Q. What kind of fighters were they? — A. They were Zeros. He does not know the type.

177. Q. Did these fighters ever attempt interception of United States bombers? — A. About four to six times, an interception was attempted. Since the radar did not give much warning, the bombers could never be intercepted before they had bombed, and the Jap fighters would chase them back toward Midway in an attempt at interception. Since the advantage was thus all with the bombers, none were ever shot down and none were ever claimed to be shot down.

178. Q. Did they plan to make a seaplane base at Wake? — A. Originally, it was part of the plan to make a seaplane base, but this plan was abandoned.

179. Q. Were there any seaplanes based at Wake? — A. Two or three times seaplanes came to Wake and then went away again. They were only visitors. They were never based here.

2. Interrogation of Chicabari, Shigeharu, Colonel, IJA.

Duty: Commander, Army Forces, Wake.
Arrived Wake Island: 10 July 1943.
Age: 50 years.

1. Q. How many times was the island attacked by allied aircraft? — A. There were six or seven large raids and other smaller ones, but he doesn't remember the dates.

2. Q. Has he any records of the dates of the attacks? — A. No records; they were burned up.

3. Q. How many attacks occurred during the daylight? — A. Six or seven raids occurred during the day. Every now and then they would receive raids at night, but they were not large ones.

4. Q. Did these raids take place after he arrived? — A. Yes.

5. Q. Which were the more effective? — A. He had heard before he arrived here the raids were not very frequent. In February of 1942 there had been a task force raid here that had been quite severe.

6. Q. Aerial or naval? — A. It was an aerial bombing attack that was quite effective. After he arrived here in July of 1943, there were eight or nine plane raids.

7. Q. How frequent? — A. After his arrival there had been only one such raid, and that was up to the large raid of the 6-7 October 1943. He says since the 31st of January 1944, till about the 10th of August 1945, the raids were made now and then.

8. Q. Does he speak English? — A. He reads it, but doesn't understand it very well.

9. Q. What type of attacks were the most effective; high-level, low-level or dive bombing? — A. He thinks the most effective were the dive bombers. The high-level bombing was not very accurate. In low-level bombing, they were able to do damage to American aircraft by their machine gun fire, etc.; so it was not effective. Some damage was caused, however. He says that the dive bombers came right down and dropped their bombs right on the target, whereas the high-level bombing was the hit and miss type.

10. Q. Were the low-level rocket attacks very effective? — A. He doesn't know very much about rockets, since they were attacked by rockets only once, and that was in July or August of 1944, and he doesn't know the size of the rockets. Damage was great. He thinks that the best method is to shoot the rockets in and drop bombs after that.

11. Q. Were we more effective with dive bombers or rockets? — A. The rocket was more effective and accurate because it went straight down into the target, whereas dive bombers would go to one side or another.

12. Q. Was the destruction very great? — A. He thinks that rockets caused more damage because they were more accurate and because they would hit the target and then explode, and dive bombing would hit one side and the casualties would not be as great. He has never seen one of these hit a posi-

tion fortified by armor, and is concerned only with positions covered by concrete or timber.

13. Q. Does he know of any positions hit by rockets? — A. There was a personnel shelter hit.

14. Q. Were there any buildings or underground positions hit? — A. He doesn't know of any.

15. Q. Was he able to identify our planes as either dive bombers or Navy fighter bombers? — A. Yes, he was able to differentiate.

16. Q. Was he able to differentiate between the Corsair and Hellcat? — A. He was in a dugout and didn't see them.

17. Q. What type of attack destroyed the most parked aircraft, high-level, low-level, or dive bombing? — A. He thinks the most effective attack against parked aircraft was high-level attack because the aircraft carried a greater load of bombs.

18. Q. What are the dates of the most damaging air attacks? — A. The raid of the 6-7 October 1943.

19. Q. Was there any shelling from the fleet? — A. They would bomb and shell. May 1944 was the next worse attack.

20. Q. What was the date of the last heavy attack? — A. The first of August 1945. The 24th of May was the second severest raid. The August 1 raid was carrier-based. He had never seen the carriers but thinks that they were carrier-based planes and the planes were the single engine type.

21. Q. Were any of your large installations knocked out by bombs or rockets? — A. He didn't have such installations at his place; they were all above ground so they could not fix them very easily.

22. Q. Was all radio and radar handled by the Navy? — A. Yes, it was.

23. Q. Did they have a distillation plant? — A. They did have a distillation plant in their area, but it wasn't being used.

24. Q. Was it unused because it was damaged? — A. It used up too much fuel and a near-miss partially damaged it.

25. Q. What damage was caused by phosphorous and incendiary bombs? — A. They were dropped along the southwest section of the island in the open areas, and they only burned the brush and no real damage was caused. There was very little damage to buildings.

26. Q. During the August 1-6 raids of this year, did he notice any bombs which appeared to burst above the ground? — A. Yes.

27. Q. Describe the results and effects. — A. Some men were wounded, but not much damage

was done. He noticed several craters about two meters across which were caused by bombs. The Army received very little damage; the attack was made on naval installations.

28. Q. During the raids of July 12-17, did he notice any increase in the size of rockets being used? — A. He doesn't remember any raid in July 1945. He said that they were firing all the time, and they lost track of the dates. When they used the rockets, it was about the 20th of June. He says they were flying over every day attacking them, and it was hard to differentiate between the raids. He says all he knows of the rockets is that in June he heard a report for the first time that we were using them, and that is all he knew about rockets. He could not tell what was being fired at them, but he did know that the caliber was increasing, whether it was guns or rockets.

29. Q. What was the Japanese Army garrison's principal mission on Wake Island? — A. To defend the island. All the anti-aircraft guns were the small type caliber, 7.7, borrowed from the Navy. They had 13 mm American type guns, in addition to the four anti-aircraft guns, two of which were destroyed in the bombing raids. One broke down and would not work, and they had intended to repel landings with the one they had on Wilkes Island. The fourth on Wake never fired at planes. That was their total anti-aircraft defense.

30. Q. What was the total loss of personnel from both bombings and naval gunfire? — A. About 90 men killed; moreover, about 100 men were wounded, but he is not certain.

31. Q. Did friction or the lack of cooperation between his command and the Navy hamper his defense? — A. There was no friction between the Army and Navy. Their missions were about the same, and didn't, in any way, hinder the defense of the island.

32. Q. Did the aerial bombings and the naval gunfire attacks materially interfere with his plans for defense? — A. It did interfere with them very much. During the air raids and naval gunfire, they had to get inside their shelters and stay there.

33. Q. Did he hit any of their defense guns and how many? — A. We knocked some out from either bombing or naval shelling. There was more bombing than naval shelling. We had knocked out 2 7.5 cm field guns, and one 47 mm anti-tank gun, and 3 anti-aircraft guns of 7.5 cm (3 inch).

34. Q. What did he do during the raids? — A. He directed operations.

35. Q. What did his operations consist of during the raids? — A. They were to take cover so they would not become casualties, and one part of the unit fired machine guns at planes when they came within range.

36. Q. What was the total number of enemy planes shot down? — A. He has heard of reports of 20 planes being knocked down altogether, but doesn't know whether Army or Navy shot them down, and since the Army had no positions along the north coast, the Navy might have shot down some there, but the total did not exceed 20.

37. Q. How many Army types and multi-engined planes? — A. They were all carrier-based planes. They didn't shoot down any Army planes because they flew too high. He doesn't know, but thinks that they flew too high. He thinks that the Navy knocked down two multi-engined bombers. That would make it 22 altogether.

38. Q. Where was he immediately before coming to Wake? — A. He was in Manchuria.

39. Q. How did he travel from Manchuria to Wake? — He went from Manchuria to Japan by railroad, then to here by plane via Saipan, Truk, and Kwajalein.

40. Q. Where did he receive his orders telling him to come to Wake? — A. He received them in Manchuria.

41. Q. What is his next highest commander? — A. The admiral is his next highest commander and he gets his orders from Truk.

42. Q. Is it the headquarters of the Fourth Fleet? — A. It is the Thirty-First Army Headquarters at Truk.

43. Q. How long did he stay at Truk? — A. About 2 or 3 days. He was waiting for a plane.

44. Q. Did he receive instructions from the Army Headquarters at Truk as to what his job would be at Wake? — A. When he went to Truk, Thirty-First Army Headquarters wasn't there at that time. He received his orders from the admiral here.

45. Q. Whom did he relieve upon his arrival? — A. Major Suzuki.

46. Q. How long did Major Suzuki serve here? — A. From October 1942 to July 1943.

47. Q. Did he know how many personnel it was contemplated to base here? — A. That was determined by the Navy.

48. Q. Did the Army have any civilian workers? — A. No, they didn't.

49. Q. From whom did the Army draw all its supplies? — A. From the Navy.

50. Q. At the time you arrived how much Army personnel was on the island? — A. About 600 or 700 men.

51. Q. Subsequent to that time did more come? — A. Yes.

52. Q. How many more? — A. In July of 1943 about 150 arrived. In September of 1943 about 100 arrived. The 100 who arrived in September 1943 were reliefs and about 100 were sent back. About 1,000 arrived here in January 1944.

53. Q. Were these or any of these replacements? — A. No. A lot of the strength was cut down because a lot died after January 1944.

54. Q. What was the strength of the Army forces in January? — A. About 1,800.

55. Q. From where did these 1,000 troops come in 1944? — A. Japan.

56. Q. Does he know why they had this sudden increase in strength? — A. Because the Marshalls and Gilberts had been taken, and they were to strengthen their defenses.

57. Q. Were these men to be used for the purpose of staging an offensive for taking of the Marshalls and Gilberts or for the defense of Wake? — A. They had not contemplated any offensive action and were to defend Wake.

58. Q. Did they expect more Army troops to arrive? — A. Yes.

59. Q. How many? — A. About 1,000.

60. Q. Did any of them arrive? — A. No, they didn't.

61. Q. Does he know why? — A. They didn't arrive because their orders had been changed while en route.

62. Q. Where had the orders been changed? — A. He knows that they got as far as Truk.

63. Q. Were these 1,000 which came in January 1944 seasoned troops or new troops? — They were mostly seasoned troops.

64. Q. From what area? — A. From China.

65. Q. At what time were the additional 1,000 troops turned back and sent to Truk? — A. They were expected to be here at the beginning of 1944. The ship which had brought the 1,000 troops in January went back to Japan for another load.

66. Q. Does he know if more naval personnel was expected? — A. He doesn't know.

67. Q. Did he, after he arrived here, receive further shipments of guns, arms, and ammunition? — A. The other troops which came in July and January brought these things with them.

68. Q. Did they bring heavy weapons with them? — A. They brought 18 light tanks in January 1944.

69. Q. Did they bring any coastal defense guns or heavy anti-aircraft? — A. No, the Army didn't have any.

70. Q. Were the tanks intended for use on Wake Island? — A. Yes.

71. Q. Had chemical warfare supplies been brought in? — A. No.

72. Q. Were there any supplies of gas on the island? — A. All they had for defense against gas were the masks.

73. Q. During the year of 1 January 1944 to 1 January 1945 how many Army troops were lost by reason of death or disease or sickness? — A. He doesn't know how many were lost during this period, but during the period of June 1944 to September 1945 about 500 died.

74. Q. How many were killed? — A. 90.

75. Q. What was the Army strength in June 1944? — A. About 1,700.

76. Q. How were they organized—into battalions? — A. They were organized into two battalions. They were broken down into companies, etc.

77. Q. Were the deaths from disease and sickness in the Army comparable to those in the Navy? — A. In the beginning the Army had more casualties due to disease but toward the end they were about even.

78. Q. On 1 January 1944 what was the daily ration of food to the men? — A. The Army and the Navy gave out 720 grams of rice per man per day. Vegetables, meat, fish, etc. were not fixed. He doesn't know how much of this type of food was raised in the gardens and the total number of fish caught.

79. Q. On 1 January had that been cut and, if so, what was the allowance? — A. He says it was changed so often he can't remember. He thinks it was about 520 grams. In the middle of August 1944 it was about 300 grams. They received supplies now and then by submarine, and they did not know how long it was to last.

80. Q. On 1 January 1945 what was the ration? — A. It was between 300 and 400 grams—closer to 400.

81. Q. Did they receive shipments between August 1944 and January 1945? — A. Yes, they did receive shipments.

82. Q. Had the amount of vegetables, meat, fish, etc., decreased like the supply of rice? — A. They ran out of vegetables and fish about February

1945, and there was almost none. They had lots of fish but they didn't go fishing.

83. Q. On 1 June 1945, how much rice did they have? — A. About the middle of June 1945 they ran out of rice almost entirely. The low point was about the 20th of June.

84. Q. Was that due to the destruction of the rice supplies by bombing? — A. It was because they were cut off and not because of bomb damage.

85. Q. Were any further shipments of rice received after June 1945? — A. In June 1945 a shipment of rice came in by submarine.

86. Q. How much came in June 1945? — A. He doesn't know exactly how much they brought. From the 20th to the 28th of June they were down to 70 grams per man. On the 28th a submarine brought rice and the ration went up to 300 grams and this lasted up until the time the island surrendered. During the period from 20 to 28 June it was necessary to have two foodless days so that they would have 70 grams per man.

87. Q. What other food supplies did they get? — A. Aside from rice, they had some kind of vegetable. They also had fish. At one time they were eating wild grass, but this made their bodies swell.

88. Q. On 1 June 1945 how much rifle ammunition did they have per man? — A. He can't say definitely because the rifle ammunition is in together with the light machine gun ammunition. There was enough for about 2,000 rounds per light machine gun and 300 rounds per rifle. They had over 10,000 rounds of heavy machine gun ammunition. They had 10,000 rounds of 7.9 ammunition per gun.

89. Q. How many heavy machine guns did they have? — A. About 12 or 13, but he isn't sure because some were damaged during the bombings. For these guns they had about 10,000 rounds per gun. They had about 40 light machine guns.

90. Q. Were stores of this machine gun ammunition destroyed by bombings? — A. Yes, some were destroyed by bombings.

91. Q. Approximately what portion of his total supply of small arms ammunition was destroyed by bombing or naval gunfire? — A. Of the small arms stuff about 10 to 20 percent was destroyed by bombing and of the field gun ammunition about 2,000 rounds were destroyed in the October 1943 raid.

92. Q. What caliber? — A. The caliber is 7.5 cm.

93. Q. Has any been destroyed since then? — A. The field gun ammunition was destroyed in the

October 1943 raid and the small arms stuff after that. A little bit of field gun ammunition was destroyed after that but he doesn't know the date.

94. Q. Does he remember the dates on which the small arms ammunition was destroyed? — A. Some small arms ammunition was destroyed during the 6-7 October 1943 raids; and subsequently, during the raids of the 24th of May 1945, the 20th of June 1945 and the 1st of August 1945, small arms ammunition was destroyed.

95. Q. How many 7.5 guns did they have? — A. They had 5, but one was knocked out in a raid.

96. Q. Was the condition of the gun crews of the 7.5 guns during June 1945 such that they could handle and load the guns? — A. They were not able to move the guns around, but upon occasion they were able to fire them. They might as well have not fired them.

97. Q. What was the rice ration on the 10th of July 1943? — A. 720 grams. They had lots of canned meat at that time and they didn't have to go fishing.

98. What period does he consider the low point of his military efficiency from the standpoint of supplies of ammunition and the condition of his men? — A. June 1945. Also between September and October 1944 they had a very bad period.

99. Q. How did they recover from that period? — A. The supplies came in and they were able to fatten up a bit.

100. Q. Of the 20 planes shot down how many were dive bombers? — A. He doesn't know.

101. Q. How many were fighters? — A. He doesn't know because they used to ditch them way out at sea.

102. Q. Where was the army entrenched? — A. He says it depends upon the time. There were two periods. From the time he arrived until January 1944, they were entrenched from the western end of Wilkes Island to Peacock Point. Within his lines the Navy had four gun positions. During the second phase from January 1944 to now, the lines were extended midway along the northeast shore of Wake Island as far as the naval gun positions located there.

103. Q. Were his men employed as infantry? — A. Yes. He has tanks and also infantry and he employed them accordingly.

104. Q. Did his men live at their positions? — A. Yes, they lived at their own gun positions.

105. Q. Did they ever live in barracks? — A. Before October 1943, they lived in four or five barracks.

106. Q. Can he state what percentage of the food was destroyed by bombing? — A. On the big raid of October 1943, about 60 percent of the Army's food supply was destroyed in a dump at Heel Point. After that they dispersed the food all over in small storage dumps. The largest loss was near the southern shore near the western end of runway "A" and was between the intersection of runways "A" and "C." The heavy caliber ammunition was stacked along the southern shore along the western end of runway "A."

107. Q. What was the largest amount of rifle ammunition per man at any one time? — A. 1,500 rounds per light machine gun and 500 rounds per rifle.

3. Interrogation of Tachibara, Soichi, Lt. Commander, IJN.

Duty: Executive Officer to Island Commander.

Arrived Wake Island: September 1943.

Age: 29 years.

1. Q. Did the air raids disrupt the local telephone system? — A. Yes, they disrupted the telephone communication system quite often. The telephone cables were buried between 3 and 4½ feet underground, and when a bomb would land in the vicinity of the cables it would cut them. The cables had between 30 and 50 wires inside.

2. Q. Were you able to repair these quickly after the raids? — A. It took about 1 day to repair them.

3. Q. What proportion of the total damage here resulted from naval gunfire? — A. About 30 percent of the total damage was caused by naval bombardments.

4. Q. When was the power plant, located near the Island Commander's headquarters, destroyed? — A. It was hit by a 14-inch naval shell on 6 August 1945. This was the only large power plant on the island.

5. Q. Where were the water distillation plants? — A. There was one in the powerhouse near the Island Commander's headquarters, another about 2,500 feet east of Wilkes Channel, and a third on the lagoon side of Wake Island, opposite the north end of the North-South runway.

6. Q. Did the large power plant house three 125-kilowatt generators? — A. Yes, that is correct.

7. Q. Which were the American water distilleries? — A. The Japanese built the one on the lagoon side of Wake Island, opposite the north end of the North-South runway, but it was never finished or used. The other two were American.

8. Q. What percentage of food stores was destroyed by our raids? — A. There was a large steel building at Heel Point which was built by the Americans, consisting of steel framework covered with boards. The whole building was filled with rice and canned goods, and during the October 1943 raid it was hit and the provisions were destroyed. Aside from this, there was very little damage to provisions from subsequent raids. He has no way of estimating the total amount of food supplies that were destroyed.

9. Q. Why hadn't the food been dispersed? — A. At that time that was the only building in the vicinity that was suitable for storing provisions. Up until then, although they had raids now and then from Midway, the damage was slight, and they didn't think it necessary to disperse the supplies, and up until that time, they had been getting adequate supplies.

10. Q. When was the dispersal of small buildings started? — A. After the October 1943 raids.

11. Q. Was the October 6-7 raid the first big raid here? — A. Yes. Up until October 1943 there were quite a number of buildings strafed from Peale Island clear down to Heel Point, but during the raids of October 1943 they were all flattened, and instead of rebuilding them, they started building and scattering small ones underground.

12. Q. Does he know anything about aviation gas? — A. He said there was about 700 tons of aviation fuel left when the Americans came ashore.

13. Q. How much aviation gas was lost due to bombing? — A. There was considerable gas stored in the vicinity of the intersection of the main runways, which was destroyed during the October 1943 raid, and later about 30 drums of aviation gas, stored about 2,000 feet east of Wilkes Channel, were destroyed, but aside from that there was almost no damage. The aviation gas was dispersed about the island in groups of 10 drums.

14. Q. What damage was inflicted on American buildings by Jap raids? — A. He doesn't know because he didn't come in until later, but by way of rumors he has heard that the Pan-American Hotel, on Peale Island, was destroyed, but aside from that the other buildings were intact.

15. Q. How do the underground machine shops compare in area with those that were above ground prior to the October 1943 raid? — A. The ones above ground were larger than the ones below. This was because a considerable amount of the machinery above ground, prior to October 1943, was knocked out.

16. Q. In addition to the American buildings that were here and occupied by Japanese forces, did they do any extensive construction of barracks and shops themselves? — A. They utilized mostly buildings that were here when they arrived. They erected some barracks, hospitals, and command posts, but construction was not very extensive.

17. Q. When all barracks were knocked out, did they have any system of setting up shelter, or did they take sets of men and tell them to quarter themselves? — A. They built living quarters around individual military positions.

18. Q. Did they have a free hand to use all salvageable material? — A. After the buildings were flattened, the usable material was salvaged and the construction unit on Peale had supplies of steel plates and lumber. They built all the various underground barracks around military positions. Plans came directly from headquarters, and the materials were issued. Troops and laborers did the actual work, but the plans for the construction of these places came through the construction unit.

19. Q. How much of the underground shop area was destroyed by our raids? — A. Not one. None of them was hit directly by bombs.

20. Q. What type of technicians were evacuated? — A. Airplane maintenance men. They left about the end of 1943.

21. Q. Were any of the air raid shelters hit by either naval gunfire or aerial bombing so that it did damage to personnel? — A. The large concrete structure housing the power plant, near the Island Commander's headquarters, was hit by a large naval shell and was destroyed. Also, the anti-aircraft command post, midway between Heel Point and the airfield, was hit by naval gunfire and destroyed.

22. Q. When materials became scarce, how did they work priority as to their use? — A. When he arrived here, the concrete had already run out. In his opinion, the power plant was of the most importance, and it would get the first priority.

4. Interrogation of Chiba, Kenjiro, Lieutenant, IJN

Duty: Platoon Leader—October 1943–December 1944.

Company Commander — December 1944–July 1945.

Executive Officer to Island Commander — July 1945–September 1945.

Arrived Wake Island: 7 October 1943.

1. Q. When did he come to Wake Island? — A. He arrived at Wake Island on 7 October 1943.

2. Q. What was his job? — A. When he came to Wake, he was an Ensign and a platoon leader. In December 1944 he became company commander. In July he became the executive officer under the admiral.

3. Q. What were the Japanese plans for Wake Island? — A. He doesn't know for sure, but thinks they intended to use it for an air and submarine base.

4. Q. How many Navy personnel did they intend to have here? — A. 1,500 or 1,600 personnel. When he arrived there were 600 personnel here.

5. Q. How many Army personnel did they contemplate having here? — A. He doesn't know much about that. Captain Nakajima, of the Army, would know. He believes 1,500 maximum and they intended to have more.

6. Q. What was the contemplated personnel strength of the Navy? — A. It was only a guard unit. The guard unit is comparable to a battalion.

7. Q. How many aircraft had they contemplated having? — A. The maximum number of planes they had here was 40 fighters and medium bombers.

8. Q. How were these planes divided according to Army and Navy type planes? — A. They didn't have any Army planes. The reason for this was that they had to use long-range planes.

9. Q. What was the break-down in types of planes? — A. 15 or 16 fighter planes and 40 medium bombers.

10. Q. For what purpose were the bombers to be used? — A. The planes were to be used in the bombing of Midway.

11. Q. How much fuel and oil was there on hand? — A. He does not know. Anything relative to planes he knows nothing about. He has never had anything to do with airplanes.

12. Q. How was the island supplied with fuel? — A. In October 1944 the planes were to be flown here and the fuel they had stored here. Some was brought in by submarine. On account of American patrols, surface craft could not get in. There were quite a few bombs and shells stored here. After anti-aircraft barrages, shells got low and at one time a submarine brought in shells.

13. Q. When did shells get low? — A. About the last of May or June 1944, 12 cm shells got low. In October 1944 a submarine brought 12 cm ammunition and 25 mm ammunition. In July 1944 food became low and the men so weak that they could not handle 12 cm ammunition.

14. Q. When was the last shipment of ammunition, and by what means? — A. 7 September 1944,

a submarine came here with supplies. The last time a surface ship came here was 1 January 1944.

15. Q. Were any supplies by air contemplated? — A. He had not heard anything about it but the personnel thought it was a good idea.

16. Q. Had they contemplated building an anchorage for ships? — A. He doesn't know for sure, but he thinks that they were going to dredge the lagoon because they had trouble in unloading ships.

17. Q. What were the plans for the submarines? — A. He thinks that they planned to use the lagoon as a submarine base and anchorage. The lagoon was to be made into an anchorage for ships no larger than submarines and DEs.

18. Q. Was Wake intended as a staging area for aircraft? — A. Since this was Japan's eastern outpost this was not contemplated.

19. Q. Was Wake intended for purposes of raids on our shipping? — A. He thinks they were to use Wake as a submarine base for raiding allied shipping. He doesn't want to be quoted and isn't sure.

20. Q. Was Wake intended for a jumping off point for a future assault? — A. He says that it was to be used as a jumping off point for an attack on Midway.

21. Q. Had they set up long range reconnaissance patrols from Wake? — A. Long range patrols flew from Roi to Wake and back. Sometimes patrols would go to Roi and sometimes to Truk. They flew a sector patrol around the islands.

22. Q. Were these islands used as listening posts on our radio transmissions? — A. They used to listen to our submarines and take bearings.

23. Q. Did they use any of this information for attacks to be launched from this island? — A. When they would fix allied ships or submarines they would inform the Marshalls and Truk.

24. Q. From what island would the order to attack come? — A. It would come from Truk, it was the headquarters of the 4th Fleet.

25. Q. At what time was the maximum number of personnel here? — A. The end of 1942 the largest amount of aircraft and personnel were here.

26. Q. How many? — A. He doesn't know.

27. Q. When did the Army first come to Wake? — A. In the middle of 1942 the Army came for the first time.

28. Q. What was the largest number of Army personnel here? — A. It was around 1,200 or 1,500.

29. Q. What areas were raided by Wake aircraft? — A. The only long range was Midway.

30. Q. What was the strategic use of Wake? — A. They held onto Wake as an advance post until they could return to the Marshalls and Gilberts.

31. Q. When were aviation personnel and aircraft evacuated, why? — A. The last planes and air personnel left in January 1944; they were taken to Truk. It was only one plane.

32. Q. When were most of the planes evacuated? — A. In October 1943; there were 20 planes here including fighters and bombers. A few planes were taken to Truk, planes came back from Truk to get the remaining personnel.

33. Q. What dates were the most severe air raids? — A. There was quite a severe air raid in February 1942 and there was one during September 1943. There were severe air raids on the 6th and 7th of October 1943, 24th of May 1944. June, July, and August 1944, these raids were quite effective.

34. Q. How many personnel were injured in these raids? — A. He doesn't know about Army but 120 to 130 were dead and wounded in the Navy.

35. Q. When was the large fuel dump destroyed? — A. The largest dump was destroyed in the October 1943 raid. Dumps were scattered and only small ones were hit after that.

36. Q. When did they go underground? — A. After the October 1943 raid.

37. Q. What was the greatest Navy strength? — A. The greatest naval strength was 1,200 personnel.

38. Q. Why didn't more replacements arrive? — A. They were cut off.

39. Q. Did any leave Japan? — A. The *Akagi Maru*, which brought the last batch of the Army, departed twice to get here, but never made it.

40. Q. Has the Naval Guard Unit any aviation attached to it? — A. The Naval Guard Unit and aviation are separate.

41. Q. Why didn't they dredge the lagoon? — A. The dredge used too much fuel and spare parts never arrived.

42. Q. When the war ended, were they still transmitting off the island? — A. Yes, they were. About to the last day.

43. Q. Was the equipment still in operation? — A. There was one that still was being used.

44. Q. Where are the transmitters located? — A. There is one at Headquarters near Back Point, which isn't working because it ran on diesel fuel and fuel was low; one was damaged by bombing and strafing and one still works.

45. Q. Did the Japanese have any aviation ground officers? — A. Yes, they did.

46. Q. Are there any aviation ground officers on the island? — A. No, there are none here.

47. Q. Any aviation personnel here? — A. No.

5. Interrogation of Tokuda, Sutematsu, Lieutenant, IJN

Duty: Engineering Officer.

Arrived Wake Island: June 1943.

Age: 45 years.

1. Q. Did the Japanese make use of existing American buildings when they occupied Wake in December 1941? — A. They occupied all existing American buildings and these had suffered only slight damage. They also built additional barracks.

2. Q. What sources of power were available? — A. There were three 30-kilowatt generators dispersed on Peale Island, possibly two or three on Wilkes Island, and a large central plant on Wake Island. The latter housed three 125-kilowatt generators.

3. Q. When was the major power house destroyed? — A. August 1945.

4. Q. Was there any plan to disperse the three main generators? — A. It was planned to build two other plants underground so as to separate the three units, but lack of cement made this impossible.

5. Q. Were building materials expected? — A. There was faint expectation.

6. Q. When was new construction abandoned? — A. About the middle of 1944. Thereafter, nothing but maintenance work was done, and this was stopped on V-J Day.

7. Q. Were any decoy buildings erected? — A. No.

8. Q. What proportion of American machinery and repair facilities was reclaimed by the Japanese? — A. After the raid of October 6-7, 1943, 30 percent remain in usable condition. These facilities were put underground and used until the main power plant was destroyed.

9. Q. What was the principal source of water? — A. There were two American distillation plants producing 1 ton per hour each. These were used until a year and a half ago. Thereafter the water supply consisted of 20 percent rain water and 80 percent brackish well water. A third distillation plant was erected by the Japanese but never put into service.

10. Q. How much Diesel fuel was available on V-J Day? — A. Enough to last until September 1946. Approximately 50 or 60 tons.

11. Q. To what extent was the fuel supply damaged by American raids? — A. Approximately 55 tons were destroyed.

12. Q. How was the fuel stored? — A. It was widely dispersed underground in deposits of about 1 ton each.

13. Q. How much aviation gas is on the island now? — A. About 600 tons.

14. Q. How much food was stored on the island? — A. A month ago there was a 15-day food supply and this was rationed so as to extend over a period of 1 month.

15. Q. How much food was produced through gardening? — A. All were encouraged to develop individual gardens, but the production was by no means sufficient.

16. Q. Were any fish obtained? — A. Possibly a little less than a half pound per man per day.

17. Q. How many men were killed as the result of air raids? — A. Approximately 200 were killed in the raid of 6-7 October 1943.

18. Q. When did the lack of food show up in the physical condition of the men? — A. Rationing was started in May 1941. From then on the men became weaker until they were working only 2 hours per day at the end of the war.

19. Q. When was the air personnel evacuated? — A. The last plane left in December 1943, leaving about 30 maintenance men behind. These maintenance men left on the hospital ship that entered Wake recently.

20. Q. Was any other personnel evacuated? — A. 15 or 20 civilian technicians left by submarine.

21. Q. Was any effort put into the construction of gas protection facilities and installations? — A. No.

22. Q. About how many square meters of buildings were here in June 1943? — A. Approximately 3,500 square meters of buildings were here in June 1943.

23. Q. After the raids of October 1943, how many did they have left? — A. After that October 1943 raid, approximately 80 percent of the buildings were destroyed; 700 square meters remained.

24. Q. How much did they increase it to, prior to the end of the war? — A. 1,850 square meters of underground living quarters and all buildings flush with the ground; 680 square meters of repair shops; remaining shops above ground approximately 1,200 square meters.

25. Q. Can he give us the buildings left standing after October 1943 raid? — A. The entire area on Peale Island was entirely destroyed; 80 percent was destroyed by bomb blasts, and the remainder was destroyed by fires caused by incendiary bombs.

26. Q. What was the date they completed their underground structures? — A. By February 1944 the major part of it was completed. If plans had gone as they had expected, the construction would have gone on indefinitely, but because of the cutting off of supplies all building construction stopped about March 1944. For many months after this, they continued to construct anti-tank trenches.

27. Q. What large buildings did they add right after they occupied Wake? — A. 7 enlisted men's barracks, and one new officer's quarters.

28. Q. Whose constructions were the power plants? — A. He said that all small power plants that turned out 30-40 kilowatts were Jap constructed, but the larger ones were American constructed.

29. Q. How much Diesel oil per month were the Japanese using when the war ended? — A. 12 tons per month.

30. Q. At that rate, how long does he estimate they would have been able to carry on? — A. The plan was to reduce the amount of oil they used each month so that the supply on hand would last for another year. If no further supplies came in during that period, they had no other plans.

31. Q. How much fuel oil was here when he came on the island in June 1943? — A. 320 tons.

32. Q. How much Diesel fuel was lost to air raids since he got here? — A. 50 tons.

33. Q. How much gas was here when he arrived? — A. 140 tons of motor fluid and 1,200 tons of aviation gas.

34. Q. How much gas was left on the island at the end of the war? — A. About 600 tons of aviation gasoline and 7 tons of motor fuel.

35. Q. How much was received from the time that he got here and V-J Day? — A. Until the big raid of October 1943, they received 30 tons of motor fluid. Since then they received only 3 tons of motor fluid.

36. Q. How much aviation gas was lost to air raids since the time he got here? — A. 12 tons of automobile gas were destroyed, and at the most, 3 or 4 tons of aviation fuel. They were housed and dispersed well.

6. Interrogation of Nakazato, Hisao, Lieutenant, IJN

Duty: Supply Officer.

Arrived Wake Island: December 1942.

Age: 28 years.

1. Q. How did bombings and air raids reduce supplies? — A. Originally food was stored above ground, but after the October 1943 raid, which caused considerable damage, foodstuffs were stored in trenches which were covered over with dirt and were not strong enough to withstand direct hits.

2. Q. How was food transported? — A. Food was moved by trucks.

3. Q. Did air raids interfere with moving supplies? — A. The air raids did not cause much interference because they had "kitchens" dispersed and they did not have to carry supplies.

4. Q. When did the last transport get in with supplies? — A. The last transport arrived on 1 January 1944. A submarine, however, was the last thing that arrived with supplies on 28 June 1945.

5. Q. How did they get supplies? — A. When he first arrived here, there was about 6 month's supply of food on the island. Up until the last trip of the transport, supplies arrived about once a month. The supplies came in from Kwajalein. With these supplies also came ammunition and troops. After Kwajalein was taken, supplies arrived from Yokosuka, in Japan, by submarine.

6. Q. Up until the time Kwajalein was taken, were transports attacked at the docks at Wake? — A. No.

7. Q. Were submarine supplies sufficient for the island? — A. The submarine supplies were not sufficient; only about one-fourth of the supplies which were needed were brought in.

8. Q. Did they ever use any flotation gear in landing supplies? — A. They did use this method.

9. Q. To what extent? — A. A lot of the supplies were damaged by getting damp, so they tried to use landing craft as much as possible, and in doing so had to watch out for planes.

10. Q. What was the bombing damage to dock facilities and small boats? — A. There were no actual dock facilities. Small boats were not damaged sufficiently to cause trouble.

11. Q. What damage was caused to gasoline and oil? — A. The subject is of the opinion that damage to gasoline and oil was not very great because it was well dispersed.

12. Q. How many trucks did they have when he came here? — A. He doesn't know.

13. Q. Was he always able to get enough transportation? — A. He was working at a desk job at

that time. They had quite a few trucks, but he does not know the exact number.

14. Q. What naval officer has been on the island the longest? — A. He does not know, but he himself and officers of similar category have been here the longest.

15. Q. What officers were here when he came? — A. He could not think of any.

16. Q. Was Admiral Sakaibara here when he came? — A. The admiral came with him in December 1942.

17. Q. Did he handle supplies for naval aviation units? — A. No, he did not. That was separate.

18. Did he handle supplies for only the guard detachment? — A. He handled supplies for that and the Army.

19. Q. How many Army troops were present—their greatest number? — A. At that time he was not handling supplies, so he does not know. The subject did not want to give the exact figure because he was not sure of it.

20. Q. What rations were given to the Army when he served? — A. He served the Army about 1,200 ration units during the period he supplied.

21. Q. How many ration units to the Navy guard detachment? — A. About the same (1,200).

22. Q. At what time was this figure? — A. May 1945, about 2,500 for both.

23. Q. Were the Army and Navy about equal in ration units? — A. Yes.

24. Q. What happened to all of them? — A. They went home in a hospital ship.

25. Q. When did the hospital ship leave? — A. 5 June 1945.

26. Q. How many of the garrison forces at Wake went home? — A. About 1,000.

27. Q. Between May and June, when the hospital ship left, what happened to the some 300 troops unaccounted for? — A. They died here.

28. Q. Does he recall how many died? — A. He does not know—about 300.

29. Q. Does that include those killed by bombing attack? — A. He does not know. It was not a very large number.

30. Q. When the subject came here, what were the names of the air units here at Wake? — A. He has forgotten.

31. Q. Were there any Navy? Any Army? — A. When they were here, they numbered about 20 planes.

32. Q. How many fighters? — A. Between 10 and 20 fighters were here.

33. Q. Is "752" a group, squadron—just what is it? — A. It is one part within a Kokusentai.
34. Q. What was the number of fighters in "752"? — A. He has forgotten.
35. Q. How many bombers in "752"? — A. He does not know.
36. Q. What types of fighters and bombers? — A. Mitsubishi 101s and Zero fighters. The bomber was a land bomber, and had two engines.
37. Q. Did the strength go up or down during the first year? — A. It did go down steadily.
38. Q. Did replacements come in since 1942? — A. He thinks they sent both replacements for pilots and planes.
39. Q. How many were they able to evacuate? — A. About 10 planes.
40. Q. How many planes were destroyed on the field? — A. He does not know, but quite a few.
41. Q. How many planes were destroyed on combat missions? — A. He thinks, even though he had no relation with operations, that more than 30 planes were destroyed because new planes kept coming in.
42. Q. How did our bombing affect repair and maintenance of planes? — A. When the planes were here there was no bombing.
43. Q. When did they move the aviation units out of here? — A. About December 1943, the last planes pulled out, one month before the last transport arrived.
44. Q. Did they have their own separate groups for aviation repairs? — A. The naval aviation unit was handled separately. It had no relationship with the guard unit.
45. Q. Were they getting priority on aviation supplies? — A. No, because when the aviation unit was here at that time, they did not have the shortages they have had since. At that time there seemed to be plenty.
46. Q. Who had charge of radio communications? — A. Lieutenant Asai, IJN.
47. Q. What did Japanese aircraft accomplish on all or any of the missions? — A. The fighters were at Wake for protection purposes only; the bombers were at Wake just for patrols.
48. Q. Why did they go to Truk in December 1943? — A. He does not know for sure, but thinks the Japanese Air Force was hard pressed for planes.
49. Q. Were there any supply ships sunk on their way here? — A. He knows of two ships which were sunk by submarines on their way from Kwajalein to here.
50. Q. Any ships which were sunk by aircraft? — A. No.
51. Q. Any submarines destroyed by aircraft? — A. He does not know anything about operations.
52. Q. Did any supplies which he had expected to receive fail to come in? — A. He does not know of any.
53. Q. While he was supply officer, was he able to transport his supplies here on the island up until the end of the war? — A. As he said before—planes did, at first, interfere with supplies. Planes did not interfere with supplies after they were stored underground.
54. Q. How about transportation of clothing, ammunition, etc.? — A. The planes did interfere with most supplies such as these, but they just waited until the planes left.
55. Q. When they evacuated the aircraft units, why didn't they evacuate the whole garrison? — A. The reason is that they did not have the shipping to remove the garrison.
56. Q. What did he do during an air raid? — A. He was supposed to give out food, but made for shelter.
57. Q. Who made the original landing on Wake? — A. It was the Uchida unit.
58. Q. They were joined by whom? — A. That was all secret.
59. Q. Were they here when he got here? — A. They had all left when he arrived.
60. Q. What unit did he relieve? — A. The 65th Naval Guard Detachment.
61. Q. What was here besides the 65th? — A. The air unit. It had no other number besides "752." He thinks there was also a unit called the Suzuki unit.
62. Q. The 65th was how large? — A. It was about as large as a battalion.
63. Q. How large was the "752" unit? — A. He does not know.
64. Q. How large was the Suzuki unit? — A. Under a thousand, he thinks.
65. Q. Give the names and sizes of other units which have come here. — A. One part of the Suzuki unit came from Rabaul. How large it was, he does not know.
66. Q. Have any other units come since that? — A. A tank unit came from Manchuria.
67. Q. How many tanks came here? — A. About 20 light tanks.
68. Q. What was the name of the unit? — A. It was one part of the Sixteenth Regiment.

69. Q. Did anything follow this unit? — A. No other units followed.

70. Q. Did any of these units go out? — A. What's left of them is here. The names of the units have changed because the commanders have changed.

71. Q. While supplies were still stored above ground, what effect did our fire bombs have? — A. They inflicted considerable damage.

72. Q. After they went underground, were any of the depots knocked out in later attacks? — A. After the supplies were stored underground, whenever a direct hit was made, the depot would be torn apart.

73. Q. How many of these underground depots were knocked out? — A. After he became supply officer, one was knocked out.

74. Q. One out of how many? — A. There were about 50 altogether, but some were empty.

75. Q. How many that were filled were hit before he took over? — A. He says that before he became supply officer one big storage place was hit on Peale Island.

76. Q. What was that building used for? — A. He thinks it was a rice storage place.

77. Q. Was it used as a personnel shelter? — A. No, it was not used as a shelter.

78. Q. We have heard that 80 men were killed there. Why were they there? — A. They were laborers who had fled there during the attack. They were in a pioneer unit.

79. Q. Does he know anything about the pioneer unit? — A. It was called the Fourth Naval Pioneer Unit.

80. Q. How many men were in the whole unit? — A. He doesn't know.

81. Q. Was that during aerial bombing attack or naval gunfire attack? — A. He thinks it was a bombing attack.

82. Q. To whom did the rice belong? — A. The rice belonged to the pioneer unit.

7. Interrogation of Asai, Masaaki, Lieutenant, IJN

Duty: Island Communications Officer.

Age: 33 years.

Service: 18 years.

1. Q. How long have you been communications officer? — A. Since May 1945. Before that I was assistant communications officer. I am 33 years old and have been in the Navy 18 years.

2. Q. What was the original radar set-up on Wake Island? — A. The original radar was a Type II (model number or mark unknown). There were two of these sets. This first was lo-

cated in the southeastern part of Wake Island at Peacock Point. It was not much good.

3. Q. Why? — A. Its elevation was not high enough. Moreover, foliage and bushes in the vicinity got in the way of the beams.

4. Q. Why wasn't this foliage cleared away and the radar set raised in height? — A. I do not know. But it wasn't done.

5. Q. Was this all the radar equipment you had? — A. There was another Type II set erected at Kuku Point, Wilkes Island. This was higher and worked much better.

6. Q. Did the first mentioned radar, that at Peacock Point, ever give good results? — A. It was not much good. It was damaged by raids several times and was continually being repaired. Finally it was destroyed by aerial bombing.

7. Q. When was it destroyed? — A. In the spring of 1944. I think it was late April, but it may have been early in May.

8. Q. What about the one at Kuku Point? — A. It was an older type also (Type II). But it was better than the one at Peacock Point. It had a range of about 50-60 miles.

9. Q. How much warning would it give you of approaching raids? — A. I would say 8 to 10 minutes.

10. Q. Did it ever enable you to make interception of our bombers? — A. The bombers were usually here before our planes could take off. Then if the planes were able they would take off and chase after the bombers. They never caught the bombers.

11. Q. Was this radar ever damaged by raids? — A. It was damaged first in October 1943. It was repaired. It was damaged several other times that year and also in 1944. Repair crews were working on it many times. Finally, it was damaged so badly by bombs that it could not be fixed.

12. Q. When did this take place? — A. In May 1944. This was shortly after the radar at Peacock Point had been wrecked. They were both too wrecked to be fixed.

13. Q. Have you been without radar since then? — A. We had two other radars. They were of a later type. It was Type III.

14. Q. What mark number? — A. I do not know.

15. Q. Where were these erected? — A. One was set up at Heel Point and the other one along the north coast of Peale Island.

16. Q. Did these sets work better? — A. These were much more effective. They had a complete traverse in a circle (360°) and they were high

enough. They had a range between 100 and 120 miles.

17. Q. Were these sets destroyed also? — A. Both of these sets were damaged by raids in the fall of 1944, and again in 1945. The set at Heel Point was completely destroyed. The set on Peale Island was badly damaged. This was in 1945.

18. Q. Was the badly damaged one repaired? — A. I believe it could have been made operational. But we had done a great deal of work on all these radars and the results had been hardly anything worth while. We did not use it again.

19. Q. Were you in a worse fix without radar? Why didn't you try to fix it? — A. It was a great relief not to have to worry about radar anymore. We had lots of other things to do.

20. Q. Let us talk about radio. How did your radio system work? — A. Before Kwajalein was captured, we would communicate with Kwajalein and then have messages relayed to Tokyo. After Kwajalein was gone we managed to get through to Truk that very same day. After that we would contact Truk and then get through to Tokyo.

21. Q. Were you using large sets for this work? — A. They had been destroyed. We were using portable sets.

22. Q. Tell me about the large sets first. — A. There were four short wave radio sets. This was before October 1943. There were two Type 95, mark 3 short wave sets and two Type 95, mark 4 short wave sets. There was one long wave set, Type 92, mark 3. We would keep in contact with Kwajalein. Kwajalein was a radio center for this area. (He indicated on a map Wake, the Marshalls and the Gilberts as being included in the area).

23. Q. Were radio conditions good? — A. Conditions were good. Reception was good.

24. Q. What happened to these large radio sets? — A. There were big raids in October 1943. They lasted 2 or 3 days. (This evidently refers to the carrier raids of 6-7 October 1943). When the raids were over, all the radios had been destroyed.

25. Q. What did you do after that? — A. We had portable sets.

26. Q. Did they have a Type number? — A. They were called "TM." (He drew these two English letters on the table with a pencil).

27. Q. How many portable sets did you have? — A. The navy had five and the air forces had two. They had left these two behind.

28. Q. Are they still in use? — A. Yes, we still use them.

29. Q. Why were they damaged in raids? — A. They were well protected. They were underground.

30. Q. Did you still relay messages through Truk? — A. Yes. It is easy to get a message to Truk. It is very difficult to get replies, however. But we make it work.

31. Q. Tell me all you can about the telephone system you had here on Wake. — A. There was an underground cable system. It was a 16 mm cable containing 32 wires. This was buried throughout the island to all important posts. It was continually being severed by bombs and repair work was a major headache. The system was always kept in operation, however.

32. Q. How did you run the wires from Wake to Peale and from Wake to Wilkes? — A. At first it was an under water cable but this was severed by bombs. Then we used an overhead cable and this escaped damage.

33. Q. How often did the bombing sever your telephone wires? — A. I don't think there was a single raid that did not sever the telephone cable in some place. The repair work was continual.

8. Interrogation of Shirata, Kimeo, Seaman 1/c, IJN

Arrived Wake Island: May 1943.

Age: 40 years.

1. Q. Were you ever told by anyone that, in the event of your capture by the Americans, you would be tortured and killed? — A. No. I have never heard anyone else talk of it either.

2. Q. Were you ever instructed by anyone to commit self-destruction rather than submit to capture if the situation appeared hopeless? — A. No. I never received any instructions to commit self-destruction.

3. Q. Are you surprised at the treatment accorded to you by the Americans? — A. The treatment is good, and I am grateful for it, but I am not surprised.

4. Q. At what approximate date did you first feel that Japan's effort was on the failing side, and what reasons do you give to substantiate your beliefs, if any? — A. I felt that Japan's efforts were on the failing side a short time before the war ended. I felt this for three reasons: firstly, because of the lack of food and supplies; secondly, because of the naval gunfire we received from American warships; and thirdly, because of the abject condition of the troops on the island. In general, the entire group felt as I felt.

5. Q. What date did this naval gunfire occur? — A. I am not sure exactly what date it occurred, but I believe it was the 4th and 5th of August 1945.

6. Q. Which island were you on at the time of the firing? — A. On Peale Island.

7. Q. How many men were killed during this firing? — A. I do not know.

8. Q. Were you permitted to listen to radio broadcasts other than those originating from Japan? If so, did you believe in what you heard? How did foreign news broadcasts affect your morale in regards to the war? — A. I heard no radio broadcasts whatsoever.

9. Q. Why? Because you had no radio, or because you were not permitted to listen to the broadcasts? — A. There was no radio in my platoon. Because of my being an enlisted man, I knew of nothing that happened in the admiral's command post.

10. Q. Did you hear any other enlisted men speak of this? — A. It is possible that others had access to radios, but I heard nothing.

11. Q. What was your reaction when you were told by the admiral that it was necessary to surrender? — A. I heard no such order.

12. Q. Surely you have heard that Japan has been defeated. — A. On the contrary, I've heard nothing of the kind. I learned of the war's termination from my platoon commander. When I was given the order to cease firing, I simply obeyed the order, but had no special reaction.

13. Q. When did you find out that Guam and Saipan had fallen; the Philippines, Iwo Jima, and Okinawa? — A. I do not recall exactly when I heard of Guam's recapture. I believe I learned of Saipan and Iwo Jima falling in July or August 1945.

14. Q. Did any of your buddies ever receive more food than yourself? If so, why? — A. As far as I know, all the privates received the same rations, but I believe the officers and noncommissioned officers received more.

15. Q. Did you and your buddies talk much about the possibility of losing the war? — A. I often thought that Japan might lose the war, but my friends and myself never discussed it openly. (Note: This man, and the rest as well, do not believe that Japan lost the war, or that they were defeated. They simply believe that hostilities between the United States of America and Japan have ceased, and will not talk of Japan's losing.)

16. Q. When did you expect the Americans to recapture Wake Island? — A. I expected the

Americans would land troops following the shelling of the island by naval gunfire in August. Prior to then I did not give it a thought.

17. Q. What are your feelings in regards to going back home? — A. I would like to return to Japan as soon as possible.

18. Q. What reactions did you notice among your buddies in reference to the shortage of food? — A. There were comments on the shortage of food, but no annoyance was expressed.

19. Q. Did you feel that your government was doing everything within her power to help the general situation as it existed here for the past year? — A. I am unable to give you any opinion because I received no news or letters from home. I had no feelings about the matter whatsoever.

20. Q. In what way would you say the effect of our bombing affected you and your buddies? — A. I considered the bombing more effective than the naval gunfire, and I was personally affected by the bombing. I thought it was terrible. This was the general feeling shared by my friends, also.

21. Q. How was the morale of you and your friends during the past year? — A. In general, the morale was good.

9. Interrogation of Kurihayashi, Kumasaburo, Seaman 2/c, IJN

Duty: Machinist.

Arrived Wake Island: September 1943.

Age: 32 years.

1. Q. Were you ever told by anyone that in the event of your capture by the Americans you would be tortured and killed? — A. No. I was never told.

2. Q. Were you ever instructed by anyone to commit self-destruction rather than submit to capture if the situation appeared hopeless? — A. No.

3. Q. Are you surprised at the treatment accorded to you by the Americans? — A. I am not surprised at the treatment, but I appreciate it very much.

4. Q. At what approximate date did you first feel that Japan's effort was on the failing side, and what reasons do you give to substantiate your beliefs, if any? — A. Such subject did not enter my mind. Because I have been in the service such a short time, I've had no thoughts regarding this matter.

5. Q. Were you permitted to listen to radio broadcasts other than those originating from Japan? — A. I heard no radio broadcasts at all.

6. Q. What was your reaction when you were told by the admiral that it was necessary to sur-

render? — A. I was very glad that we stopped fighting. I have not heard of Japan losing the war. All I've heard is that the two countries have stopped fighting, but none of the men have heard Japan was defeated.

7. Q. When did you find out that Guam and Saipan had fallen; the Philippines, Iwo Jima, and Okinawa? — A. I am a poor farmer from Japan, and did not go to school. I have never heard of any of the places mentioned.

8. Q. Did any of your buddies ever receive more food than you did; if so, why? — A. As far as I know, we all received the same amount of food.

9. Q. Did you and your buddies on the island talk much of the possibility of losing the war? — A. I had five buddies on the island, but they were all killed, so it just wasn't discussed.

10. Q. When did you expect the Americans to recapture Wake Island? — A. I did not have any opinion on the matter at all. My main concern was that I was starving to death. I grew thin and was underweight, and I am ever so grateful for the food sent by the Americans.

11. Q. What are your feelings in regards to going back home? — A. I think constantly of returning home, and am looking forward to it with great joy.

12. Q. What reactions did you notice among your buddies in reference to the shortage of food? — A. I did not have any special opinion of it, and I did not notice any special reaction among my friends.

13. Q. In regards to your personal mail, were any opinions expressed by the sender that conditions were not favorable in the homeland in regards to the war effort? — A. I received two letters from home in 1944, and in those letters I was told the news of home, to take care of myself, but no mention was made of the Japanese war effort.

14. Q. In what way would you say the effect of our bombing affected you and your friends? — A. I was so ill and weak, I'm not able to say exactly what my friends thought of the bombing.

15. Q. What was the average number of hours that each man worked per day during different periods of time? — A. I was ill when I first arrived and stayed aboard ship a while in bed. When I was released from the ship, I worked only 4 hours a day, but I still was not completely well, and other men may have worked more. (This man has been in ill health since arrival, and has reported to sick call regularly for treatment).

10. Statement of Tachibara, Soichi, Lt. Commander, IJN

Regarding deaths of American prisoners in raid of 6-7 October 1943.

(Excerpt from WAR CRIMES INVESTIGATION)

(At the time of the American raid of 6-7 October 1943, there were approximately 100 American civilian prisoners on the island. During the raid, they were apparently placed in 2 shelters, one of which, according to the Japanese, suffered a direct hit, killing all within it. The Japanese description of the fate of the others follows:)

On the morning of 6 October 1943, Wake was subjected to an American raid. Around noon a report was received at the command post to the effect that one of the air raid shelters in which the American prisoners were had been destroyed by a direct hit. That evening during a lull in the raid working parties were dispatched to the shelter to dig out any survivors who might be present. However, all were found to have been killed. About this time a dispatch was received from Rota which indicated that an American landing could be expected at any moment. Since telephone lines connecting Headquarters with Peale Island had been severed, it was considered necessary to have a responsible officer in charge for the defense of that island. Therefore, I was sent to Peale Island and my knowledge of what happened to the remainder of the Americans is pure hearsay. When I returned I was told that in the evening of 7 October 1943 a soldier shouted in a loud voice in the vicinity of the command post that the American prisoners had run away. Captain Sakaibara then issued orders directing the command platoon to recapture the prisoners. The prisoners were discovered in a location east of headquarters where they offered resistance and were killed in the ensuing fire fight. I returned to headquarters on the 8th of October when the danger of an American landing had disappeared. However, preparations were still being carried out and all men on the island were very busy. This being the case, the bodies of the dead Americans were not formally buried, but were placed in an anti-tank trench and covered over.

(The bodies were removed from the tank trap and formally buried about 25 August 1945.)

Note on Commander Tachibara's Statement

On 22 December 1945, Rear Admiral Sakaibara admitted that the foregoing statement was false and that, on 7 October 1943, he had issued an order for the execution of 96 American civilian war

prisoners on Wake. "I gave the following order," Sakaibara said, "to Tachibara, who was the commanding officer of a headquarters company as well as my acting executive officer: 'Using men of the headquarters company appropriately and at a place which will not interfere with our positions, execute by firing squad all prisoners of war.' I was convinced that the Americans had contact with the outside world. They had been seen waving handkerchiefs at United States planes during attacks

and on one occasion shortly before their execution small sand bags with streamers of red cloth were dropped to them."

On 25 December 1945, Admiral Sakaibara, Commander Tachibara and 11 other Japanese naval officers were convicted of murder by a United States naval court at Kwajalein and sentenced to be hanged.

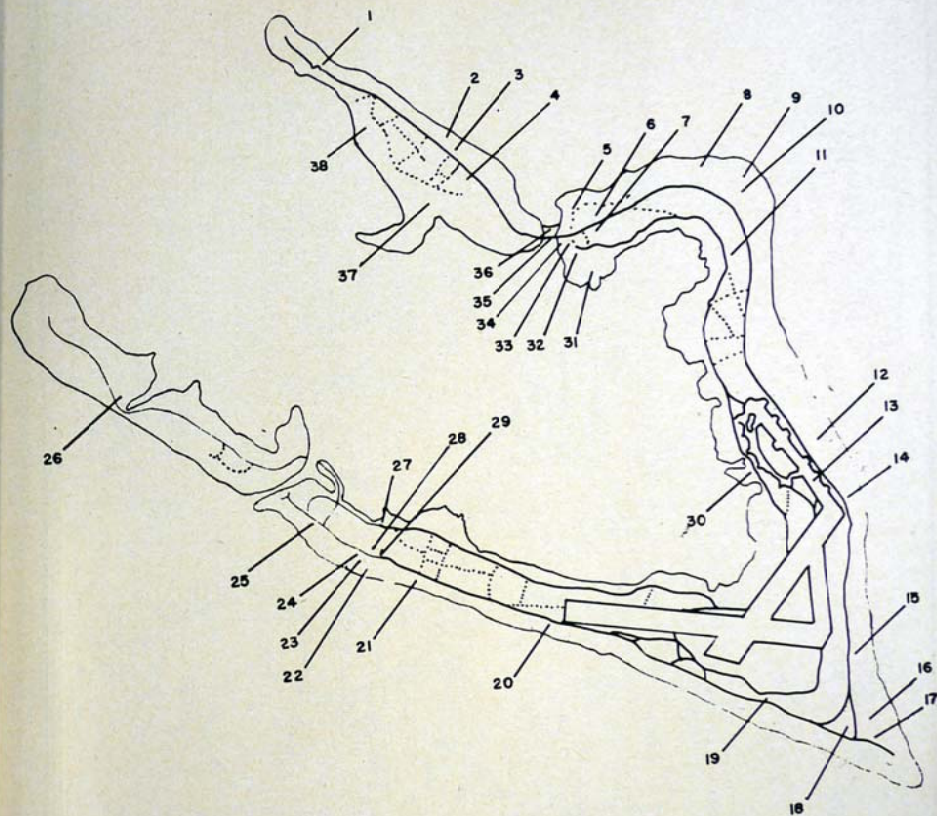
(See *New York Times*, 23 December, 26 December 1945.)

ANNEX B

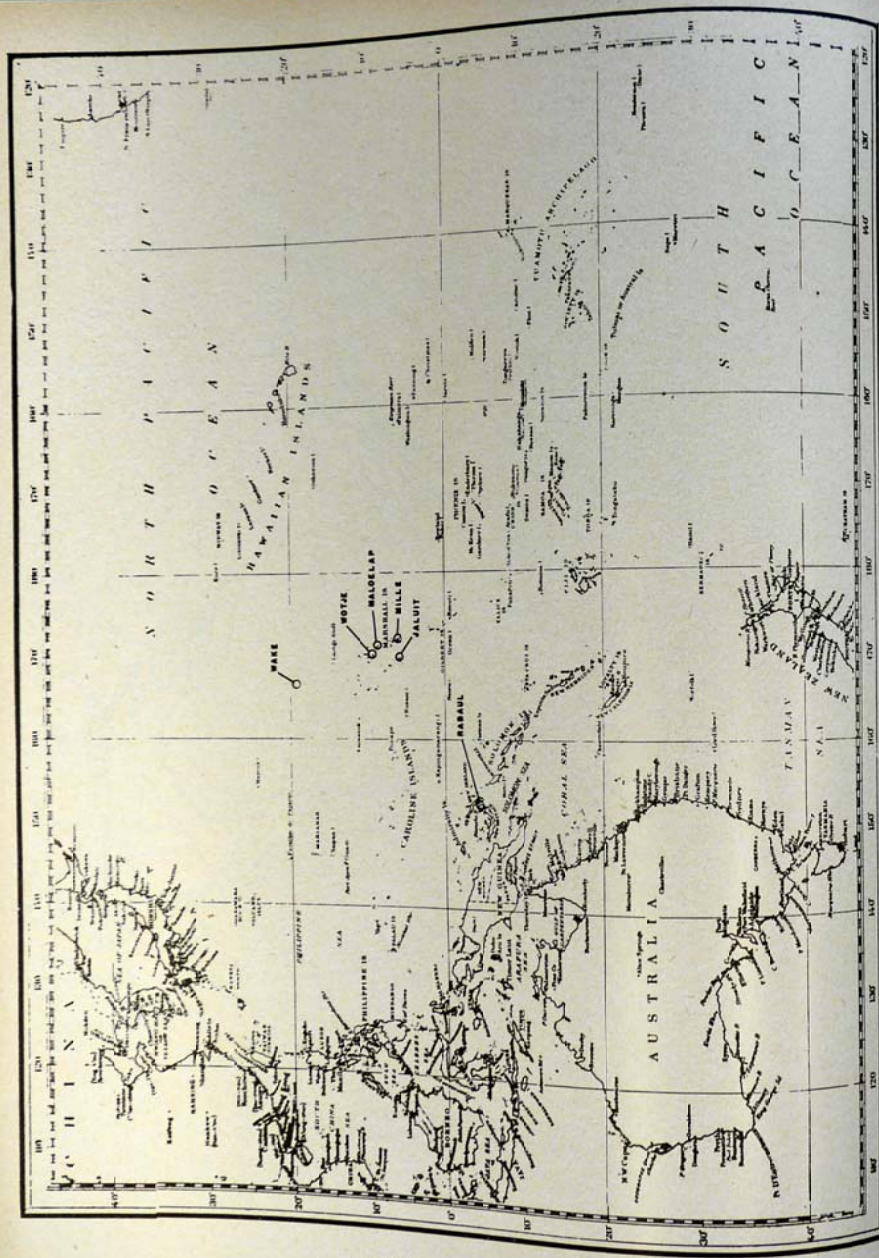
Section 2. — Maps

1. General Reference Map.
2. The Pacific Area.
3. Wake Island and Surrounding Area.
4. Map of Japanese Installations as of July 1943.
5. Areas Destroyed in American Raid of 6-7 October 1943.
6. Fuel Dispersal on Wake Island.
7. Aerial Photograph, Wake Island.

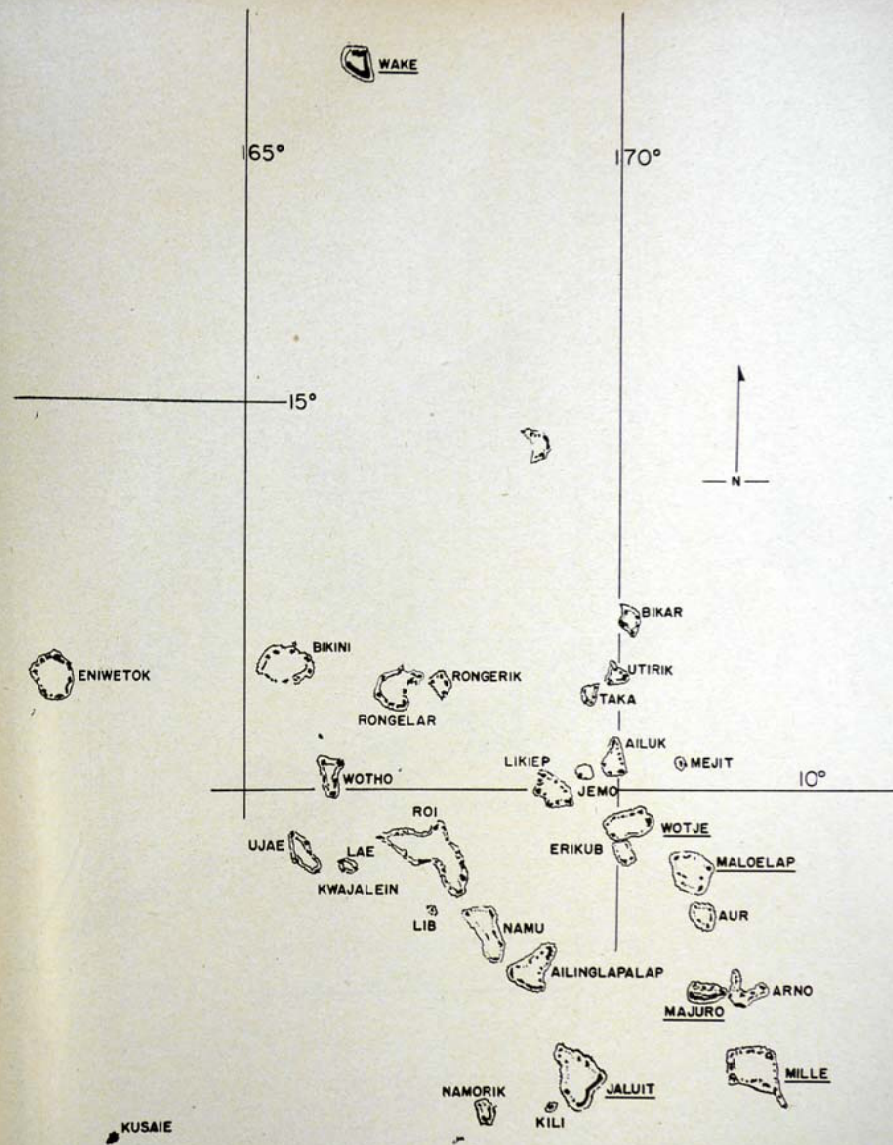
Target No.	Description	Photo No.	Drawing No.
1.	2-8 inch CD Guns	10, 11, 12	
2.	Pan-American Bldg.; Radar	57, 58	
3.	Navy Building		
4.	Torpedo Maintenance	61, 62	
5.	Hospital	81-83	
6.	Underground Shops	36-39	7
7.	Sick Bay	88, 89	
8.	2-12.7 cm DP Guns and Personnel Shelter	8, 9, 45	
9.	Barracks		
10.	U.S. BOQ; Radar	53-56	
11.	RDF Station	59, 60	
12.	Barracks		
13.	Plane Dispersal Area		1
14.	Barracks		
15.	8 cm DP Gun	21	
16.	8 inch CD Battery	13, 14	2
17.	Barracks		
18.	2-5 inch DP Guns, Personnel Shelter and Command Post	17, 18, 46, 48-52	
19.	Covered Gas Storage		6
20.	5 inch CD Strong Point	1-7	
21.	3 inch AA Guns	19, 29	
22.	2-10 cm CD Guns	15, 16	
23.	Search Light		
24.	Power for SHL		
25.	Observation Tower		
26.	3 inch AA Guns	22	
27.	Army Kitchen		
28.	Water Distillation	40-44	
29.	Water Tower		
30.	Water Distillation	62, 64	
31.	Power Plant and Water Distillation	32-35	3
32.	Air Raid Shelter	47	3
33.	3 Medium AA Guns	28	3
34.	Navy HQ, Admiral's CP	24-31, 67-69	3-5, 8
35.	Bridge	79	3
36.	Causeway	78	3
37.	Kitchen and Mess Hall		
38.	1-8 cm AA Gun		



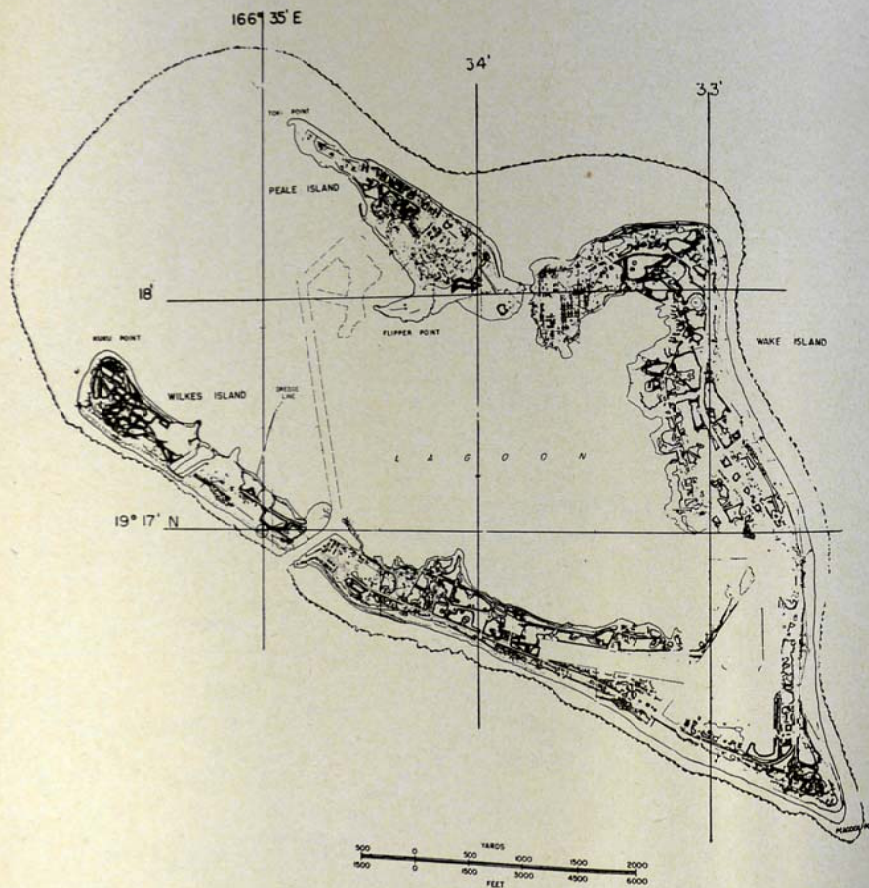
GENERAL TARGET REFERENCE
WAKE ISLAND MAP No. 1



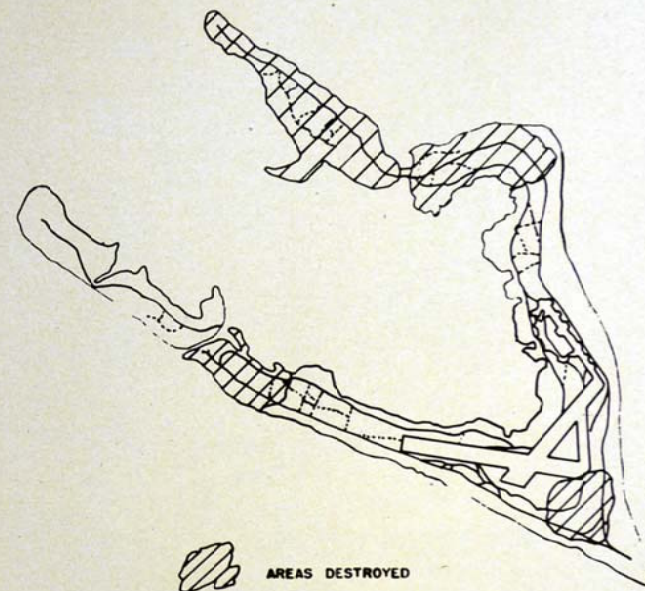
PACIFIC AREA MAP No. 2



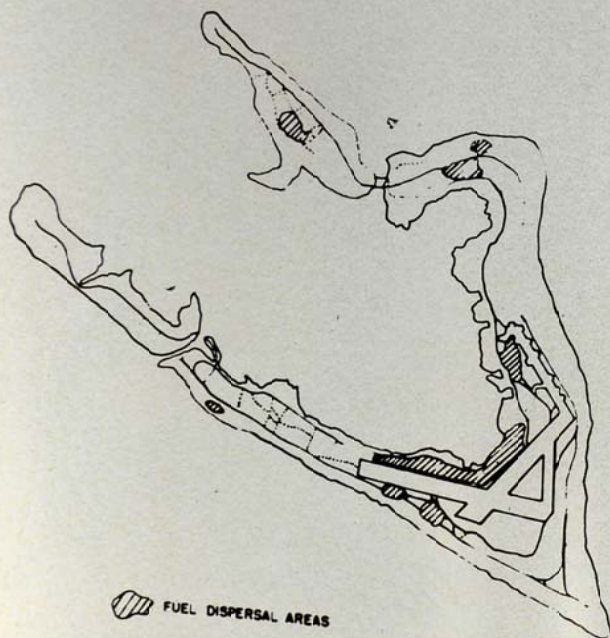
WAKE ISLAND AND SURROUNDING AREA MAP No. 3



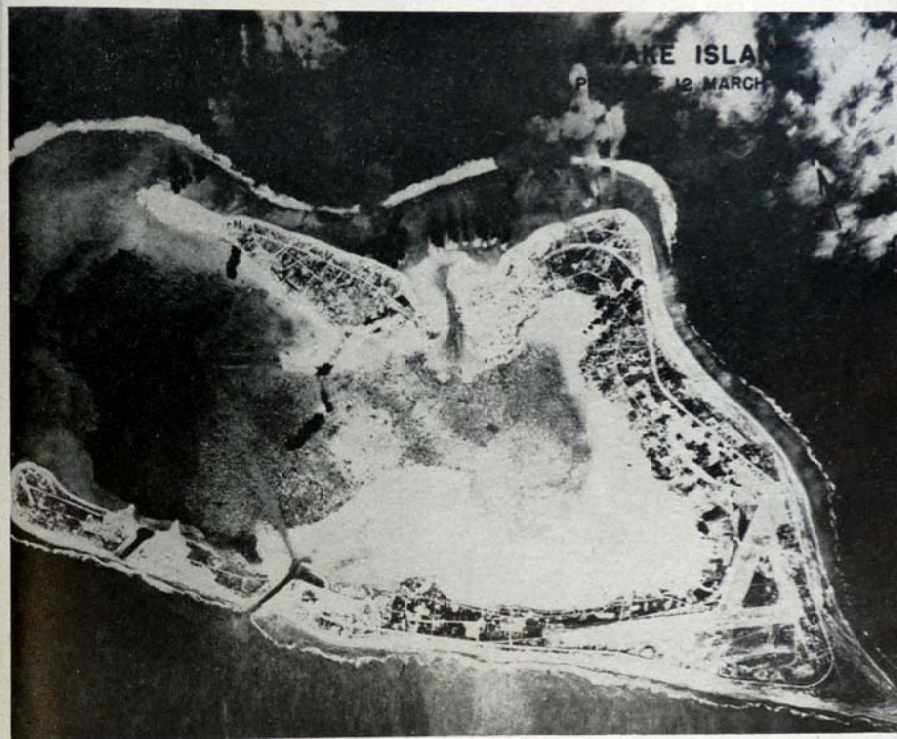
JAPANESE INSTALLATIONS
WAKE ISLAND MAP No. 4



AREAS DESTROYED BY RAIDS OF OCT. 1943
WAKE ISLAND MAP No. 5



FUEL DISPERSAL
WAKE ISLAND MAP No. 6



AERIAL PHOTO
WAKE ISLAND MAP

Annex B

Section 3.—Photographs

PHOTOGRAPHS 1-7

Typical Japanese coastal defense strongpoint on Wake Island. The defenses here pictured are built around 2 5-inch rifles captured by the Japanese from the U. S. Marines on Wake and moved to the southern coast of Wake Island. The guns were approximately 50 yards apart and were emplaced in 3 by 36 feet revetments on top of circular coral mounds. Each gun rested upon a heavy timber platform which was countersunk flush with the concrete deck. A personnel shelter, of coral covered timber construction, adjoined the rear of the coral gun mounds. Immediately behind each of the gun emplacements were well protected and camouflaged ammunition storage bunkers for the 200 rounds of ammunition captured with each gun from the Americans. The command post and lookout point for this battery was situated on high ground approximately 20 yards behind the easternmost gun. At about this same distance from each gun were well fortified and camouflaged crew quarters.

Supporting defenses consisted of tactical wire in entanglements paralleling the shoreline immediately forward of an anti-tank ditch, both of which were backed by mutually supporting machine gun emplacements. These latter were connected by partially covered slit trenches and supported by a number of individual rifle pits.

According to the Japanese, the only time these guns were in action was during the raid of 6-7 October 1943 when one of them is said to have scored a hit on an American cruiser. One gun was knocked out of action during this raid when an American shell exploded within the revetment seriously damaging the gun and killing three of the crew. During this particular raid, the Japanese were able to fire approximately 100 rounds from both guns. In subsequent raids, the remaining gun crews were so weak as to be unable to handle the ammunition.

(Ref. Annex B, Section 2, Map 1, Point 20.)



PHOTO 1

Five-inch coastal defense rifles captured by the Japanese from former Marine garrison on Wake and emplaced by the Japanese on the south shore of Wake Island. Looking eastward from near shore.



PHOTO 2

Five-inch coastal defense gun viewed from rear showing shallow emplacement atop coral mound and adjoining personnel shelter.



PHOTO 3

Details of damage suffered by 5-inch gun during raid of 6-7 October 1943 when American shell exploded within emplacement. Three of gun crew were killed.



PHOTO 4

Details of damage suffered by 5-inch gun during raid of 6-7 October 1943 when American shell exploded within emplacement. Three of gun crew were killed.



PHOTO 5

Interior of personnel shelter in rear of gun emplacement showing details of timber and coral log construction. The entire shelter is covered by loose coral sand and gravel.



PHOTO 6

Shore defenses viewed from top of gun emplacement showing tactical wire and anti-tank ditches.



PHOTO 7

Embrasures of machine gun emplacements forward of coastal defense rifles. These emplacements are joined by partially covered communications trenches; rifle pits are in high ground in background.



PHOTO 8

Damage to dual purpose gun caused by aerial bombs. The gun was first damaged in October 1943, but was repaired and remained operational until July 1945, when it was knocked out with irreparable damage to the elevating gear. From March 1944 until the final surrender a total of 24 crew members were killed in raids on this and a similar adjacent gun.

(Ref. Annex B, Section 2, Map 1, Point 8)



PHOTO 13

Photographs 13 and 14 show two naval 8-inch coastal defense guns located on Peacock Point. One gun was made inoperative by 2 near misses during an air raid in August, 1945. Although fragments of bombs failed to damage the gun, the amount which was thrown into the gun emplacement so fouled up the round-table mechanism that traversing was impossible. (Ref. Annex B, Section 2, Map 1, Point 16.)



PHOTO 14

Another view of coastal defense strong point shown in Photo 13.



Photograph 15

PHOTOS 15 AND 16

Two coastal defense guns located on the south shore of Wake Island near Wilkes Channel. Guns were in circular, concrete decked emplacements, revetted to a depth of 3 feet, on high ground 100 yards from high water line. Underground storage and personnel shelters were in rear of guns. The 2 emplacements, approximately 100 yards apart, were connected by zig-zag slit trenches and were supported by machine gun emplacements and rifle pits. Command post and fire control center were 50 yards in rear of the guns. Beach area was protected by barbed wire, approximately 10 feet in depth backed by rows of sharpened posts and was, in addition, heavily mined. Immediately behind the barriers was an anti-tank ditch.

These guns suffered no damage although several near misses were scored. Both were fired on the 6-7 October 1943, raid, but not hits were claimed.

(Ref. Annex B, Section 2, Map 1, Point 22.)



PHOTO 16

View of undamaged gun, showing field of fire.



PHOTO 21

Dual-purpose 8 cm gun. This gun was destroyed by bomb hit scored during the attack 17 May 1944. In addition to knocking out the gun, its crew of 8 was killed.
(Ref. Annex B, Section 2, Map 1, Point 15.)



PHOTO 22

Japanese operated American 3-inch anti-aircraft gun on Wilkes Island. This gun was knocked out by a shell during the bombardment of 1 August 1945.
(Ref. Annex B, Section 2, Map 1, Point 26.)



PHOTO 23

Strafing damage to twin mount 25 mm. anti-aircraft gun. Lt. Mitina, IJN, Japanese officer in command of the four batteries of 25 mm. guns located on top of and adjacent to Naval Headquarters on Wake Island, stated that his guns had shot down 10 American planes. One gun was destroyed by a direct bomb hit which also killed 7 of the crew.
(Ref. Annex B, Section 2, Map 1, Point 33.)

PHOTO 24

Photographic views 24-31 of Navy Headquarters and Admiral's Command Post on Wake Island. Of heavy timber and steel "I" beams construction and covered with coral sand, this structure was never damaged seriously. A 1,000 pound bomb striking on the north side (Photo 27) did only superficial damage.





PHOTO 25

PHOTO 26
Command post as seen from bridge to Peale
Island.

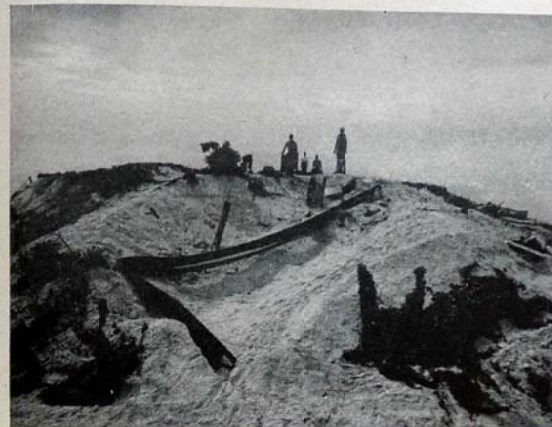
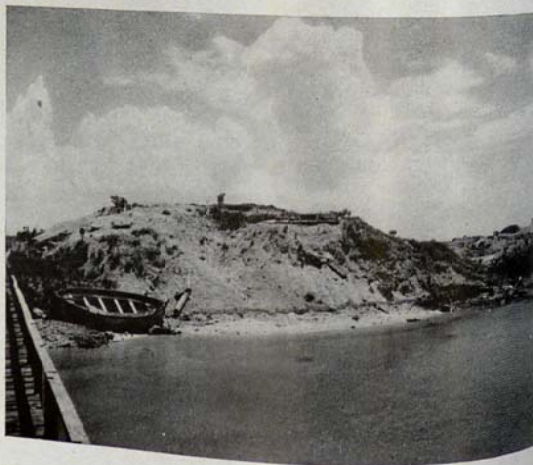


PHOTO 27
North side of Command Post, showing super-
ficial damage from 1,000-pound bomb.

PHOTO 28
Observation hatches on top of Admiral's Com-
mand Post. From this vantage point the ad-
miral directed the defenses of the island com-
municating with the central switchboard below
by means of speaking tubes.





PHOTO 29
Inside main room in base of Admiral's Command Post showing central switchboard, operations table, and speaking tubes. Note heavy timber construction.

PHOTO 30
Communications watch office on ground floor of Admiral's Command Post.



PHOTO 31
View of main power plant from top of Admiral's Command Post, looking south. (Ref. Annex B, Section 2, Map 1, Point 31.)

PHOTO 32
Main power plant. To the left are 2 fuel tanks of U. S. construction. In the foreground is a completely destroyed kitchen area. Notice the shell hole in power plant. Looking south.



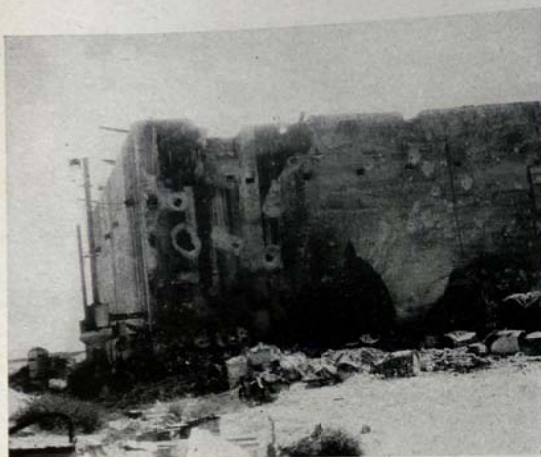


PHOTO 33
View of north side of power plant showing
hole caused by naval shell.
(Ref. Annex B, Section 2, Map 1, Point 31.)



PHOTO 34
Interior of power plant showing damage
caused by naval shell. Note broken steel wall
column.

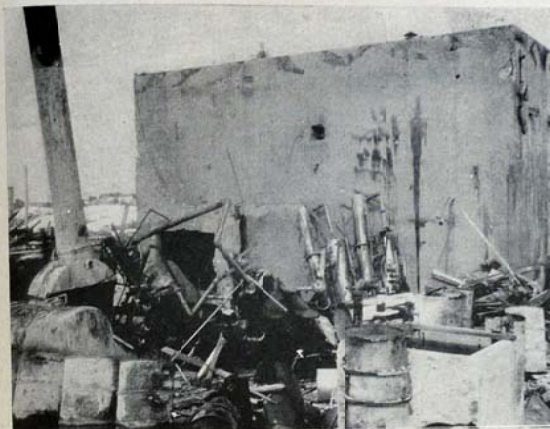


PHOTO 35
Old water distillery adjacent to main power
plant. Looking east.
(Ref. Annex B, Section 2, Map 1, Point 31.)



PHOTO 36
View of Underground Shop Area, Wake
Island.
(Ref. Annex B, Section 2, Map 1, Point 6.)

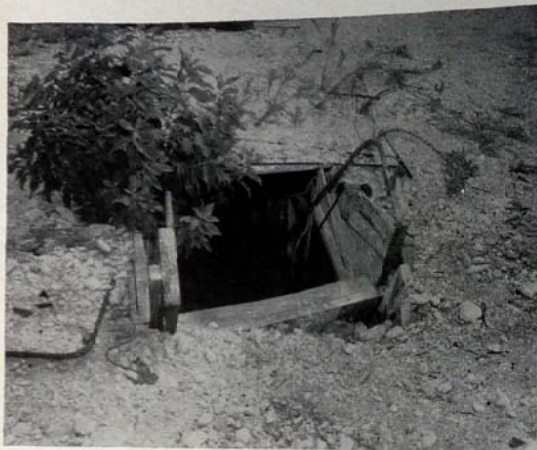


PHOTO 37
Entrance to Underground Shop.

PHOTO 38
Underground Forge and Metal Shop.
(Ref. Annex B, Section 2, Map 1, Point 6.)

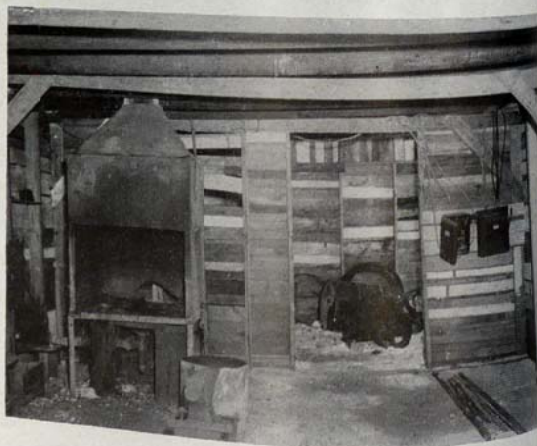


PHOTO 39
Underground Auto Shop and Tire Storage.

PHOTOS 40-44
Water distillation plant showing cumulative bomb and strafing damage. This plant was built by the Americans and, after the fall of Wake in December 6, 1941, was repaired and operated by the Japanese. All damage noted was caused either by the blast and fragmentation effect of near-misses or by strafing.
(Ref. Annex B, Section 2, Map 1, Point 28.)



Photo 40

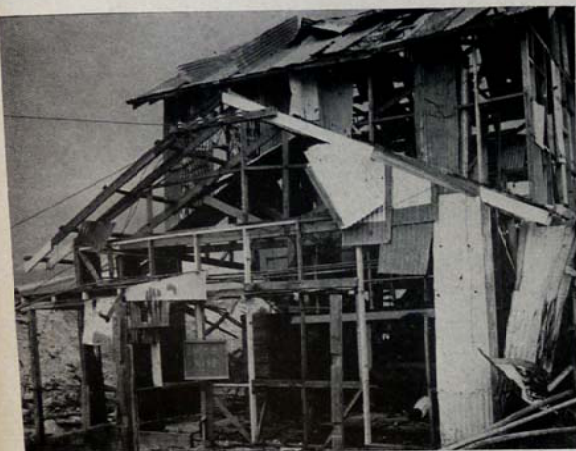


PHOTO 41

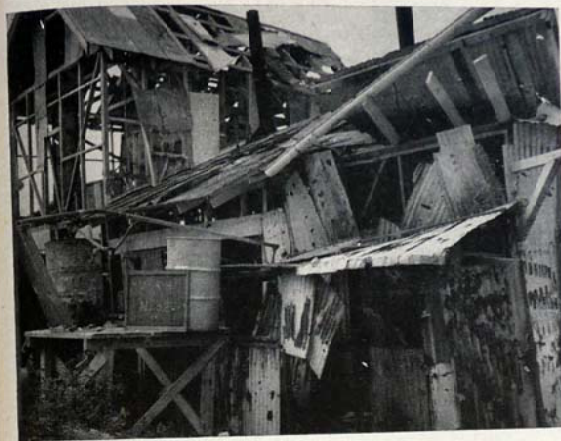


PHOTO 43



PHOTO 42

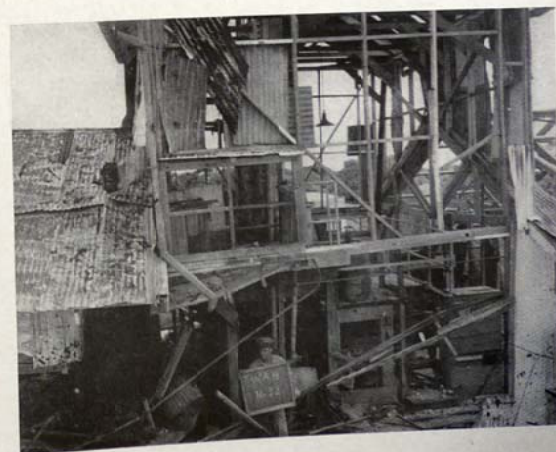


PHOTO 44



PHOTO 45

Remains of personnel shelter constructed of 6-inch x 6-inch timber upright and beams reinforced by steel "I" beams and covered by sheet steel under 4 to 5 feet of coral. Destruction of this shelter and the one adjacent to it resulted in the death of 19 occupants.

(Ref. Annex B, Section 2, Map 1, Point 8.)

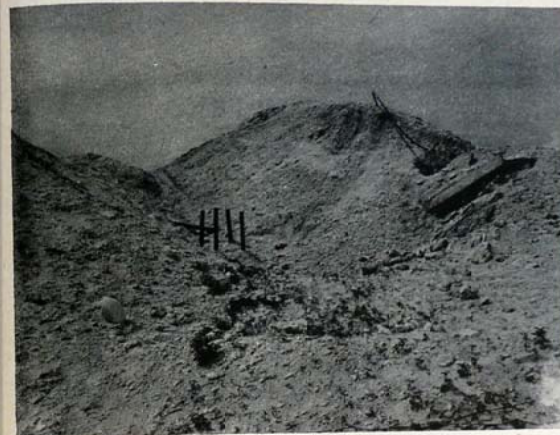


PHOTO 47

Large air raid shelter which suffered a direct hit by a 1,000 pound general purpose bomb. Four stakes mark the graves of 4 men whose bodies have not been removed.

(Ref. Annex B, Section 2, Map 1, Point 32.)



PHOTO 46

Remains of reinforced concrete personnel shelter after suffering direct hit by aerial bomb; 6 of the occupants of this shelter were killed.

(Ref. Annex B, Section 2, Map 1, Point 18.)



PHOTO 48

Exterior of reinforced concrete command post, located in rear of 2-gun 5-inch coastal defense battery on Wake Island, showing extensive damage inflicted by naval shelling. This installation which included range finding and data computing instruments, was damaged in July 1945.

(Ref. Annex B, Section 2, Map 1, Point 18.)



PHOTO 49
Interior of command post and fire control center showing effects of hits by naval shells during raid of July 1945.
(Ref. Annex B, Section 2, Map 1, Point 18.)



PHOTO 50
Optical range finder emplaced on top of command post and fire control center, shown in Photo 49.



PHOTO 51
Damage to exterior of reinforced concrete ammunition bunker caused by 6-inch or 8-inch naval shell.
(Ref. Annex B, Section 2, Map 1, Point 18.)

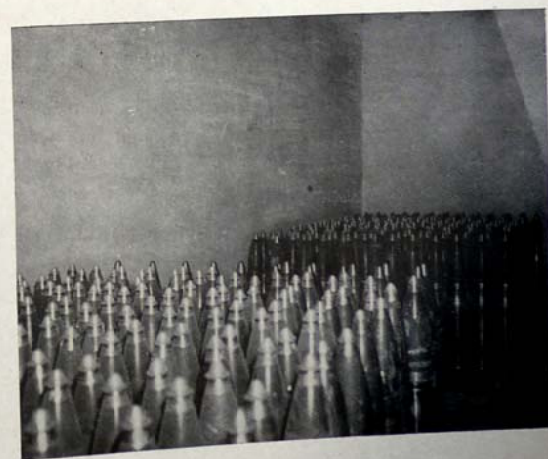


PHOTO 52
Interior of reinforced concrete ammunition bunker shown in Photo 51.



PHOTO 53

Photos 53-56 show the former Marine Bachelor Officers Quarters at Heel Point on Wake Island. It was destroyed by bombing during the raid of October 1943. The Japanese utilized the top of the steel framework as a site for a radar installation.

(Ref. Annex B, Section 2, Map 1, Point 13.)



PHOTO 54



PHOTO 55

The same building. Note radar installation.



PHOTO 56



PHOTO 57

Photos 57 and 58 show ruins of former Pan American Hotel on Peale Island. Most of the damage evident in these photographs was caused by the Japanese during the battle for capture of Wake in 1941. The concrete deck of the first floor was used as a rice storage area and the basement as a personnel shelter. Two shell hits were scored in this structure during the October 1943 raid killing 80 members of a Korean labor battalion who had taken refuge there. The radar was mounted on top of the building's framework in November 1943, and was never damaged by American attack. (Ref. Annex B, Section 2, Map 1, Point 2)



PHOTO 58

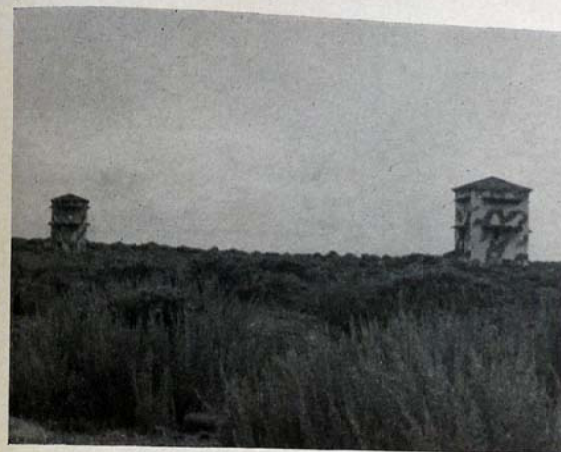


PHOTO 59
Two remaining RDF towers, Wake Island.
(Ref. Annex B, Section 1, Map 1, Point 11.)

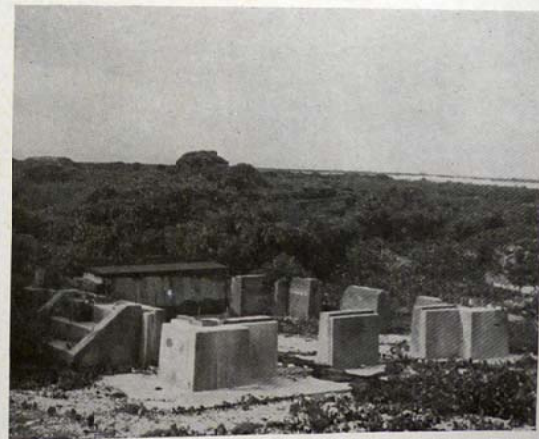


PHOTO 60
Foundation of the third RDF tower destroyed by blast effect of near miss of 500-pound general purpose bomb.



PHOTO 61

Photos 61 and 62 show small extent of structural damage due to roof initiation of small bomb (100 pound GP). Torpedo servicing building, Peale Island.
(Ref. Annex B, Section 1, Map 1, Point 4.)

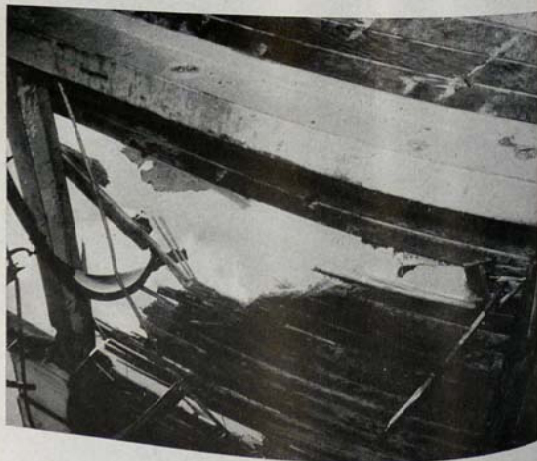


PHOTO 62



PHOTO 63

View of back of water distillation plant.
(Ref. Annex B, Section 1, Map 1, Point 30.)



PHOTO 64

Destruction of reinforced concrete roof of settling tank adjacent to water distillation plant. Caused by direct bomb hit.

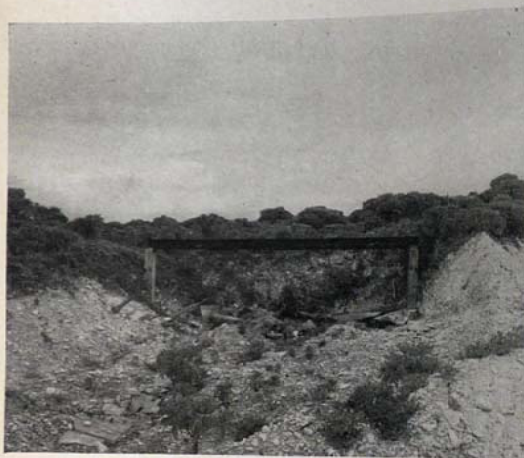


PHOTO 65

Photos 65 and 66 show 2 revetments with lightly constructed roofing, each containing 10 aerial torpedos. Both received direct hits during the raids of 20 February 1945, and were totally destroyed.

PHOTO 66

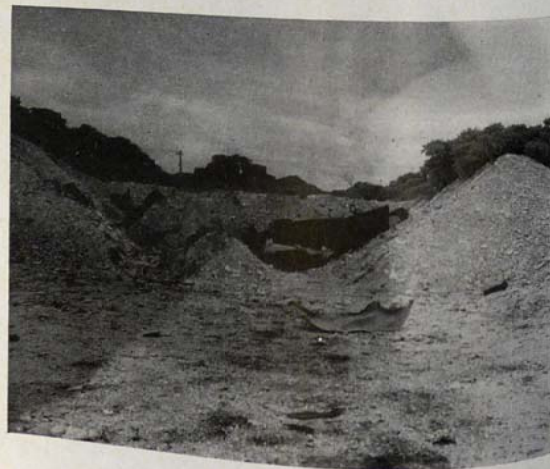


PHOTO 67

Personnel living quarters and shelters as seen from top of the Admiral's Command Post. The crater in the foreground near the water marks the site of a former observation tower which was destroyed by bombing.
(Ref. Annex B, Section 2, Map 1, Point 34.)

PHOTO 68
Japanese quarters on Wake.
(Ref. Annex B, Section 2, Map 1, Point 34.)





PHOTO 69
Japanese quarters on Wake.
(Ref. Annex B, Section 2, Map 1, Point 34)

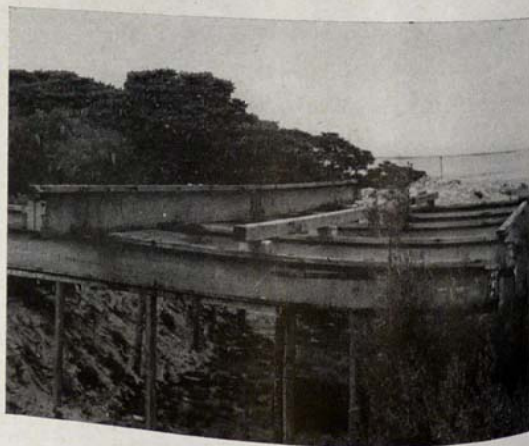


PHOTO 70
Framework of typical barracks. Steel "I" beams are supported under their ends by the top of the trench in which the barracks stands. Extensive use was made of salvaged "I" beams from U. S. buildings.



PHOTO 71
A finished barracks whose framework is the same as in Photo 70. Note the excellent camouflage.



PHOTO 72
Damage to garage caused by bomb blast from near miss, probably from instantaneous fuzed 500 or 1,000-pound bomb.



PHOTO 73
Trucks immobilized because of lack of spare parts.



PHOTO 75
Interior of garage showing little effect of bombing.



PHOTO 74
Garage damaged by 500-pound near-miss.

PHOTO 76
Camouflaged track dispersal trench. Effective use by the Japanese of such dispersal and protection saved much of their motor vehicles from bomb damage.





PHOTO 77
Japanese truck showing signs of excellent
repair and maintenance.

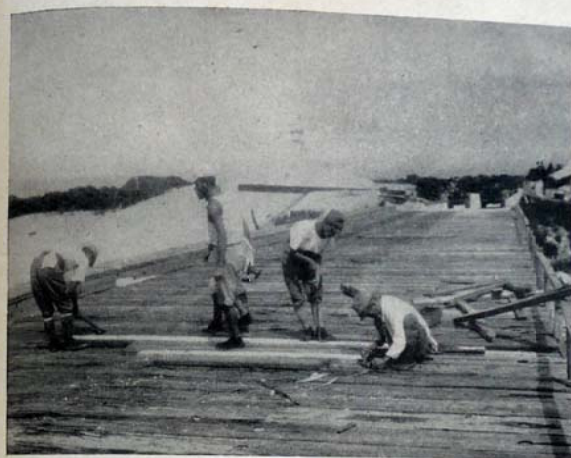


PHOTO 79
Steel girder, wooden deck, bridge to Peale
Island. Patching is to repair damage of rocket
hits to deck. No structural damage to steel
frame.
(Ref. Annex B, Section 1, Map 1, Point 35.)

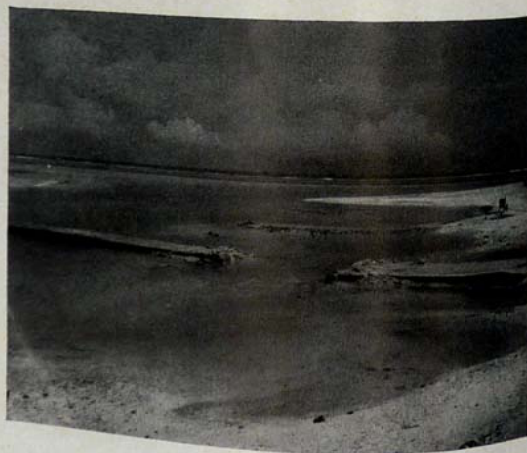


PHOTO 78
Breached and unrepaired causeway between
Wake and Peale Islands. This damage was
probably caused by 1,000-pound bomb.
(Ref. Annex B, Section 2, Map 1, Point 36.)



PHOTO 80
Strafing attack set fire to camouflage nets
used by the Japanese to conceal these tanks.
The fire badly damaged the guns and interior
of the tank in the foreground.



PHOTO 81
Entrance to underground surgery. Structure was made of reinforced concrete and covered with 15 feet of coral.
(Ref. Annex B, Section 2, Map 4, Point 5.)

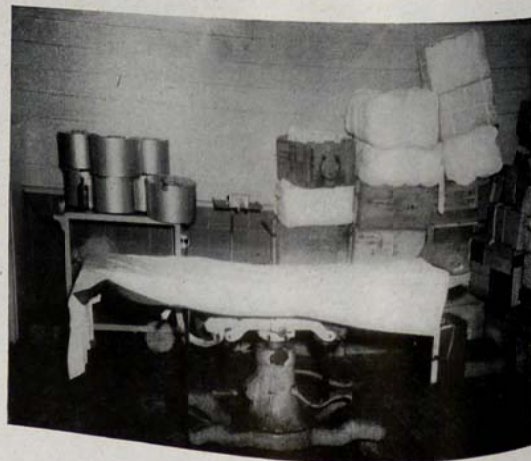


PHOTO 82
Interior of operating room. The table and the refrigerator were part of Marine equipment captured by the Japanese. Supplies to the right are those obtained from the U. S. after V-J Day.



PHOTO 83
Interior of surgical ward capable of accommodating 30 patients. The equipment shown on the right represented the remains of all surgical instruments. The operating room is through the passageway and to the left.

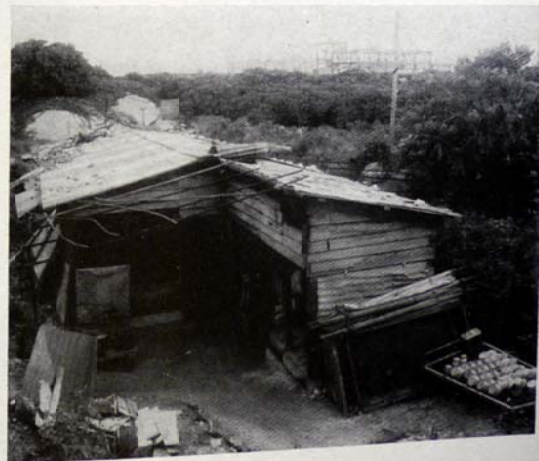


PHOTO 84
The only dispensary left intact on the island. This structure accommodated approximately 25 patients.



PHOTO 85
Interior of dispensary. Note absence of beds and medical equipment; nondescript articles of bedding, clothing, etc. In all the structure was foul and dirty and flies were in abundance. Sanitary conditions were nonexistent.



PHOTO 86
Two cases of malnutrition. These patients were considered not to have marked degree of malnutrition and consequently were not evacuated by the Jap hospital ship in July 1945.

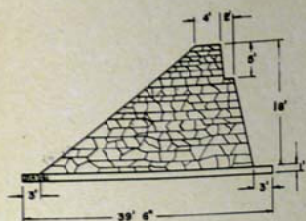


PHOTO 87
Picture shows a patient who developed tetanus following an amputation. Location is an underground wing of a damp and musty air raid shelter, totally dark and devoid of fresh air. Little attention was paid to this patient and literally he was left there to die. While the picture shows the dressing to be white and clean, it actually was soiled with purulent secretions and had not been changed during the 4 days the survey party remained at Wake. This typifies the general treatment and attitude of Jap medical practice.

Annex B

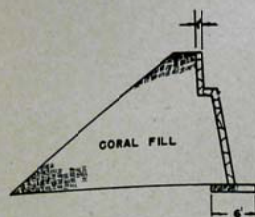
Section 4.—Drawings

1. Typical Bomber Reveiment.
2. Coast Defense Gun Layout.
3. Headquarters Area, Wake Island.
4. Admiral's Command Post, (Roof and Floor Plans).
5. Admiral's Command Post, (Sections and Details).
6. Typical Fuel Storage, Wake Island.
7. Underground Shop Area, Wake Island.
8. Typical Quarters.



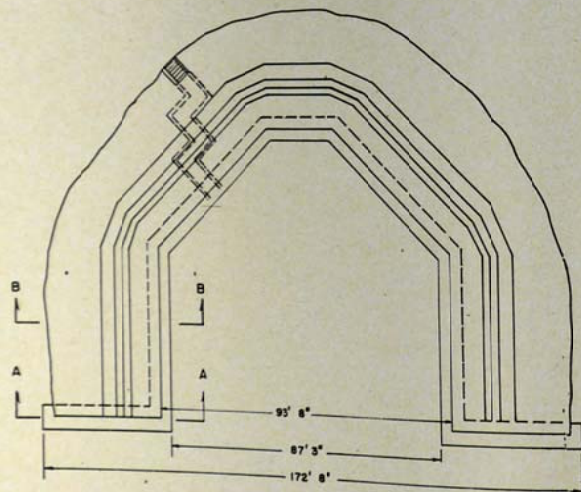
SECTION "A-A"

A veneer of rubble masonry 1' thick is used on inside face & across both ends. A concrete footer 6' wide & 1' thick makes the foundation for the rubble masonry.



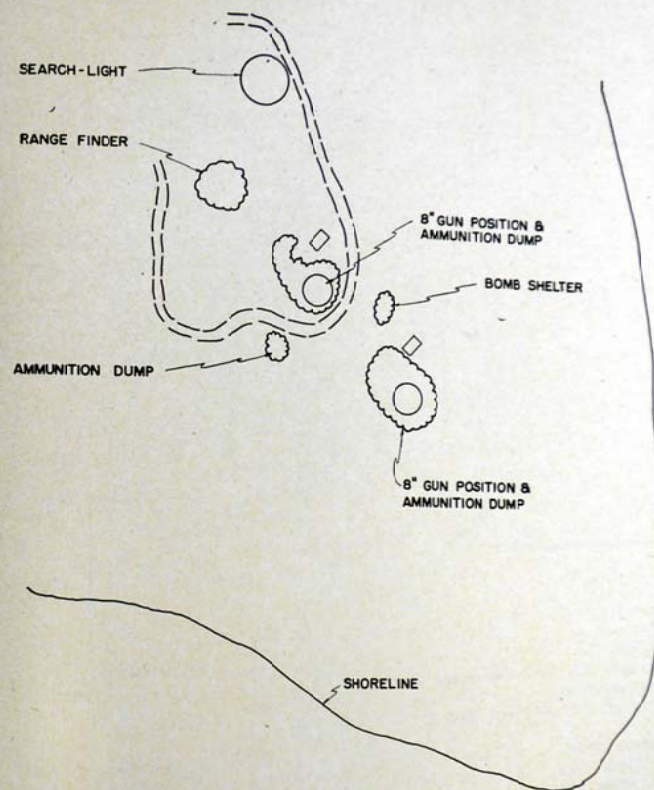
SECTION "B-B"

The passageway through the revetment is of concrete construction except at rear which is timber. The passageway is 4'x5' wide & high respectively. The walls & deck are 2' thick & the footer or floor is 1' deep. Two heavy doors are placed as shown in the drawing.



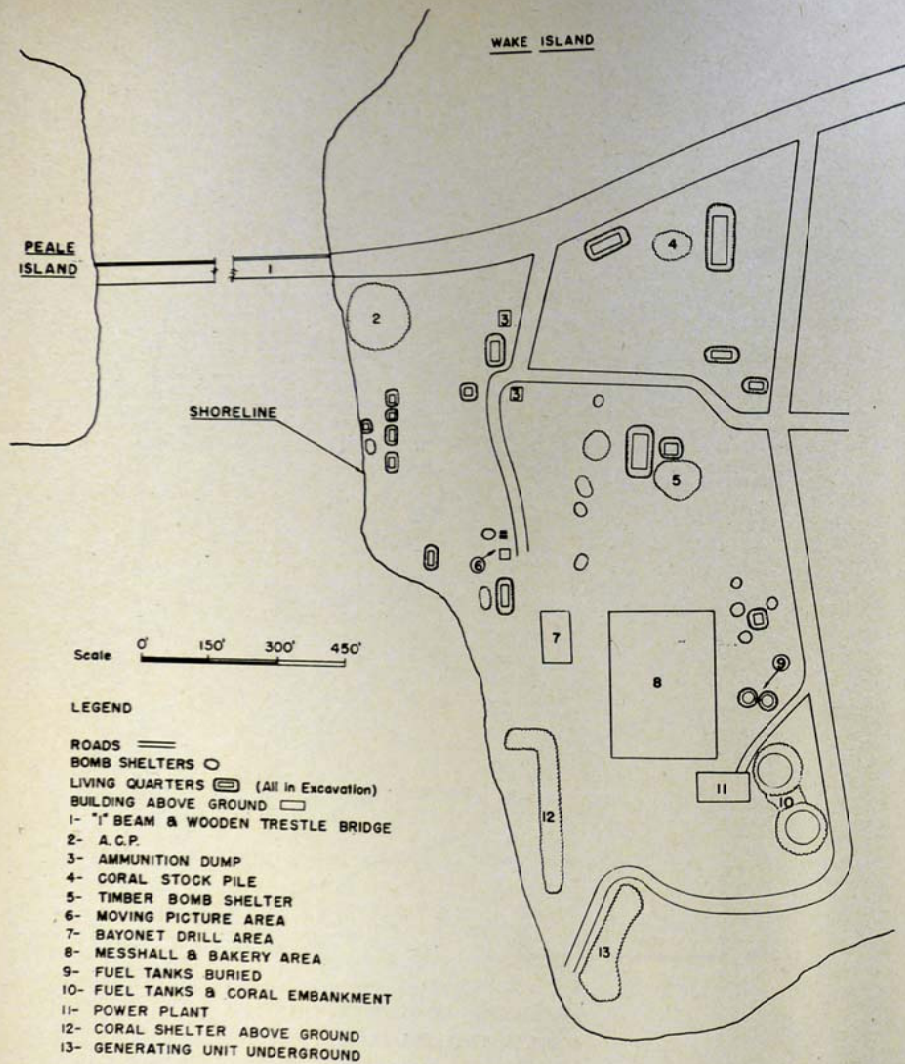
PLAN

TYPICAL BOMBER REVETMENT
WAKE ISLAND DWG No. 1
Ref. Ann. B Sec. 2 Map 1 Point 13



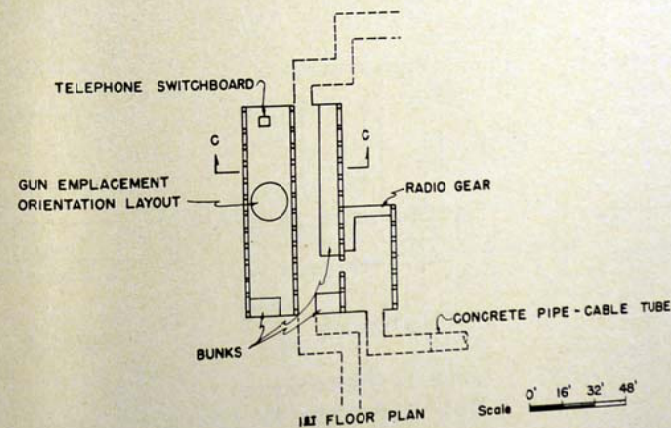
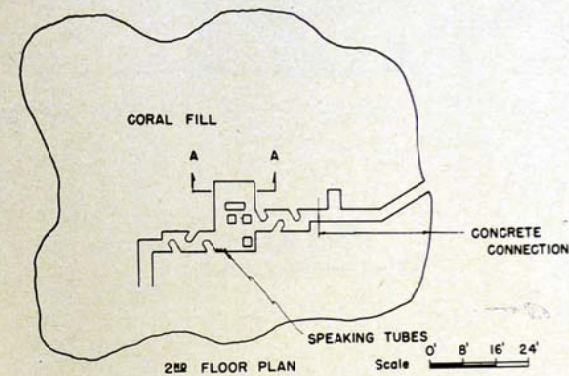
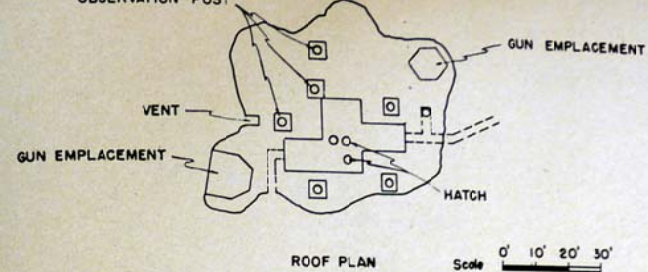
Scale 0' 100' 200' 300'

COAST DEFENSE GUN LAYOUT
WAKE ISLAND DWG No. 2
Ref. Ann. B Sec. 2 Map 1 Point 16



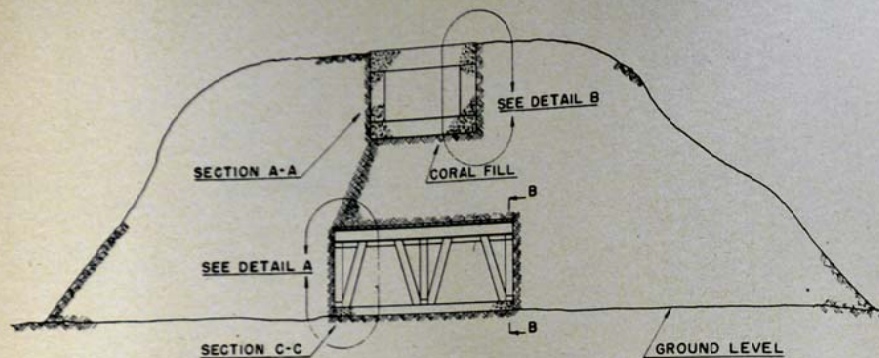
HEADQUARTERS AREA
WAKE ISLAND DWG No. 3

Ref. Ann. B Sec. 2 Map 1 Point 34

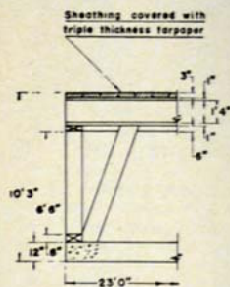


ADMIRAL'S COMMAND POST
WAKE ISLAND DWG No. 4

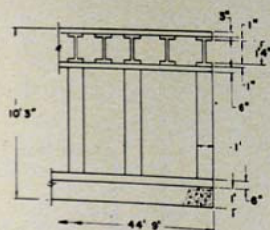
Ref. Ann. B Sec. 2 Map 1 Point 34



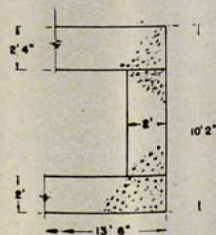
SECTION OF MOUND
CUT AT SECTION A-A & C-C



DETAIL A

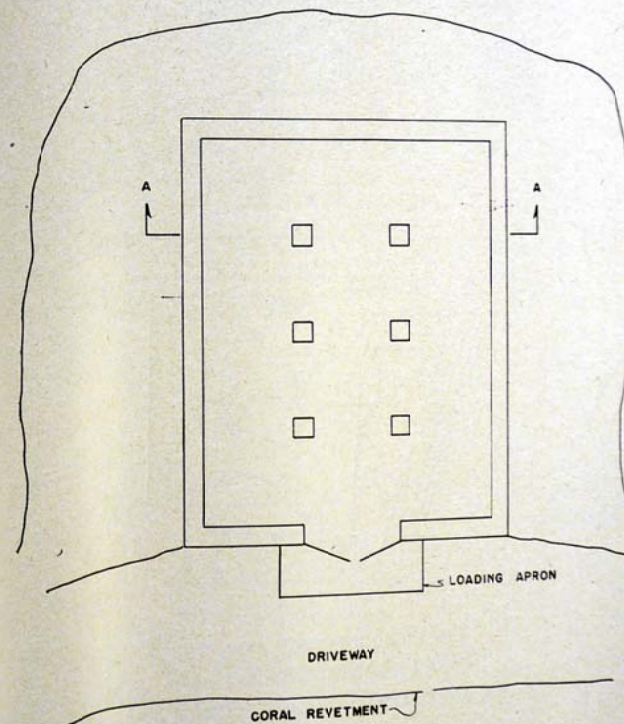
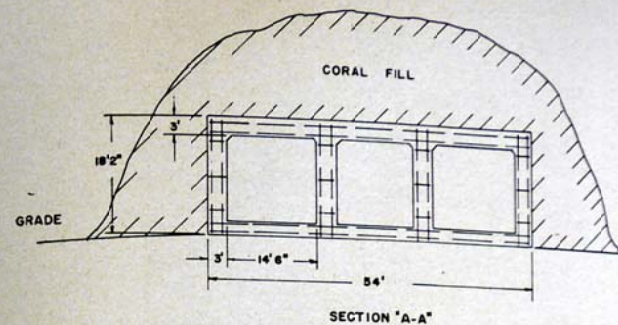


SECTION B-B

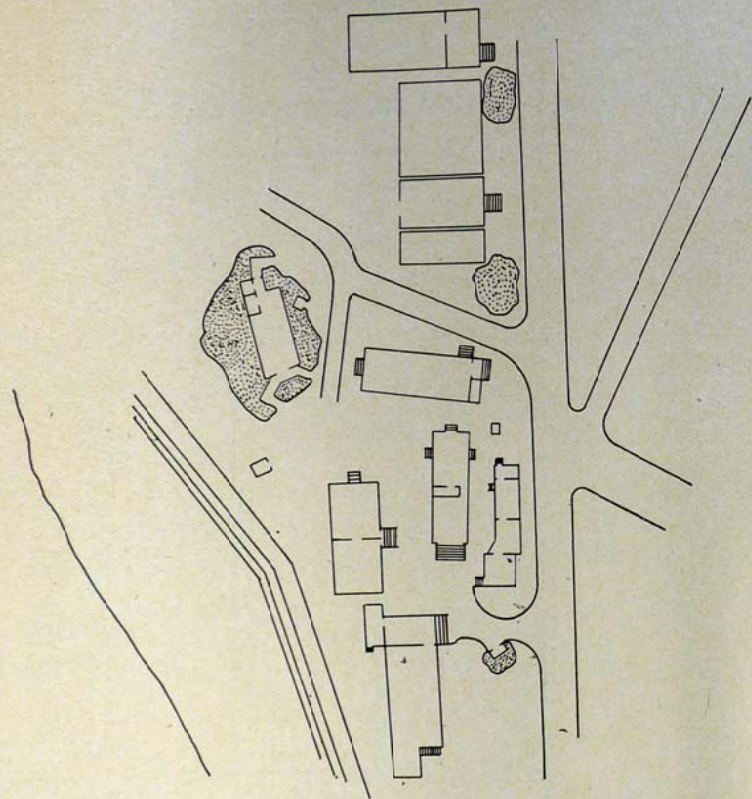


DETAIL B

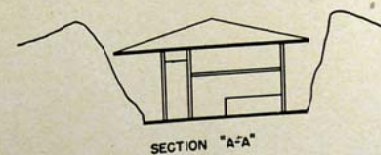
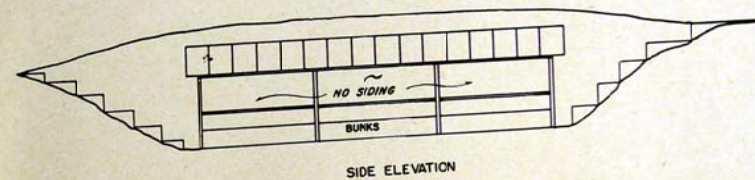
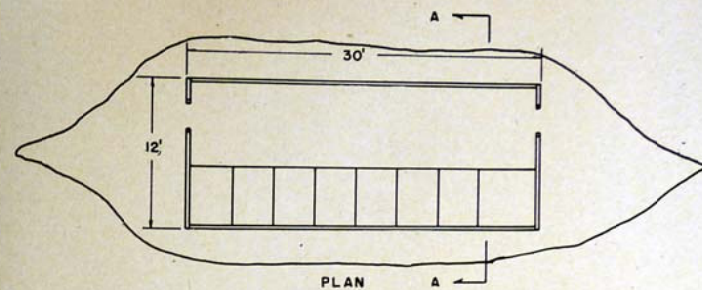
ADMIRAL'S COMMAND POST
WAKE ISLAND DWG No. 5
Ref. Ann. B Sec. 2 Map 1 Point 34



TYPICAL FUEL STORAGE
WAKE ISLAND DWG No. 6
Ref. Ann. B Sec. 2 Map 1 Point 19



UNDERGROUND SHOP AREA
WAKE ISLAND DWG No. 7
Ref. Ann. B Sec. 2 Map 1 Point 6



TYPICAL QUARTERS
WAKE ISLAND DWG No. 8
Ref. Ann. B Sec. 2 Map 1 Point 34

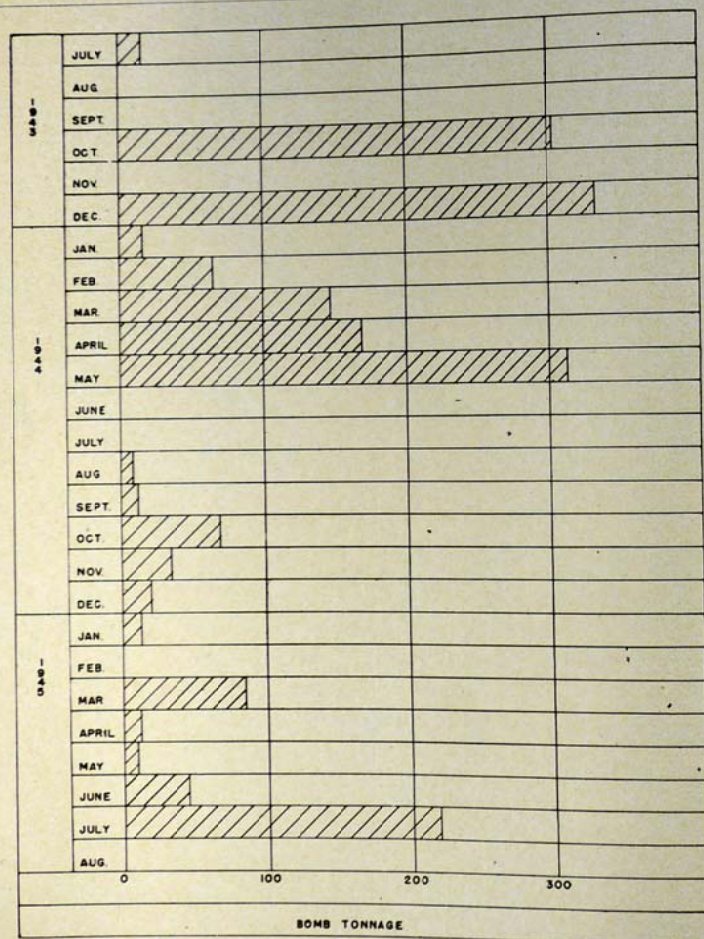
Living quarters camouflaged
with growing vines, coral,
and dead branches.

Section 5.—Tables

- I. Summary of Aerial Bombing by Months.
- II. Aerial Bombing (Graph).
- III. Strategic Bombing and Surface Bombardment.
- IV. Navy Strikes.
- V. Anti-Aircraft and Coastal Defense Guns.
- VI. Transportation.
- VII. Japanese Air Strength (Graph).

TABLE I.—Summary of aerial bombing by months¹

Month/Year	Tons dropped	Month/Year	Tons dropped
1943:		October	70.00
July	16.61	November	36.04
October	310.00	December	19.76
December	367.00	1944:	
1944:		January	13.75
January	18.80	March	83.75
February	65.00	April	13.25
March	143.00	May	11.25
April	170.00	June	53.00
May	315.00	July	221.00
August	7.50	Total	1,982.11
September	17.50		

¹ Estimated.AERIAL BOMBING
WAKE ISLAND TABLE II

Date	Army	Navy	Orinance	Target	Remarks
8 Jul 43	8 B-24s		300-50 lb. frags., 7-500 lb. GP, 3-650 lb. DB.	Shore installations	90% of hits on target.
24 Jul 43	8 B-24s		13-350 lb. GP		
26 Jul 43	8 B-24s		174-30 lb. frags., 18-500 lb. GP, 9 inend. clusters.		
5 Oct 43	Task Force 14 (TG14.5, 14.2, 14.6, 14.12, 14.13)		Carrier-based planes flew 510 sorties. Dropped 340 tons of bombs.		Substantial damage to power plant, water supply, fuel, ammunition, and storage facilities and buildings.
6 Oct 43			South bombardment group: 1,491 rounds 8", 1707 rounds 5".		
7 Dec 43	Task Force 57.		North bombardment group: 3387 rounds 6", 3,705 rounds 5".		Merely reported as 551 sorties.
30 Jan 44		24 PB2Ys	68-500 lb. GP.		
31 Jan 44			36-100 lb. GP	Not reported	
7 Mar 44	7 B-24s		143 tons	Not reported	
19 Apr 44	1 B-24		3 tons	Runways	60% in target area. 44 additional tons dropped during Apr 44.
20 Apr 44	12 B-24s		29 tons	Installations	
7 Apr 44	B-24s		44 tons	Installations	
20 Apr 44	98th BS, 10 B-24s.		376-500 lb. GP	Barracks, power plants, shops; NW part of Wake.	Damage to food storage, garage and buildings.
	24th BS, 10 B-24s.				
	392nd BS, 11 B-24s.			Gun positions, barracks on Peacock Point.	41% in target area. Hits on power plant, storage and revetments. Peale Island.
	27th BS, 11 B-24s.				
10 May 44	3 B-24s		6 tons		
15 May 44	392nd BS, 3 B-24s.		80-500 lb. GP	Installations AA Positions, North Shore, W. Heel Pt.; E. Shore, N. of Peacock Point.	90% in target area. Results not observed.
				NW half Wilkes Is. area east runway of Wake Is.	Results not observed.
16 May 44	27th BS, 11 B-24s.		120-500 lb. GP		Est. 90% of hits in target area. Large building in center of island hit. Fires.
	392nd BS, 12 B-24s.		480-100 lb. GP		
17 May 44	431st BS, 9 B-24s.		360 lb. GP	Dispersal Area N. of runway-lagoon side of Wake barracks and Seaplane Base, Peale Island.	Damage found: 1 search light, 7 small fuel dumps, 2 magazines.
	98th BS, 9 B-24s.		108-500 lb. GP		
23 May 44	Task Group 58.6 (Essex, Wasp, San Jacinto).		148 tons		Reported damage: DESTROYED: 20 Bldgs., 4-6 Ammunition dumps, 1 fuel tank, 1 lookout station. DAMAGED: 12 Bldgs., 2 revetments.
31 May 44	38th BS, 6 B-24s.		18-2000 lb. GP	Area W. of Heel Pt. Power plant, shops, barracks.	61% in target area.
	392nd BS, 11 B-24s.		4-1000 lb. GP, 400-100 lb. GP.	SW side Peacock Pt. CD Gurs.	81% in target area. 240 hits—CD area. 129 hits—runways.
5 Aug 44	B-24s		2½ tons	Runways	
7 Aug 44	B-24 (Recon)		2½ tons	Runways	
23 Aug 44	431st BS, 1 B-24.		10-500 lb. GP	6 bombs near old U.S. BOQ, Peacock Point.	
4 Sep 44	USS Salt Lake City.		Naval Bombardment.		Reported damage. Out of commission: 1-8" gun, Peacock Pt.; 2-8" guns, Toki; 1-5" AA, Peacock Pt.; 2-5" DP, Wake, center portion, east side; 2-5" guns, Heel Pt. Probably damaged.
24 Sep 44	B-24 (Recon)		2½ tons		
26 Sep 44	2 B-24s		5 tons	Peacock Point ground installations.	Results unobserved.
	98th BS, 1 B-24.			Heel Point ground installations.	Results unobserved.
	26th BS, 1 B-24.		10-500 lb. GP	Peacock Point	Results unobserved.
29 Sep 44	98th BS, 1 B-24.		10-500 lb. GP	Heel Point	Results unobserved.
	98th BS, 1 B-24.		10-500 lb. GP	Heel Point, Airstrip	100% bombs on target, results unobserved.
1 Oct 44	26th BS, 1 B-24.		10-500 lb. GP	Peacock Point	50% bombs on target, results unobserved.
6 Oct 44	98th BS, 1 B-24.		10-500 lb. GP		
	431st BS, 1 B-24.		10-500 lb. GP		

TABLE III.—Strategic bombing and surface bombardment—(Continued)

Date	Army	Navy	Ordnance	Target	Remarks
7 Oct 44	98th BS, 1 B-24		10-500 lb. GP	Heel Point, Seaplane Base	9 bombs struck center of island.
8 Oct 44	431st BS, 1 B-24		10-500 lb. GP		
9 Oct 44	26th BS, 1 B-24		4-1000 lb. GP	Airfields	Results unobserved.
9 Oct 44	98th BS, 1 B-24		10-500 lb. GP	Heel Island	
	431st BS, 1 B-24		10-500 lb. GP		
	26th BS, 1 B-24		4-1000 lb. GP		
10 Oct 44		3 B-24s	7 tons		Results unobserved.
11 Oct 44	26th BS, 1 B-24		10-500 lb. GP	Storage area	Results unobserved.
	431st BS, 1 B-24		4-1000 lb. GP	Flipper Point	
12 Oct 44	98th BS, 1 B-24		4-1000 lb. GP	AA Positions, Peacock Point	Results unobserved.
	26th BS, 1 B-24		4-1000 lb. GP		
13 Oct 44	98th BS, 1 B-24		4-1000 lb. GP	Peacock Point	
	431st BS, 1 B-24		4-1000 lb. GP		
14 Oct 44		2 B-24s	4 tons	Peacock Point	Results unobserved.
15 Oct 44	26th BS, 1 B-24		4-1000 lb. GP	Peacock Point	
	98th BS, 1 B-24		4-1000 lb. GP		
16 Oct 44		2 B-24s	4 tons		Results unobserved.
17 Oct 44	26th BS, 1 B-24		4-1000 lb. GP	Heel Point	Results unobserved.
	98th BS, 1 B-24		4-1000 lb. GP	Heel Point	Results unobserved.
25 Oct 44		VP-133 (6)	24-500 lb. GP	Power Station	Results unobserved.
2 Nov 44		VP-133 (10)	32-1000 lb. GP, 12-500 lb. GP	AW Positions, Revetments	Results unobserved.
7 Nov 44		VP-133 (3)	12-500 lb. GP	AW Positions	Explosions.
23 Nov 44		VP-133 (6)	24-500 lb. GP	Power Plant Bldg.	
29 Nov 44		VP-133 (6)	24-500 lb. GP		
30 Nov 44		1 FBV	2 tons	Gun emplacement	100% accuracy.
2 Dec 44		VP-133 (6)	24-500 lb. GP, 20-100 lb. GP	Power Plant, Fuel Tank	
13 Dec 44		VP-133 (6)	22-500 lb. GP, 12-100 lb. GP	AA Positions	
30 Dec 44		VP-133 (6)	24-500 lb. GP, 12-100 lb. GP	Water Plant	
13 Jan 45		VP-133 (5)	25-500 lb. GP	Installations	
20 Jan 45		VP-133 (5)	30-500 lb. GP	Radio-Radar Bldg.	
1 Mar 45		VP-133 (11)	40-500 lb. GP	Runways	Cratered.
2 Mar 45		VP-133 (5)	36-500 lb. GP	Runways	Cratered.
7 Mar 45		VP-121 (6)	27-500 lb. GP	Runways	Cratered.
9 Mar 45		VP-121 (6)	45-500 lb. GP	Runways	Cratered.
11 Mar 45		VP-121 (6)	45-500 lb. GP	Runways	Cratered.
14 Mar 45		VP-121 (4)	36-500 lb. GP	Storage areas and building	
20 Mar 45		VP-121 (6)	54-500 lb. GP	Runways, barracks	
26 Mar 45		VP-121 (6)	54-500 lb. GP	Magazines	
25 Apr 45		VP-121 (6)	53-500 lb. GP	Airstrips and Magazines	Explosions.
6 Jun 45		VP-121 (6)	54-500 lb. GP	Airstrips and Magazines	
17 Jun 45		VP-121 (8)	72-500 lb. GP	Buildings	
				Storage area buildings, and revetments.	

TABLE IV.—Isolated Navy strikes not included in Table III

Date	Number of Sorties	Tons of Bombs	Number of 5" Rockets
1944:			
February	59	65	
October	5	7	
1945:			
May	6	11.25	
June	14	21.50 ¹	
July	156		54

¹ Not reported

TABLE V.—Table of bombing effects

Installation	Original Number	Number Destroyed	Number Damaged	Weapon ¹
I. Guns:				
20 cm CD	4	2	0	1-N; 1-B
15 cm CD	4	0	0	
12.7 cm AA (twin mount)	8	7	0	4-N; 3-B&R
12.7 cm DP	6	2	0	1-N; 1-O
12 cm CD	3	0	0	
8 cm AA	1	1	0	B
8 cm DP	1	0	0	
7.5 cm AA	9	3	0	2-N; 1-O
25 mm AA (twin mount)	24	7	0	2-S; 5-B
II. Auxiliary Defenses:				
Command Posts	1	0	0	
Fire Control Stations	8	5	1	4-B; 1-N
Searchlights	12	6	0	5-B; 1-R
III. Ammunition Dumps:				
12.7 cm		2	0	B
7.5 cm		1	0	N
25 mm		1	0	S
IV. Utilities:				
Power Plants	2	2	0	1-B; 1-N
Generators	4	0	0	
Distillation Plants	2	1	1	B
V. Communications:				
Radar Installations	2	0	2	S
Radio Station	1	0	1	B
VI. Miscellaneous:				
Personnel Shelters	11	1	0	B

¹ B-Bombing; N-Naval Gunfire; S-Strafing; R-Rocket; O-Operational failure due to repeated damage.

TABLE VI.—Transportation

TRUCKS

	Navy	Army	Total
Trucks on island	35	53	88
Knocked out by air attack	11	7	18
Rendered useless by lack of supplies	10	18	28
Still in commission in August 1945	14	8	22

BOATS AND BARGES

	Number	Destroyed by air attack
Torpedo Boats	3	3
American Barges	2	2
Small Patrol Boats	7	5
MCL's	3	1
Motor Boat (Small)	1	0

UNITED STATES STRATEGIC BOMBING SURVEY European War

LIST OF REPORTS

The following list of studies is a bibliography of completed reports resulting from the German survey. Reports numbers 1, 2, and 3 can be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. Permission to examine the remaining reports may be had by writing to the headquarters of the Survey at Gravelly Point, Washington 25, D. C.

- 1 The United States Strategic Bombing Survey: Overall Report (European War)
- 2 The United States Strategic Bombing Survey: Summary Report (European War)
- 3 The effects of Strategic Bombing on the German War Economy

AIRCRAFT DIVISION (By Division and Branch)

- 4 Aircraft Division Industry Report
- 5 Inspection Visits to Various Targets (Special Report)

Airframes Branch

- 6 Junkers Aircraft and Aero Engine Works, Dessau, Germany
- 7 Erla Maschinenwerke G m b H, Heiterblick, Germany
- 8 A T G Maschinenbau, G m b H, Leipzig (Mockau), Germany
- 9 Gothaer Waggonfabrik, A G, Gotha, Germany
- 10 Focke Wulf Aircraft Plant, Bremen, Germany
- 11 Messerschmitt A G, Augsburg, Germany
 - Over-all Report
 - Part A
 - Part B
 - Appendices I, II, III
- 12 Dornier Werke, Friedrichshafen & Munich, Germany
- 13 Gerhard Fieseler Werke G m b H, Kassel, Germany
- 14 Wiener Neustädter Flugzeugwerke, Wiener Neustadt, Austria

Aero Engines Branch

- 15 Bussing NAG Flugmotorenwerke G m b H, Brunswick, Germany
- 16 Mittel-Deutsche Motorenwerke G m b H, Taucha, Germany
- 17 Bavarian Motorworks Inc, Eisenach & Durrenhof, Germany
- 18 Bayerische Motorenwerke A G (BMW) Munich, Germany
- 19 Henschel Flugmotorenwerke, Kassel, Germany

Light Metal Branch

- 20 Light Metals Industry (Part I, Aluminum
of Germany (Part II, Magnesium)

- 21 Vereinigte Deutsche Metallwerke, Hildesheim, Germany
- 22 Metallgussgesellschaft G m b H, Leipzig, Germany
- 23 Aluminiumwerk G m b H, Plant No. 2, Bitterfeld, Germany
- 24 Gebrüder Giulini G m b H, Ludwigshafen, Germany
- 25 Luftschiffbau Zeppelin G m b H, Friedrichshafen on Bodensee, Germany
- 26 Wieland Werke A G, Ulm, Germany
- 27 Rudolph Rautenbach Leichtmetallgiessereien, Solingen, Germany
- 28 Lippewerke Vereinigte Aluminiumwerke A G, Lunen, Germany
- 29 Vereinigte Deutsche Metallwerke, Heddernheim, Germany
- 30 Duerener Metallwerke A G, Duren Wittenau-Berlin & Waren, Germany

AREA STUDIES DIVISION

- 31 Area Studies Division Report
- 32 A Detailed Study of the Effects of Area Bombing on Hamburg
- 33 A Detailed Study of the Effects of Area Bombing on Wuppertal
- 34 A Detailed Study of the Effects of Area Bombing on Düsseldorf
- 35 A Detailed Study of the Effects of Area Bombing on Solingen
- 36 A Detailed Study of the Effects of Area Bombing on Remscheid
- 37 A Detailed Study of the Effects of Area Bombing on Darmstadt
- 38 A Detailed Study of the Effects of Area Bombing on Lubeck
- 39 A brief Study of the Effects of Area Bombing on Berlin, Augsburg, Bochum, Leipzig, Hagen, Dortmund, Oberhausen, Schweinfurt, and Bremen

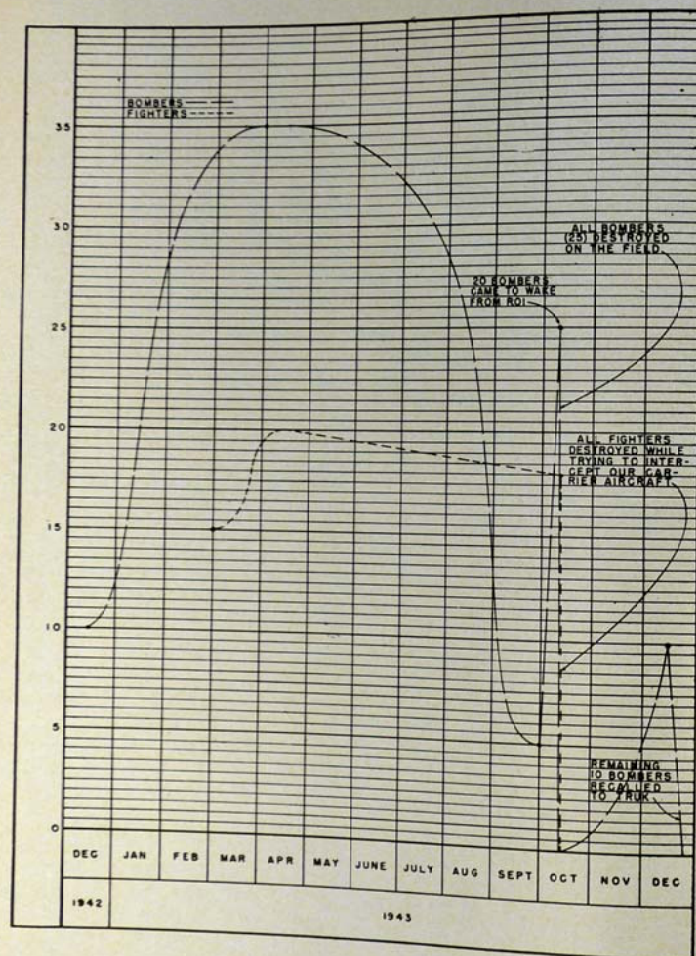
CIVILIAN DEFENSE DIVISION

- 40 Civilian Defense Division—Final Report
- 41 Cologne Field Report
- 42 Bonn Field Report
- 43 Hanover Field Report
- 44 Hamburg Field Report—Vol I, Text; Vol II, Exhibits
- 45 Bad Oldesloe Field Report
- 46 Augsburg Field Report
- 47 Reception Areas in Bavaria, Germany

EQUIPMENT DIVISION

Electrical Branch

- 48 German Electrical Equipment Industry Report
- 49 Brown Boveri et Cie, Mannheim Käfertal, Germany



JAPANESE AIR STRENGTH 1942-43
WAKE ISLAND TABLE No. VII

Optical and Precision Instrument Branch

50 Optical and Precision Instrument Industry Report

Abrasive Branch

51 The German Abrasive Industry
52 Mayer and Schmidt, Offenbach on Main, Germany

Anti-Friction Branch

53 The German Anti-Friction Bearings Industry

Machine Tools Branch

54 Machine Tools & Machinery as Capital Equipment
55 Machine Tool Industry in Germany
56 Herman Kolb Co, Cologne, Germany
57 Collet and Engelhard, Offenbach, Germany
58 Naxos Union, Frankfurt on Main, Germany

MILITARY ANALYSIS DIVISION

59 The Defeat of the German Air Force
60 V-Weapons (Crossbow) campaign
61 Air Force Rate of Operation
62 Weather Factors in Combat Bombardment Operations in the European Theatre
63 Bombing Accuracy, USAAF Heavy and Medium Bombers in the ETO
64 Description of RAF Bombing

MORALE DIVISION

Medical Branch

65 The Effect of Bombing on Health and Medical Care in Germany

MUNITIONS DIVISION

Heavy Industry Branch

66 The Coking Industry Report of Germany
67 Coking Plant Report No. 1, Sections A, B, C, & D
68 Gutehoffnungshuette, Oberhausen, Germany
69 Friedrich-Alfred Hütte, Rheinhausen, Germany
70 Neunkirchen Eisenwerke A G, Neunkirchen, Germany
71 Reichswerke Hermann Goering A G, Hallendorf, Germany
72 August Thyssen Huette A G, Hamborn, Germany
73 Friedrich Krupp A G, Borbeck Plant, Essen, Germany
74 Dortmund Hoerder Huetteneverein, A G, Dortmund, Germany
75 Hoesch A G, Dortmund, Germany
76 Bochumer Verein fuer Gusstahlfabrikation A G, Bochum, Germany

Motor Vehicles and Tanks Branch

77 German Motor Vehicles Industry Report
78 Tank Industry Report
79 Daimler Benz A G, Unterturkheim, Germany
80 Renault Motor Vehicles Plant, Billancourt, Paris
81 Adam Opel, Russelheim, Germany
82 Daimler Benz-Gaggenau Works, Gaggenau, Germany
83 Maschinenfabrik Augsburg-Nurnberg, Nurnberg, Germany
84 Auto Union A G, Chemnitz and Zwickau, Germany
85 Henschel and Sohn, Kassel, Germany
86 Maybach Motor Works, Friedrichshafen, Germany
87 Voigtlander Maschinenfabrik A G, Plauen, Germany
88 Volkswagenwerke, Fallersleben, Germany

89 Bussing NAG, Brunswick, Germany
90 Muehlebau Industrie A G (Mlag) Brunswick, Germany

91 Friedrich Krupp Grusonwerke, Magdeburg, Germany

Submarine Branch

92 German Submarine Industry Report
93 Maschinenfabrik Augsburg-Nurnberg A G, Augsburg, Germany
94 Blohm and Voss Shipyards, Hamburg, Germany
95 Deutsche Werke A G, Kiel, Germany
96 Deutsche Schiff und Maschinenbau, Bremen, Germany
97 Friedrich Krupp Germaniawerft, Kiel, Germany
98 Howaldtswerke A G, Hamburg, Germany
99 Schmarine Assembly Shelter, Farge, Germany
100 Bremer Vulkan, Vegesack, Germany

Ordnance Branch

101 Ordnance Industry Report
102 Friedrich Krupp Grusonwerke A G, Magdeburg, Germany
103 Bochumer Verein fuer Gusstahlfabrikation A G, Bochum, Germany
104 Henschel and Sohn, Kassel, Germany
105 Rheinmetall-Borsig, Dusseldorf, Germany
106 Hermann Goering Werke, Braunschweig, Hallendorf, Germany
107 Hannoverische Maschinenbau, Hanover, Germany
108 Gusstahlfabrik Friedrich Krupp, Essen, Germany

OIL DIVISION

109 Oil Division Final Report
110 Oil Division Final Report, Appendix
111 Powder, Explosives, Special Rockets and Jet Propellants, War Gases and Smoke Acid (Ministerial Report #1)
112 Underground and Dispersal Plants in Greater Germany
113 The German Oil Industry, Ministerial Report Team 78
114 Ministerial Report on Chemicals

Oil Branch

115 Ammoniakwerke Merseburg G m b H, Leuna, Germany—2 appendices
116 Braunkohle Benzin A G, Zeitz and Bohnen, Germany
117 Wintershall A G, Luetzkendorf, Germany
118 Ludwigshafen-Opau Works of I G Farbenindustrie A G, Ludwigshafen, Germany
119 Ruhroel Hydrogenation Plant, Bottrop-Boy, Germany, Vol I, Vol II
120 Rhenania Ossag Mineraloelwerke A G, Harburg Refinery, Hamburg, Germany
121 Rhenania Ossag Mineraloelwerke A G, Grassbrook Refinery, Hamburg, Germany
122 Rhenania Ossag Mineraloelwerke A G, Wilhelmshafen Refinery, Hamburg, Germany
123 Gewerkschaft Victor, Castrop-Rauxel, Germany, Vol I & Vol II
124 Europaeische Tanklager und Transport A G, Hamburg, Germany
125 Ebano Asphalt Werke A G, Harburg Refinery, Hamburg, Germany

125 Meerbeck Rheipreussen Synthetic Oil Plant—Vol I & Vol II

Rubber Branch

126 Deutsche Dunlop Gummi Co., Hanau on Main, Germany
127 Continental Gummiwerke, Hanover, Germany
128 Huels Synthetic Rubber Plant
129 Ministerial Report on German Rubber Industry

Propellants Branch

130 Elektro Chemischwerke, Munich, Germany
131 Schoenebeck Explosive Plant, Lignose Sprengstoff Werke G m b H, Bad Salzemen, Germany
132 Plants of Dynamit A G, Vormal, Alfred Nobel & Co, Troisdorf, Clausthal, Drummel and Duneberg, Germany
133 Deutsche Sprengchemie G m b H, Kraiburg, Germany

OVERALL ECONOMIC EFFECTS DIVISION

134 Overall Economic Effects Division Report
Gross National Product-----Special papers
Kriegs-Eil Berichte-----which together
Herman Goering Works-----comprise the
Food and Agriculture-----above report

PHYSICAL DAMAGE DIVISION

135 Villacoublay Airdrome, Paris, France
136 Railroad Repair Yards, Malines, Belgium
137 Railroad Repair Yards, Louvain, Belgium
138 Railroad Repair Yards, Hasselt, Belgium
139 Railroad Repair Yards, Namur, Belgium
140 Submarine Pens, Brest, France
141 Powder Plant, Angoulême, France
142 Powder Plant, Bergerac, France
143 Coking Plants, Montigny & Liege-Belgium
144 Fort St. Blaise Verdun Group, Metz, France
145 Gnome et Rhone, Limoges, France
146 Michelin Tire Factor, Clermont-Ferrand, France
147 Gnome et Rhone Aero Engine Factory, Le Mans, France
148 Kugelfischer Bearing Ball Plant, Ebelsbach, Germany
149 Louis Breguet Aircraft Plant, Toulouse, France
150 S. N. C. A. S. E. Aircraft Plant, Toulouse, France
151 A. I. A. Aircraft Plant, Toulouse, France
152 V Weapons in London
153 City Area of Krefeld
154 Public Air Raid Shelters in Germany
155 Goldenberg Thermal Electric Power Station, Knap-sack, Germany
156 Brauweiler Transformer & Switching Station, Brauweiler, Germany
157 Storage Depot, Nabhollenbach, Germany
158 Railway and Road Bridge, Bad Munster, Germany
159 Railway Bridge, Eller, Germany
160 Gustloff-Werke Weimar, Weimar, Germany

161 Henschel and Sohn G m b H, Kassel, Germany
162 Area Survey at Pirmasens, Germany
163 Hanomag, Hanover, Germany
164 M A N Werke Augsburg, Augsburg, Germany
165 Friedrich Krupp A G, Essen, Germany
166 Eria Maschinenwerke, G m b H, Heiterblick, Germany
167 A T G Maschinenbau G m b H, Mockau, Germany
168 Eria Maschinenwerke G m b H, Mockau, Germany
169 Bayerische Motorenwerke Durrerhoff, Germany
170 Mittel-Deutsche Motorenwerke G m b H, Taucha, Germany

171 Submarine Pens Deutsche-Werft, Hamburg, Germany
172 Multi-Storied Structures, Hamburg, Germany
173 Continental Gummiwerke, Hanover, Germany
174 Kassel Marshalling Yards, Kassel, Germany
175 Ammoniskwerke, Mersburg-leuna, Germany
176 Brown Boveri et Cie, Mannheim, Kafertal, Germany
177 Adam Opel A G, Russelheim, Germany
178 Daimler-Benz A G, Unterturkheim, Germany
179 Valentin Submarine Assembly, Farge, Germany
180 Volkswagonwerke, Fallersleben, Germany
181 Railway Viaduct at Bielefeld, Germany
182 Ship Yards Howaldtswerke, Hamburg, Germany
183 Blohm and Voss Shipyards, Hamburg, Germany
184 Daimler-Benz A G, Mannheim, Germany
185 Synthetic Oil Plant, Meerbeck-Hamburg, Germany
186 Gewerkschaft Victor, Castrop-Rauxel, Germany
187 Klockner Humblot Deutz, Ulm, Germany
188 Ruhroel Hydrogenation Plant, Bettrop-Boy, Germany
189 Neukirchen Eisenwerke A G, Neukirchen, Germany
190 Railway Viaduct at Altenbecken, Germany
191 Railway Viaduct at Arnburg, Germany
192 Deurag-Nerag Refineries, Misburg, Germany
193 Fire Raids on German Cities
194 I G Farbenindustrie, Ludwigshafen, Germany, Vol I & Vol II
195 Roundhouse in Marshalling Yard, Ulm, Germany
196 I G Farbenindustrie, Leverkusen, Germany
197 Chemische-Werke, Huels, Germany
198 Gremberg Marshalling Yard, Gremberg, Germany
199 Locomotive Shops and Bridges at Hamm, Germany

TRANSPORTATION DIVISION

200 Transportation Division Report
201 Rail Operations Over the Brenner Pass
202 Effects of Bombing on Railroad Installations in Regensburg, Nurnberg and Munich Divisions
203 German Locomotive Industry During the War
204 Wehrmacht Traffic Over the German Railroads

UTILITIES DIVISION

205 German Electric Utilities Industry Report
206 1 to 10 in Vol I "Utilities Division Plant Reports"
207 11 to 20 in Vol II "Utilities Division Plant Reports"
208 21 Rheinische-Westfalische Elektrizitätswerk A G