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**CONFIDENTIAL**

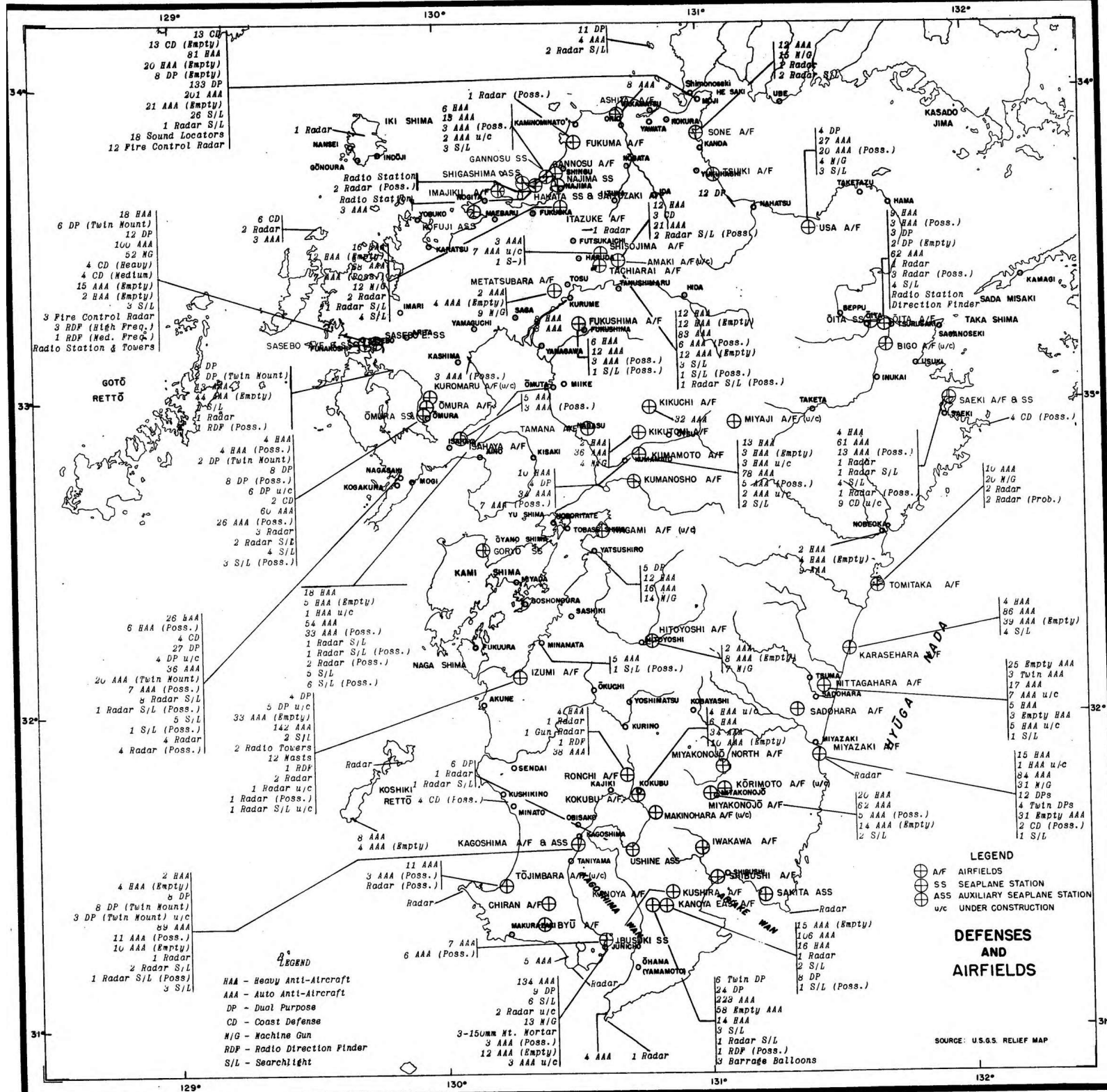
**UNITED STATES PACIFIC FLEET  
AND PACIFIC OCEAN AREAS**



**SPECIAL STUDY**

**SASEBO NAVAL BASE**

**CINCPAC - CINCPOA  
BULLETIN NO. 188 - 45  
20 JULY 1945**



18 HAA  
6 DP (Twin Mount)  
12 DP  
100 AAA  
52 NG  
4 CD (Medium)  
15 AAA (Empty)  
2 HAA (Empty)  
3 S/L  
3 Fire Control Radar  
3 RDF (High Freq.)  
1 RDF (Med. Freq.)  
Radio Station & Towers

GOTŌ  
RETTŌ

26 HAA  
6 HAA (Poss.)  
4 CD  
27 DP  
4 DP u/c  
36 AAA  
20 AAA (Twin Mount)  
7 AAA (Poss.)  
8 Radar S/L  
1 Radar S/L (Poss.)  
5 S/L  
1 S/L (Poss.)  
4 Radar (Poss.)

18 HAA  
5 HAA (Empty)  
1 HAA u/c  
54 AAA  
33 AAA (Poss.)  
1 Radar S/L  
1 Radar S/L (Poss.)  
2 Radar (Poss.)  
5 S/L  
6 S/L (Poss.)

4 DP  
5 DP u/c  
33 AAA (Empty)  
142 AAA  
2 S/L  
2 Radio Towers  
12 Nests  
1 RDF  
2 Radar  
1 Radar u/c  
1 Radar (Poss.)  
1 Radar S/L u/c

2 HAA  
4 HAA (Empty)  
8 DP  
8 DP (Twin Mount)  
3 DP (Twin Mount) u/c  
89 AAA  
11 AAA (Poss.)  
10 AAA (Empty)  
1 Radar  
2 Radar S/L  
1 Radar S/L (Poss.)  
3 S/L

LEGEND  
HAA - Heavy Anti-Aircraft  
AAA - Auto Anti-Aircraft  
DP - Dual Purpose  
CD - Coast Defense  
N/G - Machine Gun  
RDF - Radio Direction Finder  
S/L - Searchlight

LEGEND  
A/F AIRFIELDS  
SS SEAPLANE STATION  
ASS AUXILIARY SEAPLANE STATION  
u/c UNDER CONSTRUCTION

### DEFENSES AND AIRFIELDS

SOURCE: U.S.G.S. RELIEF MAP

# SASEBO NAVAL BASE

## Scope of Study

This special study on the SASEBO Naval Base in northwestern KYUSHU is specifically designed for use in air strike and therefore emphasis has been placed upon graphic presentation of material. Included is a detailed description of the facilities in the naval base, the volume of shipping which may be expected to be present at any one time in the harbor, and target information on the shipbuilding, ship repair, and naval ordnance of the area. An uncontrolled mosaic of SASEBO KO and Approaches provides all of the known defenses up to 20 June 1945, and a map of the principal installations on the island of KYUSHU has been included.

## LOCATION, GENERAL DESCRIPTION

(SEE UNCONTROLLED MOSAIC OF SASEBO KO AND APPROACHES SHOWING DEFENSES AS OF 20 JUNE 1945, PAGE 13.)

SASEBO, 33°11'N., 129°45'E., headquarters of the Third Naval District and one of the four primary Japanese naval stations, is a major repair base for the Japanese fleet. It provides a construction center for naval vessels, defense and convoy escort, and a supply base for the mainland. It is the naval administrative center for KYUSHU and much of the island chain to the south. SASEBO's location in northwestern KYUSHU, near CHOSEN Strait, makes it strategically important for operations in the CHINA Seas and the South Pacific. The harbor is nearly landlocked and has deep water over most of its area; it divides into three arms which trend northward, northeastward, and southeastward. The northern arm or inner harbor contains the main facilities of the base. OMURA WAN, included in the naval port of SASEBO, is an extensive and protected gulf southeast of SASEBO KO and can be entered only through the naval port.

## FACILITIES

(SEE ANNOTATED PHOTO OF SASEBO INNER HARBOR AND VICINITY, AND UNCONTROLLED MOSAIC OF SASEBO AND VICINITY, PAGE 4.)

Facilities at SASEBO include:

- (a) Six drydocks and three ways are located in the Naval Dockyard in the northwest section of the inner harbor; their dimensions and capacity from west to east are as follows:

Drydock	Size	Cranes	Capacity
6	475' x 100'	2 small	Destroyer
5	700' x 110'	1 small	Cruiser
4	825' x 125'	2 traveling	Battleship
2	1050' x 200'	3 traveling	Any ship
1	400' x 100'	1 medium	Destroyer
3	550' x 100'	1 medium	Light cruiser
Way	Size	Cranes	Capacity
1	360' x 75'	1 hammerhead	Destroyer or submarine
2	570' x 90'	Traveling crane on overhead Gantry Frame, 570' long, 100' wide.	Light cruiser or destroyer
3	570' x 90'	Traveling bridge crane, span of tracks 105', length of tracks, 530'	Light cruiser or destroyer

- (b) Mole, located on the northern shore of IORI SAKI on the western side of the entrance to the inner harbor, has the following dimensions:

	<u>Face</u>	<u>East Side</u>	<u>West Side</u>
Dimensions	260'	290'	520'
Depth alongside	30'	22'	10'

There are railroad and road connections to the area and there are several probable warehouses that may be used for crude oil storage.

- (c) Two piers at the southeast end of Target 90.36-755 have the following dimensions:

	<u>Face</u>	<u>Overall length</u>
Dimensions	270'	130'
Depth Alongside	14'	7'

These piers are probably used for both fueling and coaling.

- (d) A wharf 600 feet long is on a small inlet across from the abandoned tanks of Target No. 90.36-755. There is a warehouse nearby probably used for oil storage.
- (e) There is a bulkheaded area 1,300 feet long at the northeast corner of Target No. 90.36-755. Eight warehouses nearby may be used for oil storage.
- (f) Just to the north of the bulkheaded area is a fueling wharf 1,700 feet long. There are railroad and road connections to this wharf.
- (g) Another bulkheaded area used as a coaling wharf is 3,300 feet long and lies just to the north of the fueling wharf. A railroad spur and nearby coal storage facilities serve this coaling area.
- (h) Wharf located at the south side of the entrance to the dockyard is 450 feet long. This wharf is probably used for unloading material used in drydock area.
- (i) Wharf, located just inside the eastern entrance to the dockyard, is 1,100 feet long.
- (j) To the east of the drydock area is the Outfitting and Repair Basin, with railroad spur tracks, warehouses, outfitting and repair shops, and numerous maintenance-type buildings around its sides.
- (k) The Supply Basin is directly to the east of the Outfitting and Repair Basin. It is surrounded by supply and warehousing facilities.
- (l) There is shallow Boat Basin to the east of the Supply Basin.
- (m) Southeast of the Boat Basin is a reported destroyer base and submarine unit. This area is believed to serve as a local patrol boat headquarters. A wharf, 820 feet long, is located on the seaward side of the mole that forms the northwest side of this reported base. A quay, 1,330 feet long, is located on the seaward side of the mole that forms the southwest side. A small wharf, 20 feet by 200 feet, is on the south side of the entrance to this area.

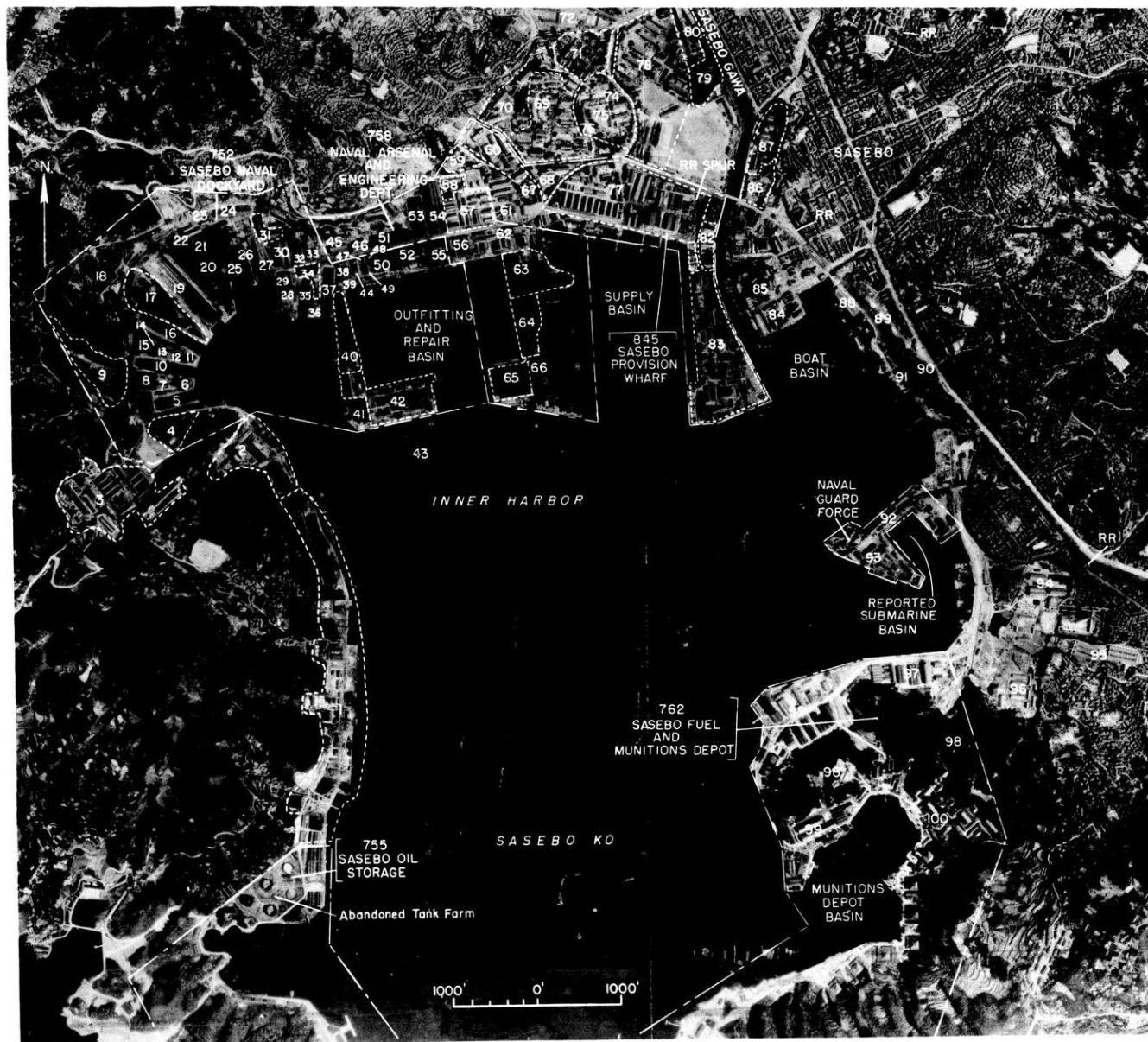
## VOLUME OF SHIPPING

Judging from past observations based on photo coverage, the smallest amount of shipping that may be expected to be present at any one time at this harbor is as follows:

<u>Inner Harbor</u>	<u>Ways</u>
Moored in Stream:	1 DD (TERUTSUKI Class)
7 escorts	2 DE
1 ODD	4 SS (small)
1 DD	<u>Drydocks</u>
1 APD	escorts, submarines, PT boats
2 LSM	<u>East of KYUKI SAKI</u>
1 FT 3000 tons or more	3 carriers (camouflaged)
<u>Outfitting and Repair Basin</u>	<u>Southeastern AINOURA WAN</u>
5 SS; possibly 2 large, 3 small	DD (TERUTSUKI Class) -
3 escorts	forward turrets off

KEY TO ANNOTATIONS ON PHOTO OF SASEBO INNER HARBOR AND VICINITY

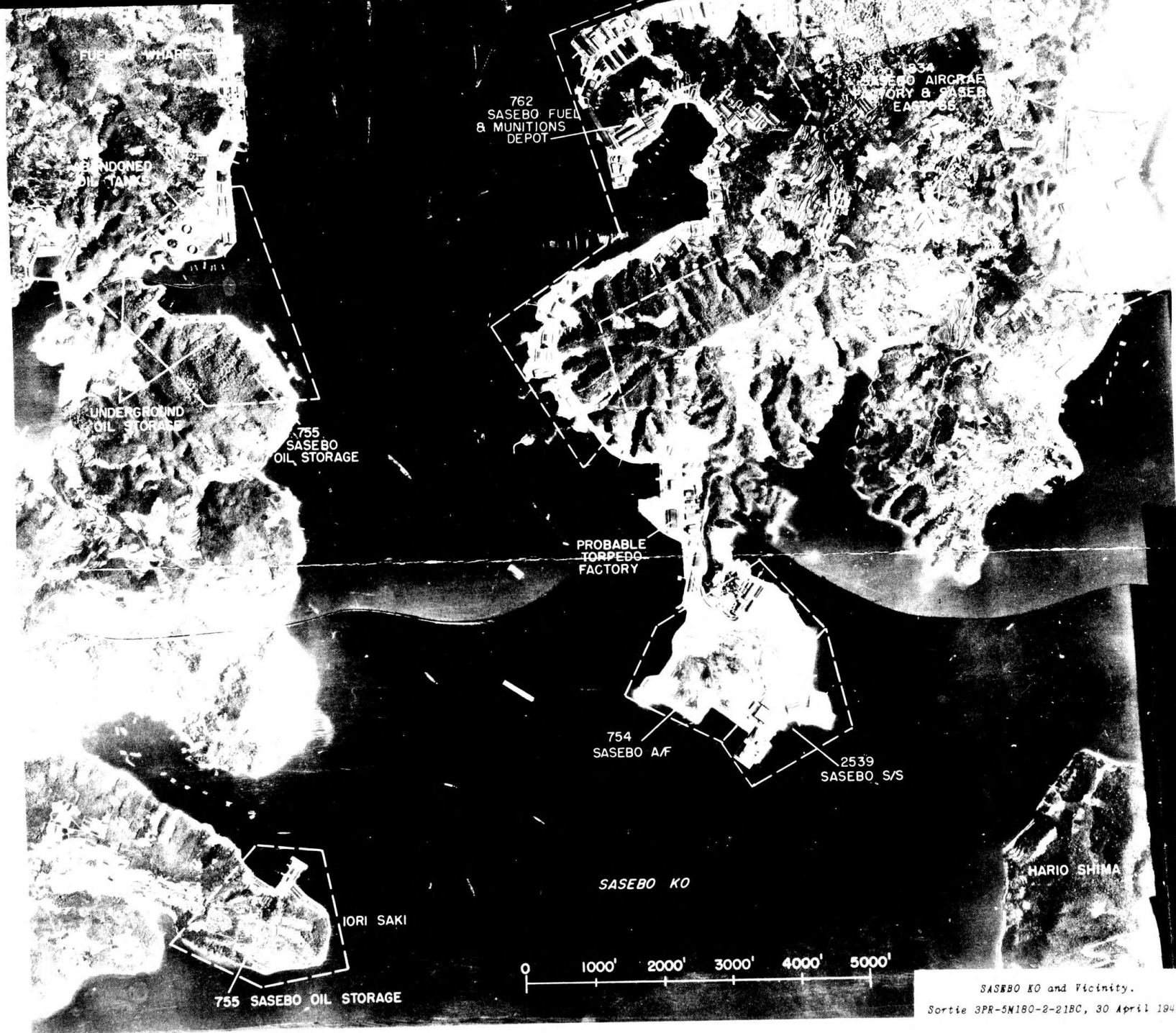
1. Coal and Fuel Storage and Bunkering Area
2. Shops (Unidentified Plant) and Unloading Wharf
3. Barracks Area
4. Shops - Unidentified
5. Drydock #6
6. Probable Pump for Drydock #6
7. Canteen
8. Drydock Workshop and Office
9. Reported Salvage Mills for Reclaimed Metals
10. Drydock #6
11. Drydock Pumping Station
12. Canteen
13. Head
14. Paintshop
15. Drydock Workshops and Office
16. Drydock #4
17. Ways Construction Area
18. Probable Barracks Area
19. Drydock #2
20. Plate Rolling Mill
21. Plate Shaping Shops
22. Engine Manufacturing Machine Shop
23. Small Power Plant
24. Mold Loft
25. Way #1
26. Way #2
27. Way #3
28. Carpenter Shop and Paint Mixing Shop
29. Power Plant
30. Foundry
31. Shops and Storage (Unidentified)
32. Material Storage
33. Foundry and Pattern Shop
34. Drydock Workshops
35. Drydock #1
36. Drydock Pumps
37. Drydock #3
38. Drafting Office
39. Office of Engine Manufacturing Department
40. Shops - Unidentified and Wharf
41. Ships boats Construction
42. Probable Small boat Storage and Fitting-out Yard
43. Floating Crane
44. Engine Manufacturing Drafting Office
45. Shops
46. Warehouses
47. Repair Shop
48. Electric Distribution Station #1
49. Office of Fitting-out Shops
50. Fitting-out Shops
51. Forgings - Blacksmith Shops
52. Warehouses
53. Boiler Making Shop
54. Engine Manufacturing Machine Shop
55. 250 Ton Hammerhead Crane
56. Machine Shop #3
57. Naval Stores Department, Shell Magazines, Searchlight Storage, etc.
58. Workers School
59. Lense Manufacturing, Periscope Construction
60. Research Laboratories
61. Yard Hospital
62. Electrical Inspection Shop, Paint Shop
63. Naval Gun Factory
64. Torpedo Factory
65. Reported Submarine Battery Construction
66. Mine Manufacture
67. Yard Offices
68. Scores - Commissary
69. SASEBO Naval Hospital
70. Library and reported Classified Document Depository
71. Officers Quarters
72. Naval Barracks and Parade Ground
73. Officers Club (North of 78 - off photo)
74. Main Air Raid Shelter and Military Command Post (Underground)
75. Naval District Offices
76. Commandants Headquarters
77. Food - Clothing Stores
78. Barracks and Receiving Station Area
79. Base C.P.O's Homes
80. Enlisted Mens Clubhouse Area
81. Post Office (North of 80 - off photo)
82. Naval Construction Battalion
83. Harbor Masters Area and Supply Wharf
84. Ice Plant
85. Gas Works
86. Outpatients Hospital Dependents of Military
87. HOSHU Hospital
88. Fish Market
89. Freight Warehouses
90. Railroad Station
91. Marshalling Yards
92. Navy Guard Force
93. Reported Submarine Base Unit
94. Unidentified Storage
95. Barracks
96. Barracks
97. Torpedo and Mine Shops, Powder Loading Area
98. Underground Storage Area
99. Munitions Manufacturing Plant
100. Revetted Storage Area



SASEBO Inner Harbor and Vicinity.  
Sortie 3PR-5N180-2-2180, 30 April 1945.







## INDUSTRIAL IMPORTANCE

As a whole, SASEBO's industry is concentrated around, and related to, its shipbuilding, ship repair, and naval activity. Production of naval ordnance and small naval reconnaissance planes is on only a secondary scale, but serves to add to the overall importance of the area. The following targets are of significance:

**Name:** SASEBO NAVAL DOCKYARD

**Target No:** 90.36-752

**Coordinates:** 33°10'N., 129°43'E.

**City, Town, Prefecture:** SASEBO, NAGASAKI Prefecture

**Landmarks:**

- (a) Located at the head of SASEBO Inner Harbor at the west end of the city of SASEBO.
- (b) The shipyard occupies the shore along the northwest corner of the harbor between the foot of several hills and the water-front.
- (c) It is marked by two L-shaped docks forming a large ship basin in the form of a letter "C" projecting out from shore.

**Flying Hazards:** Hills with an elevation of 1200 feet one mile inland of the target.

**Production:** Products - Extensive building and repair facilities. Submarines, destroyers, and cruisers are known to have been launched.

**Volume -** As of November 1943, its capacity was estimated to be: one vessel of 40,000 tons, one vessel of 20,000 tons, and two vessels of 3,000 tons or less. Annual tonnage was placed at 30,000. It is indicated that possibly a 40,000-ton battleship was to have been completed before the end of 1943.

**Per cent of Total Output of this Product -** 12% of the known building capacity of JAPAN's Navy Yards. 30% of the total repair capacity of JAPAN's Navy Yards.

**Physical Description:**

The SASEBO NAVAL DOCKYARD is contained in an area 1750 yards long by 500 yards wide, stretching along a concave waterfront at the northwest corner of SASEBO Inner Harbor. It contains the following facilities:

**Drydocks -** Six graving docks of concrete construction with stone facing used for both construction and repair. Their dimensions from west to east:

NUMBER	SIZE	CAPACITY	CRANES
6	475' x 100'	DD	2 small
5	700' x 110'	CA	1 small
4	825' x 125'	BB	2 traveling
2	1050' x 200'	Any Ship	3 traveling
1	400' x 100'	DD	1 medium
3	550' x 100'	CL	1 medium

**Building Ways -** Three building ways, their dimensions from west to east:

NUMBER	SIZE	CAPACITY	CRANES
1	360' x 75'	DD or SS	1
2	570' x 90'	CL or DD	1
3	570' x 90'	CL or DD	2

One large "C"-shaped fitting out Basin, 1830 feet by 1170 feet, enclosing about 49 acres of water with berthing room for 10 to 12 large ships alongside.

**Buildings as follows -** 20 large buildings in excess of 300 feet by 100 feet which include: Pattern shop and Foundry, Sheet Metal Mill, Power Plant, Mold Loft, Machine Shops, Warehouses, etc. About 30 medium buildings in excess of 40 feet by 100 feet which include shops, stores, offices, etc. Approximately 110 small buildings, less than 40 feet by 100 feet, which include shops, stores, maintenance buildings, etc. See annotated photo on SASEBO Inner Harbor and Vicinity for building identifications.

On the basis of photo coverage as of 21 April 1945, the yard was occupied with the construction of submarines and PT boats and repairs of DD's, YMS's, and APD's.



SPECIAL STUDY- SASEBO NAVAL BASE  
CINCPAC-CINCPA BULLETIN 188-45

CONFIDENTIAL  
20 JULY 1945

Name: SASEBO NAVAL ARSENAL AND ENGINEERING DEPARTMENT

Target No: 90.36-758

Coordinates: 33°10'N., 129°42'E.

City, Town, Prefecture: City of SASEBO, NAGASAKI Prefecture

Landmarks: (a) The target is located along the western part of the city on the waterfront, at the head of SASEBO Inner Harbor.  
(b) It is immediately back of a large "C"-shaped boat basin and 1200 yards west of the SASEBO River.

Flying Hazards: Hills rise gradually back of the waterfront.

Production: Products - Integral part of dockyard. Believed equipped to outfit and repair all types of naval craft, produce ship's engines, turbines, boilers, machinery, guns, gun mounts, shell casings, aircraft engines. Reports emphasize mainly repair work. Section labelled as Hydrographic Office reported converted to an arsenal.

Physical Description: The NAVAL ARSENAL AND ENGINEERING DEPARTMENT cannot be separated from the NAVAL DOCKYARD AREA. A large portion of the heavy ordnance and engine works is located on the eastern arm forming the "C"-shaped ship's basin. In this area the following buildings are present: Five large heavy equipment shops in excess of 250 feet by 100 feet; two additional large shop or storage buildings; five medium size buildings in excess of 100 feet by 60 feet, and seven small buildings less than 100 feet by 60 feet in size.

The balance of the target is located in the area inland of the "C"-shaped basin. It includes three large buildings in excess of 300 feet by 150 feet; three medium size buildings in excess of 100 feet by 60 feet, and 43 other buildings less than 100 feet by 60 feet.

See annotated photo on SASEBO Inner Harbor and Vicinity for building identifications.

Name: SASEBO AIRCRAFT FACTORY and SASEBO EAST SEAPLANE STATION

Target No: 90.36-834

Coordinates: 33°09'N., 129°45'E.

City, Town, Prefecture: SASEBO, Prefecture of NAGASAKI

Landmarks: Located at the mouth of HIJ GAWA, three miles southeast of the city of SASEBO and two miles northeast of SASEBO NAVAL AIR STATION.

Flying Hazards: Hills 200 feet high 500 yards from plant. Hills 1800 feet in elevation three miles to the north.

Production: Products - Assembles small naval observation planes and probably does complete repair and overhaul to fleet aircraft. Produces parts and does sub-assembly work.

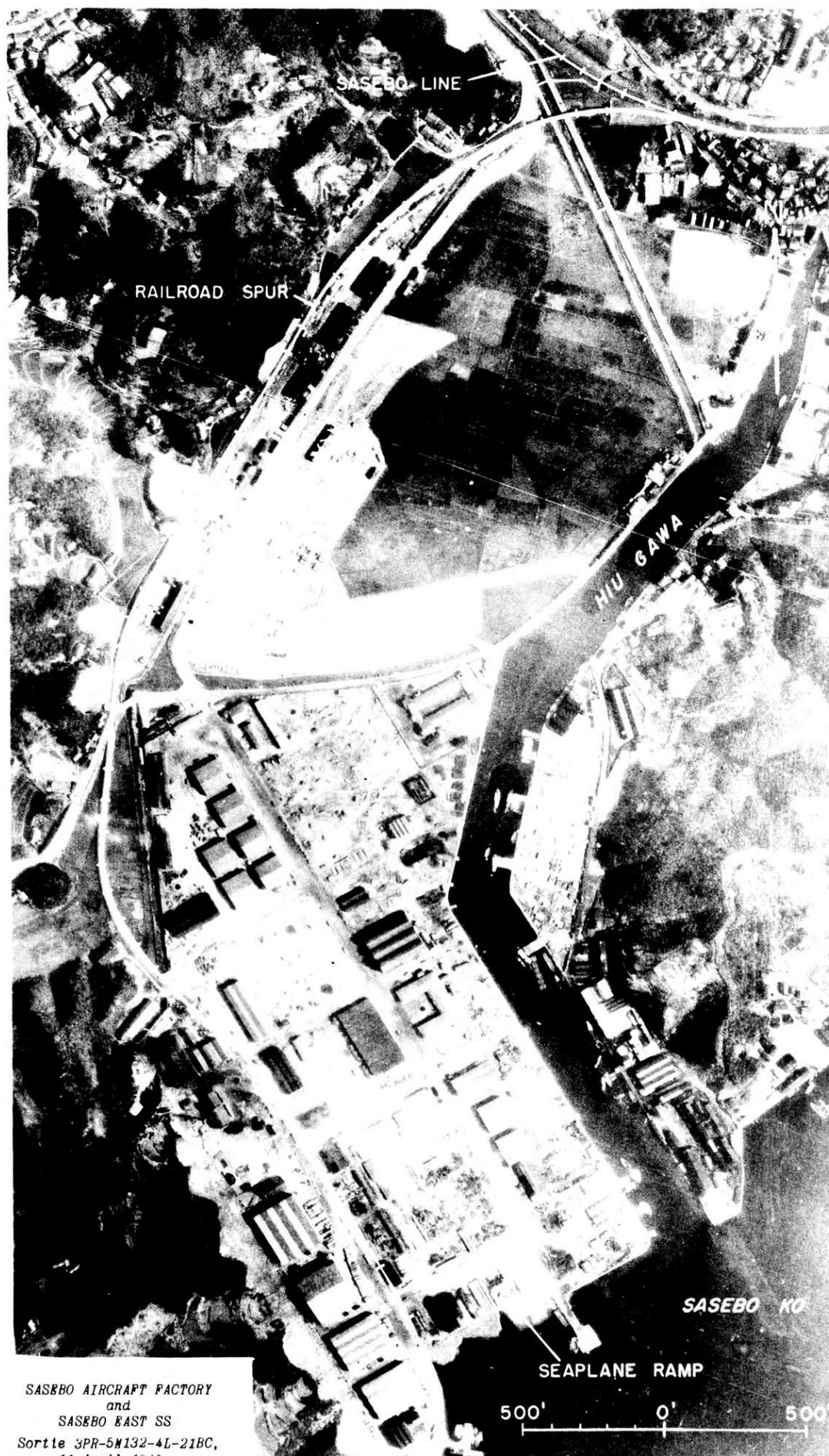
NOTE - Development of storage facilities (plus additional confirmation from POW reports) makes it very probable that this area is functioning primarily as a supply depot, which is in line with the chief function of the SASEBO area, and not as an aircraft plant.

Physical Description: The plant occupies a filled-in area at the west side of the river. It is a medium size target with the following buildings:

NUMBER	DIMENSION	USE
8	90' x 90'	Hangar type
5	165' x 135'	Shops
1	240' x 120'	Shops and storage buildings
1	Large	Administration building
1	120' x 60'	Power plant
1	290' x 135'	Storage building
25 - 30	Small	Miscellaneous

A large area of loose stores is north of the building area. Loose stores are scattered about the shop buildings. Additional storage and shop buildings are northeast across the HIJ GAWA. Several small docks and ramps are along the waterfront. (See photo).

SASEBO EAST SEAPLANE STATION - A seaplane station with small ramps at the south end of the target provides ample beaching facilities. No aircraft have been observed at the target in recent photo coverage. It is believed that the station functions only as an auxiliary area with limited repair and maintenance facilities.



SASEBO AIRCRAFT FACTORY  
and  
SASEBO EAST SS  
Sortie 3PR-5W132-4L-21BC,  
11 April 1945.

Name: KAWATANA FACTORY OF THE SASEBO ARSENAL  
Target No: 90.36-2021  
Coordinates: 33°04'N., 129°52'E.  
City, Town, Prefecture: At KAWATANA on the northern edge of OMURA WAN in NAGASAKI Prefecture.  
Landmarks: (a) The plant is situated on made land extending south into OMURA WAN.  
(b) The KAWATANA GAWA empties into OMURA WAN along the west side of the plant.  
Flying Hazards: Mountainous terrain surrounds the area in all directions except to the south. Approaches from the south are over OMURA WAN.  
Production: Products - Reported manufacturing aerial torpedoes; in particular, Type 91, Modification 3.  
Physical Description: The following building identifications are from POW sources, and are believed to be reliable (see photo):

ANNOTATION NO.

1  
2  
3  
4  
5  
6

BUILDING

Cookhouse, dining hall, etc.  
Electric parts shop  
Torpedo parts shops  
Sub-assembly shops  
Final assembly shops  
Torpedo storage buildings



KAWATANA FACTORY OF THE SASEBO ARSENAL  
Sortie 3PR-5W132-2-21BC, 11 April 1945.

Name: AINOURA STEAM POWER STATION

Target No: 90.36-1603

Coordinates: 33°12'N., 129°39'E.

City, Town, Prefecture: AINOURA, SASEBO area, NAGASAKI Prefecture

Landmarks: (a) On the east shore of SASANO URA, one mile northwest of the town of AINOURA and 250 yards east of a peninsula jutting into the head of the bay.

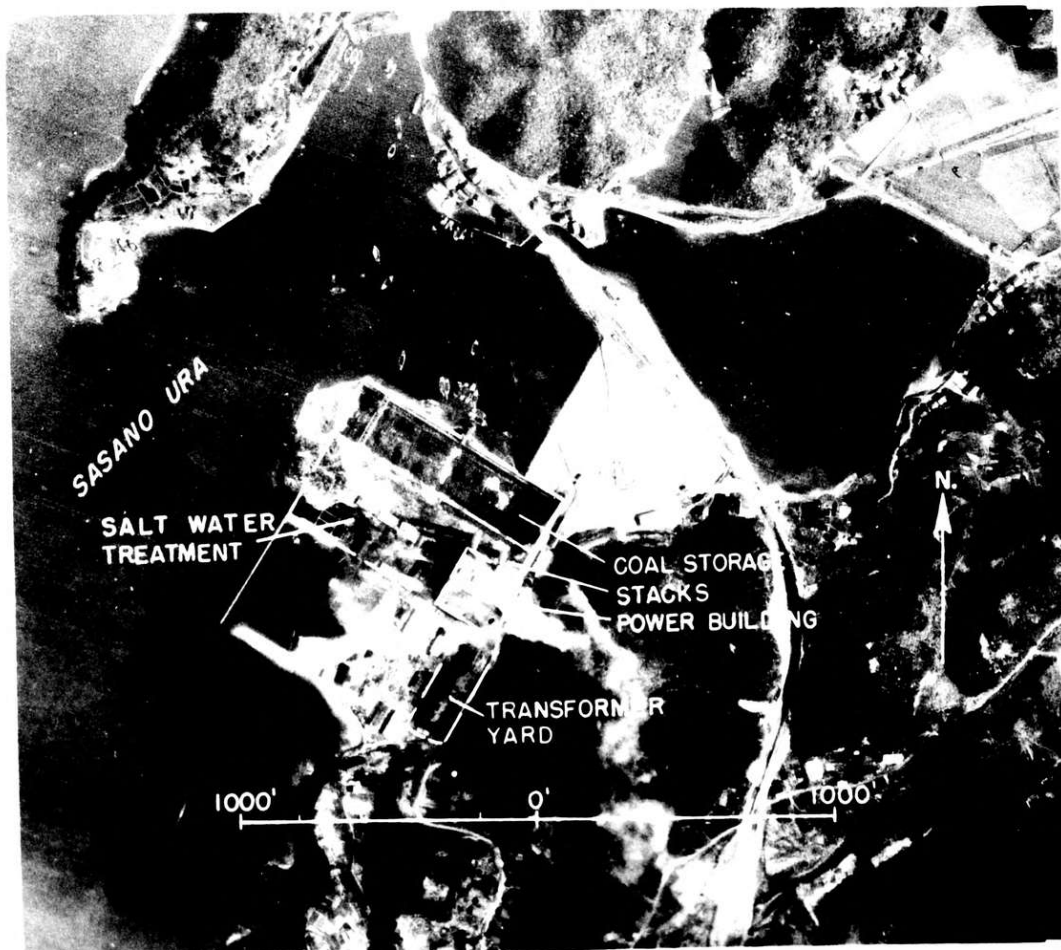
(b) Bounded on three sides, north, west, and south, by water.

Flying Hazards: Low hills 100 feet to 200 feet in elevation surround the power station.

Production: Products - Electricity

Volume - Capacity, 30,000 KW in 1939, reported 50,000 KW in 1940-41. One of five principal stations in West KYUSHU network. Primarily serves SASEBO NAVAL BASE district.

Physical Description: The plant occupies a rectangular area 800 feet by 975 feet. A coal storage area served by a traveling overhead crane 800 feet long and 180 feet wide occupies the northern part of the plant. A square boiler and turbine - generator main building, 180 feet on a side, is located next to the east end of the coal yard and connected to it by an inclined conveyer. Two tall stacks occupy the narrow space between the main building and the coal yard. A transformer yard 330 feet by 60 feet is located in the southeast corner of the plant south of the power building. The central part of the area is occupied by five connected 50-foot by 60-foot buildings which probably contain the water purification apparatus. The southwest corner of the area is water area now being filled in by cinder.



AINOURA STEAM POWER STATION  
Sortie 3PR-54132-41-218C, 11 April 1945.



SPECIAL STUDY- SASEBO NAVAL BASE  
CINCPAC-CINCPMA BULLETIN 188-45

CONFIDENTIAL  
20 JULY 1945

Name: SASEBO OIL STORAGES

Target No: 90.36-755

Coordinates: 33°07'N., 129°42'E.

City, Town, Prefecture: SASEBO Harbor, Prefecture of NAGASAKI

Landmarks: Three storage sites on the west shore of SASEBO Harbor as follows: Two sites on the shore of a small bight two miles southwest of the city of SASEBO and two miles due south of the Navy Yard. One site on a point of land marking the west side of the entrance to SASEBO Harbor and southwest of the Naval Air Station.

Flying Hazards: Hills 520 feet in elevation, rise one mile west of the target.

Use: Fuel storage.

Physical Description: There are three separate fuel storage areas - one tank farm and two underground storage spaces. The tank farm consists of four, possibly five, tanks on the north point of a small bight on the west shore of SASEBO Harbor. These tanks, on the basis of photo coverage as of 30 April 1945, are not in use; two of them are being dismantled. A quay and fuel transfer area having 25 to 30 small buildings extends north along the shore from the tank farm. Around the bight, between the farm and the adjacent fuel site, are a group of partially buried, camouflaged tanks.

Across the bight from the tank farm is an underground storage area extending along the west shore of the harbor south of the tank farm. It is marked by two "T"-shaped bunkering piers.

On the west side of the entrance of SASEBO Harbor is an underground storage area on a small peninsula. The site consists of a rectangular pier and pumping station area having 10 to 12 medium and small size buildings. No tanks are visible, but the surface is marked by a rectangular pattern of trails.

Name: YOKOSE OIL STORAGE

Target No: 90.36-1835

Coordinates: 33°05'N., 129°42'E.

City, Town, Prefecture: Town of YOKOSE, NAGASAKI Prefecture.

Landmarks: Located on the south shore of SASEBO KO, three miles south of the SASEBO SEAPLANE STATION, and 2½ miles east of the entrance to SASEBO KO.

Flying Hazards: Hills rise to an elevation of 1,000 feet one-half mile south of the target.

Use: Fuel storage.

Volume: On the basis of a 50-foot tank height of buried tankage, estimated tankage capacity is 4,500,000 barrels.

Physical Description: Nine circular patches 250 feet in diameter on a hilly peninsula. Patches are sparsely covered with vegetation in contrast to surrounding area. Have the appearance of recently filled-in areas. One square concrete bunkering pier to north of area measures 90 feet on a side. Six other small piers are scattered along the north shore. Area is marked by very prominent pattern of roads and buried pipe lines. For location of this target see mosaic of SASEBO KO and Approaches.

Name: SASEBO FUEL AND MUNITIONS DEPOT

Target No: 90.36-762

Coordinates: 33°09'N., 129°43'E.

City, Town, Prefecture: City of SASEBO, Prefecture of NAGASAKI

Landmarks: Located on the east shore of SASEBO KO, one mile south of the city of SASEBO, and two miles southeast and across the bay from the Navy dockyard.

Flying Hazards: Hills reach an elevation of 1800 feet three miles northeast of the target.

Production: Products - Munitions and fuel storage; torpedoes and mines adjusted and stored here.

NOTE - It has been established that the torpedo and mine depot listed by AOF as Target 90.36-757 is actually located within Target 90.36-762. Thus, 757 is omitted.

Physical Description: Sixteen large and 60 to 70 small buildings along the waterfront of the irregular eastern shore of SASEBO KO. Revetted buildings and underground adits are strung out along the shores of the area.

Concrete quays and shop-type buildings are concentrated at the north end of the area. Concrete blast walls indicate munition loading activities.

The munition storage area lies to the south, where two large underground fuel tanks are also located.

See annotated photo on SASEBO Inner Harbor and Vicinity for area identifications.

## DEFENSES

Defense concentrations for all KYUSHU are shown on the KYUSHU "Defenses and Airfields" map. For defenses of the SASEBO Area, see photo mosaic of "SASEBO KO and Approaches showing Defenses as of 20 June 1945."

# KEY

-  Heavy Anti-aircraft
-  Dual Purpose (Twin Mount)
-  Dual Purpose (Single Mount)
-  Automatic Anti-aircraft
-  Machine Gun
-  Coast Defense (Heavy)
-  Coast Defense (Medium)
-  Automatic Anti-aircraft (Empty)
-  Heavy Anti-aircraft (Empty)
-  Searchlight
-  Fire Control Radar
-  High Frequency Direction Finder
-  Medium Frequency Direction Finder



