

# WORLD WAR II BASE END AND SEARCHLIGHT STATIONS OF SITKA SOUND



HARBOR DEFENSES OF SITKA  
U.S. ARMY COAST ARTILLERY  
SITKA, ALASKA

# AMERICA PLANS FOR WAR

## War Plan Orange

### World War II Summary:

Due to the massive unemployment from the Great Depression, Germans were drawn to Hitler and his promises of a new future, which allowed him to attain great power and rise through the ranks quickly. World War II has been universally accepted to have begun in 1939 when Germany invaded Poland. Hitler's power continued to grow, and it was soon discovered that his goal was to establish global domination, which started with his reign of terror in Europe, and later in other parts of the world. With Hitler's desire to conquer Europe evident, France and the majority of the countries of the British Empire and Commonwealth declared war on Germany.

Japan saw this outbreak of war as an opportunity to expand their power and take over other areas of the world to provide more raw materials for its economy. This led to increased tensions between Japan and China in the early 1930s, which prompted the United States War Department to begin implementation of Plan Orange, the nation's plan for potential war with Japan. Plan Orange recognized the strategic triangle of Alaska, Hawaii, and Panama as America's main line of defense. In 1937, the Navy secured a small appropriation to establish facilities at Sitka for servicing its PBY Catalina aircraft. In 1939, at the urging of the Navy's Hepburn Board and with Brigadier General William Mitchell noting, "I believe in the future he who holds Alaska will hold the world," Congress appropriated funds for the construction of naval bases in Sitka, Dutch Harbor, and Kodiak.

Japan forced the United States to enter the war on the morning of December 7th, 1941. Japanese carrier aircraft attempted to destroy the US Pacific Fleet at anchor in a bold sneak attack in Pearl Harbor, Hawaii. President Franklin Delano Roosevelt called upon Congress to declare war on Japan the next day. America's peacetime army was soon faced with a second threat as Germany followed her ally and declared war on the US.



Bombing attack on Pearl Harbor, Hawaii, (historyplace.com photo)

# *DEFENDING THE COUNTRY: ALASKA'S ROLE AND STRATEGY*

## *Sitka, Kodiak, and Dutch Harbor*



Alaska Fortifications Map (edited) (*World War II in Alaska, A Resource Guide for Teachers*, Alaska Region, National Park Service)

Coast defense, in its broadest sense, includes all measures taken to provide protection against any form of attack at or near a shoreline. Coast defense strategies in Alaska were to establish fortifications at Sitka, Dutch Harbor, and Kodiak, and were designed to reflect the latest military technology. The harbor defense strategy included long-range gun batteries (unit of guns grouped in order to facilitate better battlefield communication and command and control), powerful nighttime searchlights, and complex artillery targeting and fire control devices/base end stations located in concealed defensive units distributed along the coast. The Navy employed civilian contractor Seims Drake Puget Sound to build all three naval bases.

# *ALASKA'S MILITARY BASES*

## **General Strategy:**

In 1937, the Navy's Hepburn Board secured funds to establish a seaplane base for servicing its PBY Catalina airplanes at Sitka. Furthermore, at the Board's recommendation, Congress approved funds on August 29, 1939, for Naval Air Stations at Sitka, Kodiak, and Dutch Harbor. From Sitka, air base planes covered the entire Southeast Alaska coastline and far out into the Gulf of Alaska. The naval establishment at Sitka on the west coast of Baranof Island provided an intermediate base between northwestern United States and Dutch Harbor. An air station on the Island of Kodiak provided both an intermediate location and a strategic point of view.

## *THE SITKA NAVAL OPERATING BASE*

Japonski Island was had been set aside as a naval reservation in the nineteenth century. The Navy had a coaling station on the island in the early 1900s, and in 1937, established the first seaplane base in the Territory of Alaska. Sitka was the first WWII station in Alaska to be constructed, employing civilian contractor Siems Drake Puget Sound. Construction of the base was completed using the naval reservation on Japonski Island, across the channel from Sitka. On March 28th, 1942, President Roosevelt signed Executive Order No. 9114 to withdraw certain public lands in Sitka Sound for their use by the War Department. The

Japonski Island varies in name as Japanese Island, Japonski, Ostrov Yaponskoy, and Yaponskoi Island. It is a Russian name meaning 'Japanese Island' given in 1809 by navigator Ivan Vasiliev first published in 1826 by Lieutenant Sarichev. This name was given because there were some shipwrecked Japanese sailors living there at the time. The Coast Pilot of 1883 has this: "Named by the Russians from the residence here of some Japanese sailors who were rescued from the storm-drifted hulk of a Japanese junk cast on these shores in 1805."



Sitka Naval Operating Base during WWII  
(www.kodiak.org photo)

withdrawal of lands in Sitka from public and civilian ownership were for 30 projects to be constructed in the Sitka area, at a cost of approximately \$3,000,000. The contract was later enlarged to cover 155 projects, and in July 1942, the total cost of work in the Sitka area was estimated at \$32,000,000. Designated as a naval air station on September 12, 1939, Sitka was made a naval section base on January 24, 1941, and redesigned on July 20, 1942, as a naval operating base. The operating base was composed of the naval air station, radio station, naval section base, Marine barracks, and subordinate naval shore activity sites such as a bowling alley and movie theatre.

## *Kodiak Naval Operating Base*

Located on the northeast shores of Kodiak Island, the Kodiak Naval Operating base provided a strategic location between Sitka and Dutch Harbor. Kodiak's Base included Forts Greely and Abercrombie. Built in 1942, Greely's Harbor Defense Command Post was situated high on Artillery Hill and built 120 feet from the edge of the cliff. It was a fully concealed structure buried into the hillside with no windows or exposed faces, but allowed for unobstructed views of the naval base perched on a sea cliff 50 feet away. This command post served as the headquarters for the Eleventh Air Force and Alaska Defense Command.



Naval Base at Kodiak , WWII  
([www.history.army.mil](http://www.history.army.mil) photo)

## *Dutch Harbor Naval Operating Base, defending Alaska's Aleutian Chain*



Dutch Harbor battle damage, 1942  
([www.militaryhistoryonline.com](http://www.militaryhistoryonline.com) photo)

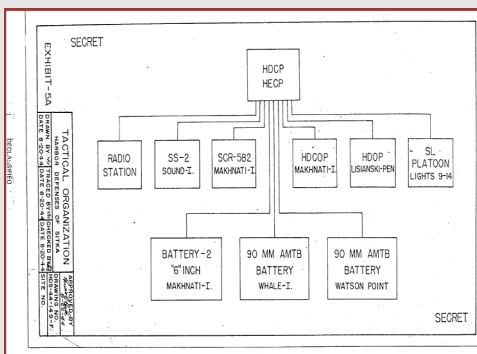
Dutch Harbor, located on the Aleutian Chain of Alaska, was considered vital to Japanese operations in the northern Pacific due to its deep-water port. The Base also played a central role in the Battle for Attu, one of the bloodiest of the Pacific war. Six months after the U.S. entered the war, June 1942, the Japanese landed on Attu and Kiska. Strategically, they established an airbase and proceeded to bomb Dutch Harbor on Amaknak Island on June 3rd and 4th, 1942, seeking to destroy U.S. Army and Navy operations. In an effort to recapture Attu and Kiska, the United States established airfields on Adak and Amchitka Islands in August of 1942. On May 23, 1943, U.S. troops

landed on Attu and began a campaign of bombardment. Although the Japanese held strong, after two weeks of battle with heavy casualties, the Japanese were backed into a small harbor. Unwilling to surrender, a 19-day battle of hand-to-hand combat with ensued. Although the U.S. casualties numbered 549, nearly all Japanese soldiers were killed (2,850) and 29 were taken prisoner. On August 15, 1943, a powerful Allied amphibious force assaulted the island of Kiska where the Japanese had established their largest base. The Allies found that the Japanese had secretly evacuated the island under cover of heavy summer fog. Kiska was then declared secure. Although interest in the Alaskan theater waned, it marked the Allies' first theater-wide victory in World War II, and ended Japan's only campaign in the western hemisphere.

# HARBOR DEFENSES OF SITKA

## Seacoast Armament

Once construction of the Sitka Naval Air Station was underway, planning began for the Army protective garrison facilities. The mission of the harbor defense was to “deny enemy naval vessels access to Sitka Harbor entrances to the distance of 25,000 yards from the naval air station, and the destruction of such hostile vessels as may enter these waters, and to assist in the local protection of all military, naval, and other vital installations in the vicinity of Sitka against all forms of enemy attack during day and night.” Four forts in the area of Sitka Sound were established to fulfill the mission by an intricate system of coordination.



Organizational Chart (Supplement to *The Harbor Defenses Project Harbor Defenses of Sitka, 1944*)

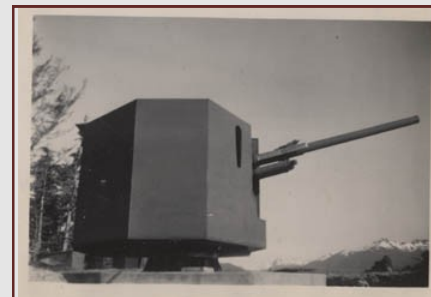


WWII Forts in Sitka Sound

## FORT RAY

To protect the Naval Air Station, the U.S. Army established Fort Ray. The fort consisted of military installations on Alice and Charcoal Islands, on islands throughout Sitka Sound, and north and south of Sitka on Baranof Island. Although never completed, Fort Ray became the second-largest harbor defense system in Alaska. Charcoal and Alice Islands, which adjoined the main Navy facilities to the south, became the site of Army administration, housing, and hospital facilities. This garrison could accommodate 2,988 enlisted men and 194 officers. Buildings for housing totaled 136, half of them semi-permanent, and the remainder, temporary.

By May of 1942, the coast defense construction program had in place several gun installations on islands throughout the Sound. This included an Anti-MT-Boat (AMTB) battery at Watson Point and four 90mm gun emplacements (two fixed and two mobile) installed on Whale Island. Soldiers housed at Camp Aberdeen manned Watson Point and a state-of-the-art side-scanning radar facility located on Harbor Mountain.



90mm gun at Watson Point  
(Sitka Historical Society photo)

## FORT ROUSSEAU

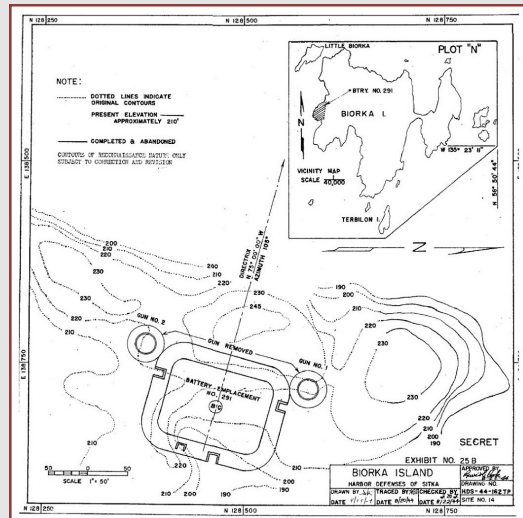


Fort Rousseau, Battery 292 Emplacement  
(Sitka Historical Society photo)

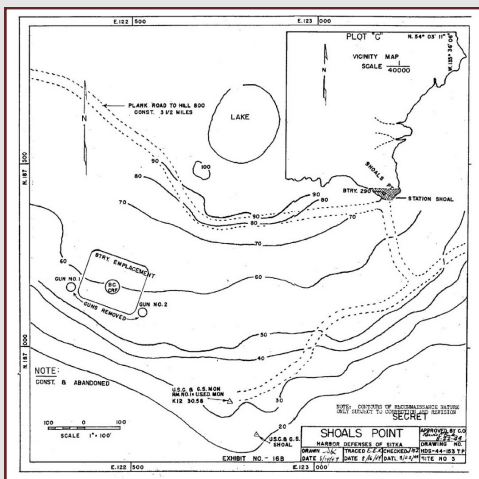
During the construction of Fort Ray, Commanding Army General Dewitt recommended Makhnati Island be connected to Japonski Island by means of a causeway. In 1943, Makhnati and the adjoining causeway named Fort Rousseau and declared the Harbor Defense Command Post (HDCP) and Harbor Entrance Control Post (HECP). Makhnati Island was the location of Battery 292 (Tactical Number 2) which included four 155 GPF guns (Grande Puissance Filloux, originally guns of French design and copied by the U.S. military, and used until WWII) placed on Panama Mounts, which were later removed. A Harbor Defense Command Observation Post was built on a timber tower and a SCR-582 surveillance radar was mounted on the top floor and roof.

## FORT PEIRCE

Constructed in 1943, Fort Peirce was located 18 miles southwest of Sitka on Biorka Island. This fort housed Battery 291 (Tactical Number 3) consisting of two fixed 6-inch M1903A2 guns on a barbette carriage with a magazine positioned between the guns. The Fort was completed to 98% including the gun batteries, seacoast radar facilities, searchlight tower, lookout tower, power plant, water tank, 16 Quonset huts, a mess and recreation halls, administration, cold storage, infirmary, and latrine buildings.



Biorka Island Plans Supplement to The Harbor  
Defenses Project Harbor Defenses of Sitka, 1944



Shoals Point Plans Supplement to The  
Harbor Defenses Project Harbor  
Defenses of Sitka, 1944

## FORT BABCOCK

Kruzof Island, located 12 miles west of Sitka, was the site of Fort Babcock and Battery 290 (Tactical Number 1). This fort had two 6-inch M1903A2 guns with a range of 27,150 yards. Before construction was halted in 1944 and abandoned in 1945, 19 Quonset huts, and wood-frame buildings utilized for troop quarters, administration, supply/equipment storage, maintenance shop and a power plant were built. A 7,500 square-foot concrete bunker served as the magazine. The fort included a fire control/base end station, observation tower, water tank, above-ground fuel storage tanks, and a 220 by 40-foot dock at Shoals Point comprised this fort.

# BASE END STATIONS

## Targeting Big Guns

During World War II fire control stations were built for weapons under construction to protect the harbor. Base end stations were assigned to particular batteries of guns or mine fields in a harbor defense system. In some U.S. harbors during the war, there were 20 or more base end stations, often from 10,000 to 15,000 yards apart, and tied together by telephone lines running through switchboards. These stations could be used in different combinations by different gun batteries as ships moved through the area, or in case a given station was damaged by enemy action.

These structures are technically known as base end stations but sometimes called fire control stations, observation stations or fire control bunkers. As some stations were located in tall fire control towers, the terms "base end station" and "fire control tower" were also used interchangeably.

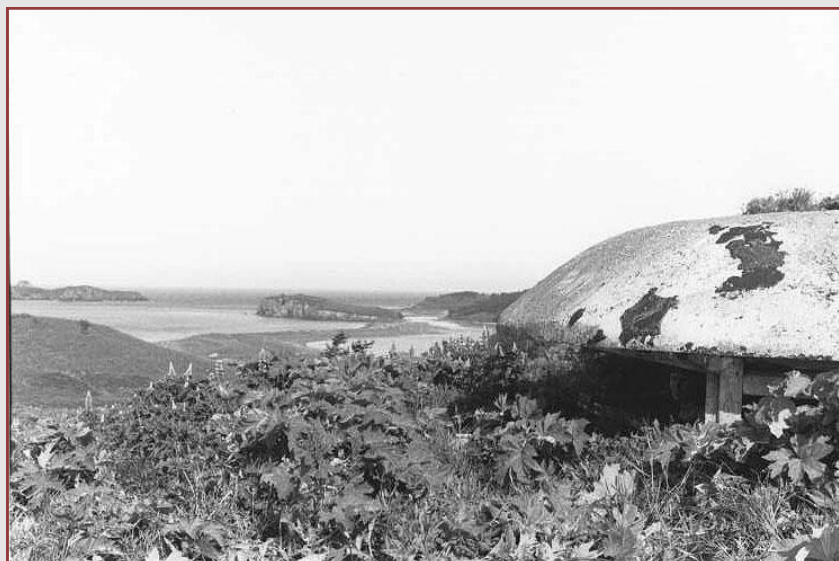
In general, a fire control tower was built to raise one or more base end, spotting, or observation station high above the ground. Some fire control towers contained several base end stations, one on top of another on different stories of the tower with each station being at one end of a different baseline. They were primarily assigned to a different gun battery in a harbor's defensive scheme. Other base end stations resembled pillboxes, small bunkers dug into the ground or on the surface overlooking coastal waters. Still others were camouflaged to

### BASE LINE DATA

Base Line		Azimuth	Length
From Station	To Station	Degrees	Yards
$B_1^1$	$B_1^2$	299°533	8,901.08
$B_1^1$	$B_1^3$	261°277	14,109.74
$B_1^2$	$B_1^3$	223°536	9,004.01
$B_1^1$	$BC_1$	275°958	12,767.72
$BC_1$	$B_1^2$	58°279	5,824.19

Base Line Data used in Sitka Sound (*Supplement to the Harbor Defense Project, Harbor Defenses of Sitka*, National Archives Record Group 407, 1934-37).





Distant Electronic Control Station for Searchlight No.8, Bald Hill, Kodiak, 1999 (kadiak.org photo)

resemble seaside homes or cottages. Some base end stations had anti-aircraft observation positions on their top level or harbor observation radar antennas on platforms above their roofs.

Base end stations contained various optical instruments for making observations a target. The standard issue for Coast Artillery was the Model 1910A1 azimuth telescope, which was used to determine horizontal angles of the azimuth to the target from the base end station. A second and much more complex instrument was the depression position finder (DPF). The DPF was used to determine the vertical azimuth of the target from the base end station. Azimuth telescopes were mounted on concrete columns, while depression position finders were mounted on large eight-sided concrete bases.



Base end station with a depression position finder scope (courtesy of John Martini, <http://cdsg.org/old/>)

In Sitka, all base end, fire control, signal and searchlight stations, and the gun emplacements were assigned a datum point based upon a grid coordinate system. For example, B2S2 datum point represented the base end and searchlight station at Kayak Island and B1B1 represented Little Biorka.

**B** ← Number represents datum point of a Station  
**1** ← Number represents Battery it serves (Tactical Battery No. 1 is Battery No. 290 at Shoals Point)

# SEARCHLIGHTS IN SEACOAST DEFENSES

## *An Instrument of Defense*

### **History of the Searchlight:**

The concept of illuminating a harbor area is as old as fire. This approach of illumination during the night was improved by the development of the electric light. As soon as electric generators became available, the U.S. Army began experimenting with electric arc lights as a way of illuminating harbor approaches. Over the years, mobile searchlights became more reliable, durable, and rugged. By the late 1930s, the Coast Artillery switched to mobile searchlights, and replaced fixed searchlights where possible. During World War II, the U.S. seacoast defenses used mostly mobile searchlights to track and defend against enemy vessels and aircraft.

Seacoast artillery searchlights were a surveillance aid for Coast Artillery batteries and associated beach defense detachments. Searchlights were used to:

1. Search water areas: (searching lights).
2. Illuminate hostile naval vessels (illuminating lights).
3. Place a barrier beam across a channel or other confined approach to a defended area (barrier lights). Illuminate or search beaches.

### **Operation:**

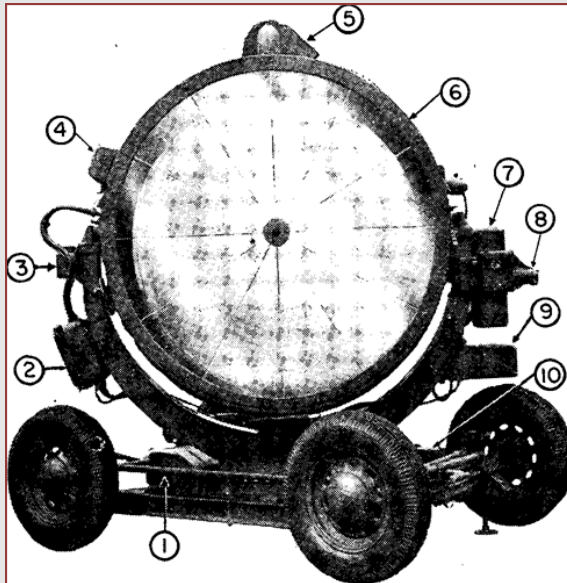
Usually built in pairs, searchlights ensure a greater range of coverage or in case one light is out of action. A searchlight's directional position was determined as to when each light will be put in action, who will control it, and the general nature of employment, including the decision as to whether it was to be used as a barrier, searching, or illuminating light, and the particular water area or ship formation to be covered. The searchlight set included the 60-inch mobile searchlights, the distant electric control station, the extended hand controller, the power plant, and



East Coast of U.S. Military Crew  
(*ACME News Photo, Jan. 6, 1943,*  
[www.skylighters.org](http://www.skylighters.org))



1941 Model Sperry Searchlight in use at  
Fort McArthur  
(*Fort McArthur Museum photo*)



1. Azimuth drive housing
2. Arc switch box
3. Meter box
4. Lamp operating mechanism box
5. Blower hood
6. Drum
7. Elevation drive housing
8. Extended hand controller socket
9. Elevation amplifier housing
10. Azimuth motor amplidyne generator

Sperry Searchlight, *Service of Seacoast Searchlight, War Department Field Manual 4-29*, August, 1945

interconnecting cables. In general, each seacoast searchlight was operated by a squad comprising of a light commander, a control station operator, a power plant operator, and a searchlight operator.

A telephone/radio system was used by both the Harbor Defense Command Post and the mobile unit for communication. It was of utmost importance for the searchlight officer to have an uninterrupted view of the water area covered by searchlights under his control.

Most searchlights operated from a nearby Distance Electronic Control System (DEC). The DEC system allowed the light to be controlled from a distant location. The DEC is a stand-alone station connected to the light by a cable which allowed the operator to look through a set of binoculars to acquire the target. Then the operator could track the target without being blinded by the light. Having a remote control for the lights also gave the operator some protection as the lights would be a prime target for any invading force.

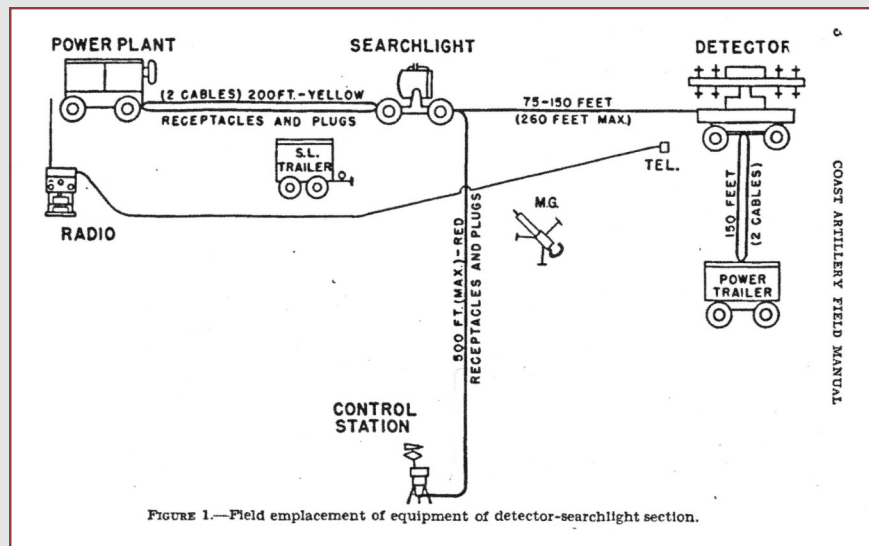


FIGURE 1.—Field emplacement of equipment of detector-searchlight section.

Illustration from the War Department issued *Coast Artillery Field Manual: Operation of Material and Employment of Personnel Searchlight Units* December 9, 1942

# BATTERY "G", 250TH COAST ARTILLERY

## *Guardsmen Defending Alaska's Coast*

To restore law and order during the 1849 California Gold Rush, the First Infantry Regiment, California Militia, was established on May 18, 1861. It was redesigned as the California National Guard in 1866, and in 1909 it reconstituted as the "First Coast Defense Command" with its units being taken from various Infantry, Field Artillery and Coast Artillery organizations. On August 5, 1917, the Regiment completed its training at Fort Winfield Scott at San Francisco, then units of the California National Guard Coast Artillery were reorganized as three Coast Artillery regiments that are still in existence today.

During the years after World War I, the regiment was organized as a Coast Artillery Harbor Defense Regiment. On October 6, 1923, it was formed into a mobile, tractor-drawn organization and redesignated as the 250th Coast Artillery and equipped with 155mm guns. The Regiment was inducted into service on September 16, 1940, in San Francisco, and on the 23<sup>rd</sup>, moved to Camp McQuaide located in the Santa Cruz Valley of California. On September 19, 1941, the regiment was assigned to Alaska, and the men were dispersed to Harbor Defense units in Kodiak, Dutch Harbor, and Sitka.

HEADQUARTERS 250TH COAST ARTILLERY (155--GUN)  
OFFICE OF THE REGIMENTAL COMMANDER  
CAMP McQUAIDE, CALIFORNIA

March 24, 1941.

### CRESTINGS

Soldiers of the 250th Coast Artillery, model 1941, whose pictures and names adorn the pages of this book, you have the example of the heroes of the past who have made the supreme sacrifice under its Standards - an ever-present stimulu to so conduct yourselves as to be worthy of your noble heritage.

As in the past, so in the future, new weapons, new situations, new dangers, will be but new opportunities for you of the present-day organization to add to her laurels.

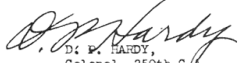
The regiment is now ready for front line service, equipped and trained for combat. Undoubtedly, a number of our units will soon be ordered away from Camp McQuaide for such duty.

Let us firmly resolve to apply ourselves in our everyday duties and training that we shall show the way in National Defense! I know that every one of you is exceedingly proud, as I am, of the 250th Coast Artillery, and that your pride will grow with its increasing importance as a front line defender of our nation.

To the other officers and men of Camp McQuaide, my warmest thanks and appreciation for your assistance. Without it, we could not have come so far along the road. Together, we shall make even greater advances.

To all of you, the best of luck and every success.

Sincerely yours,

  
D. P. HARDY,  
Colonel, 250th C.A.,  
Commanding.

During World War II, the Coast Artillery Corps was stationed along the American coastlines and at outposts of U.S. foreign territories. Coast Artillery installations were mostly harbor defenses manning fortified gun emplacement.

In Sitka, several batteries of the 250th Coast Artillery were part of the Sitka Harbor Defenses and served to protect the Sitka Naval Air Station. These batteries manned fire control/base end and searchlight stations around Sitka Sound.

Letter from Commanding Officer Colonel D.P. Hardy noting "Ready for War"

### Corporal Walter Dangel

Walter Dangel served in the National Guard Coastal Artillery of California unit before coming to Sitka in June, 1941. He arrived alongside the rest of the Battery "G" of the 250th Coast Artillery to construct the harbor defense system. After several years in the National Guard Coast Artillery, Dangel was inducted into the US Army. Corporal Dangel built and operated the searchlights in Sitka, including Searchlight No. 10 at Lisianski Peninsula. In 1941, he transferred to Kodiak Island to build similar installations.

Corporal Dangel married in Kodiak to a Sitka woman named Margaret, who followed her husband to Oklahoma, where he retrained as part of a Field Artillery unit. They spent nine months together until Dangel went to Germany as a radio operator in the Field Artillery headquarters Battery 535 F.A. BTTN (8-inch howitzer), which he served in until the end of the war. After the war, he made his way back to Sitka, which the Dangels have called home since.



*"I was in Sitka June to October 1941. Smaller units were in Seward and Anchorage. We were all returned to the U.S. for retraining the Summer of 1944 and trained for Field Artillery. Three Battalions were formed from the Regiment, which was oversized: the 529th, 534th, and the 535th Field Artillery Battalions. We were armed with 8" Howitzers.*

*The 535th was sent to Germany and saw action during the battle of the Rose Pocket, [Ruhr] I was in the 535th as a radio operator in the Headquarters Battery. The other two Battalions went to Italy.*

Corporal Walter Dangel, Sitka  
*Sitka at War* (Community Schools, Volume II, 1994)



Corporal Walter Dangel manning a Harbor Defenses Searchlight (Dangel photo)



250th Coast Artillery Regiment  
California National Guard Insignia  
(approved in 1925)

# WAR COMES TO SITKA

*“Sitka was a quiet town.”*

As a result of the war, thousands of men and women moved to the sparsely populated territory of Alaska, and many stayed. In 1940, just over 72,000 people called Alaska home. By 1950, the population nearly doubled to 129,000.

Sitka in 1932 (The Photo Shop, Alaska Library and Historical Collection)



Sitka in 1948 (The Photo Shop, Alaska Library and Historical Collection)

The population of Sitka was about 2,000 before the war, but soon swelled to 8,000 with the influx of soldiers, civilians, and contractors. Sitka's Elders recall military personnel walking the streets and others tell of running to the forest with fear of an enemy invasion, only to discover it was a false alarm.

Several of the wartime infrastructure construction efforts in Sitka can be seen today. Many, such as Halibut Point Road, are still in use.

Halibut Point Road under construction circa 1940 (Alaska Library and Historical Collection)





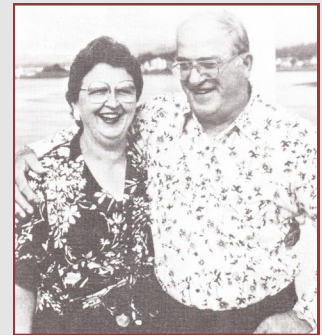
*“The military impacted every Sitkan’s life. The people who lived out Halibut Point Road had to sell their land so the military would have more lookouts. After the war, they had a chance to buy their land back.”*

Florence Donnelly, Sitka  
*Sitka at War* (Community Schools, Volume II, 1994)

*“I remember as a child, when we lived on Biorka Island and we always considered it our home. My dad did a lot of his hunting for seal, and trapped for minks up there, and did some hunting for deer, and we just made our home up there. During summer when school was out, we had a wonderful time there. So we were all a little bit disappointed when the war came along. We were naturally scared. Our dad was put in a position to think about turning Biorka Island over for the war effort. He didn’t have too much time to think about it, but he realized we needed the protection against our enemies. That’s all I can think of to say. Thank you”.*

Rachel Kasakan, Sitka

Lewis Burkhart was a 21-year old Sitkan when Pearl Harbor was bombed. Shortly thereafter, he was inducted into the Army and relocated to the Chilkoot Barracks near Haines. His wife Shirley Burkhart moved to Sitka with her family in 1939. She recalls the day an ammunition bunker blew up at Japonski Island. She notes, “the explosion was so big it caused a fire truck to explode which killed several people.”



Shirley and Lewis Burkhart  
*Sitka at War* (Community Schools, Volume II, 1994)



Joe Ashby with Lt. Commander Whitlock  
at Fred’s Creek, Kruzof Island  
*Sitka at War* (Community Schools,  
Volume II, 1994)

Joe Ashby came to Sitka on a Naval ship during WWII. Upon his return to make Sitka his home in 1945, he recalls,

*“There were only a hundred or so servicemen left at the Japonski Island Air Station instead of the several thousand there were in the early 1940s. They had all moved out to the far Pacific to drive out the Japanese.”*

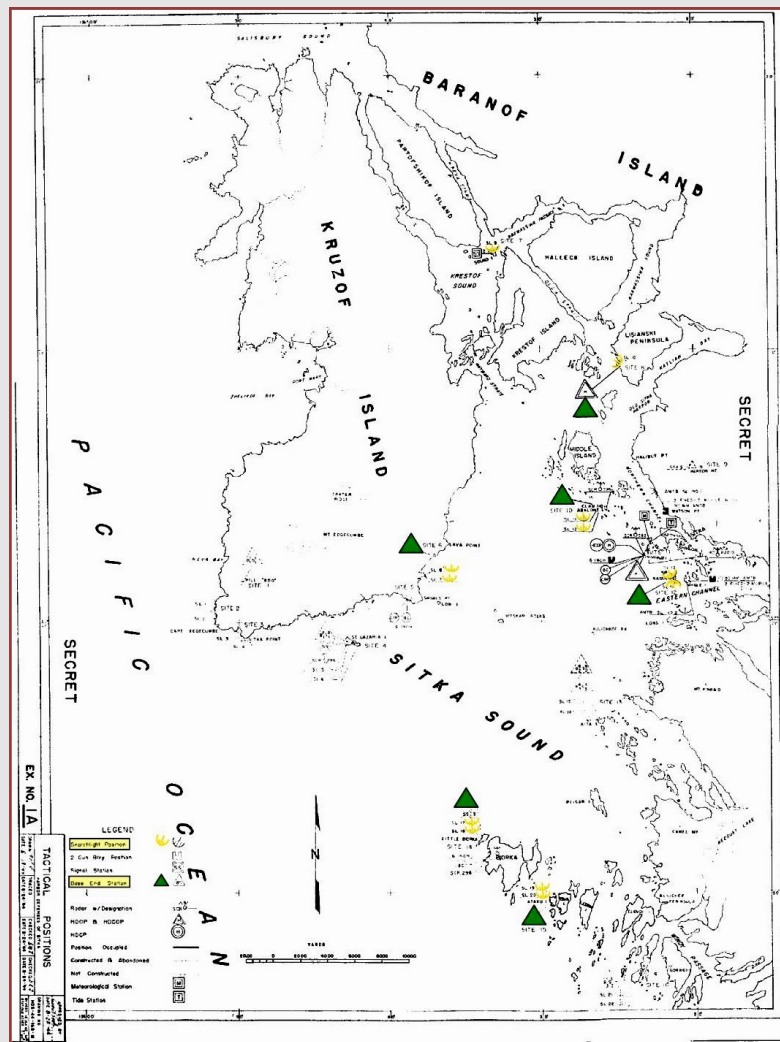
# BASE END STATIONS AND SEARCHLIGHT POSITIONS OF SITKA SOUND

## Hidden Defenses

### Base End Stations in Sitka:

The base end stations and searchlights were constructed to support the three batteries located around Sitka Sound. Batteries were strategically placed to overlap their fields of fire to protect the Sound and the Sitka Naval Air Station.

Terrain was the chief factor in determining the nature and extent of the base end stations for harbor defense. Numerous small, heavily wooded islands, of low elevation were necessary in the establishment of the base end stations in order to secure proper observation of the required fields of fire. When the angle of intersection at the target was less than 15 degrees, it was then necessary to establish one additional base end station for Battery No. 290 at Shoals Point on Kruzof Island in order to avoid plotting inaccuracy. There were six completed base end stations serving Sitka Sound, all located adjacent to searchlights. They were at Lisianski Peninsula, Lava Point, Clam Island, Kayak Island, Little Biorka Island, and Ataku Island.



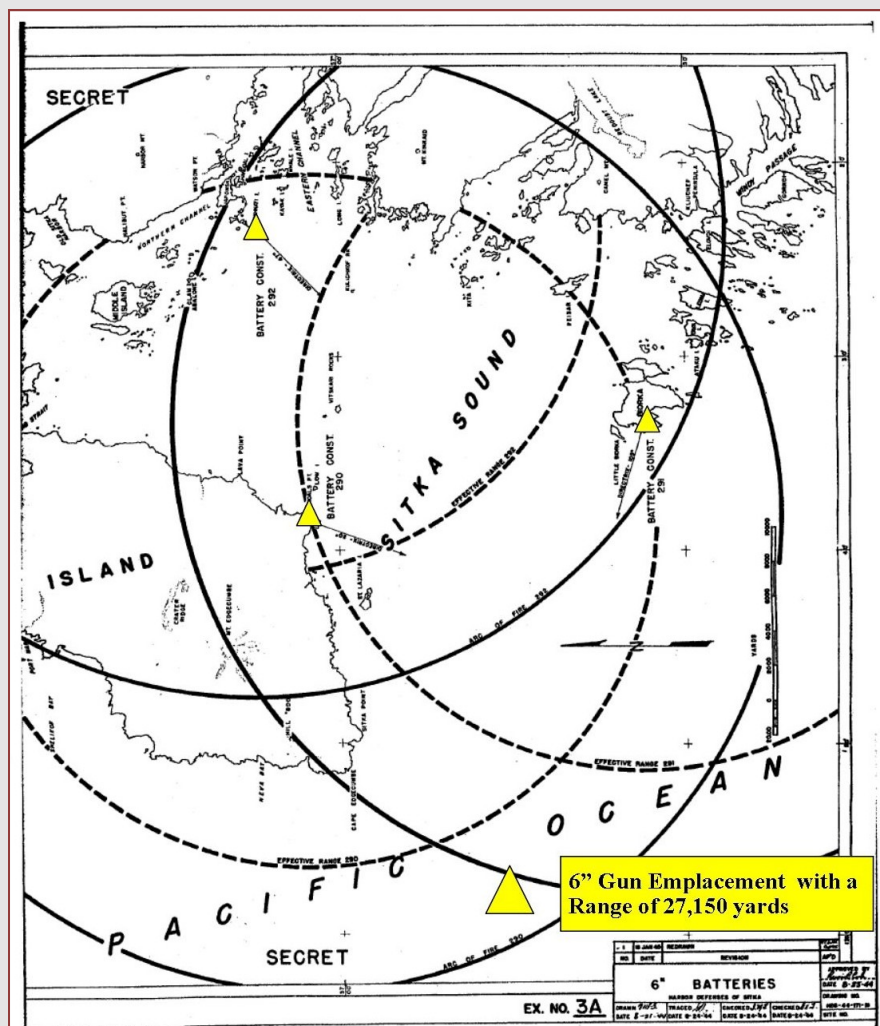
Tactical Positions (Supplement to the Harbor Defense Project, Harbor Defenses of Sitka, National Archives Record Group 407, 1934-37).



### Searchlights in Sitka Sound:

Searchlight locations were chosen for the most effective illumination of naval targets to assist base end stations. Lights had to be located upwards of 40 feet above the tide line to prevent errors due to earth's curvature. According to military manuals, 60 feet was ideal. Searchlights around Sitka Sound were located with the base end stations at: Lisianski Peninsula, Shoals/Lava Point, Sound Island, Clam Island, Kayak Island, Little Biorka Island, and Ataku Island.

Provisions were made at the Harbor Defense Command Post (HDCP) to act as the central control of searchlights. In Sitka Sound, HDCP was located on Makhnati Island at Fort Rousseau. To offer a view of the northern entrance to Sitka Sound and its Western Channel, a Harbor Defense Observation Post was located strategically at Lisianski Peninsula.



Battery Ranges (Supplement to the Harbor Defense Project, Harbor Defenses of Sitka, National Archives Record Group 407, 1934-37).



# REMAINS AT LISIANSKI IN 2014



Searchlight Shelter on Lisianski Peninsula



Concrete foundation for power plant shelter



Close-up of concrete poured with local aggregate

Metal ladder up searchlight bunker



Cam shaft housing resting on beach, likely to the power plant generator



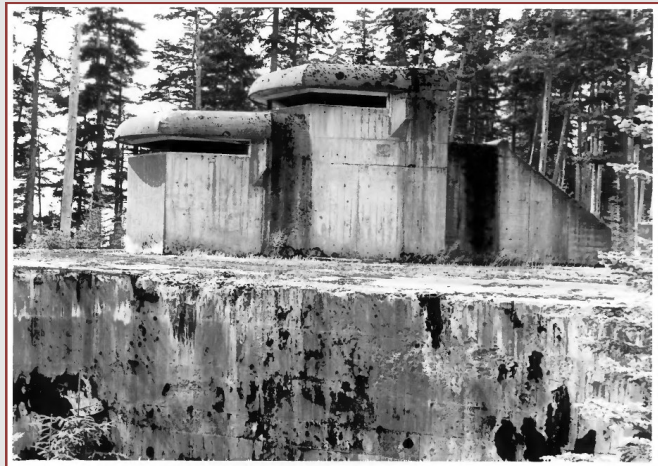
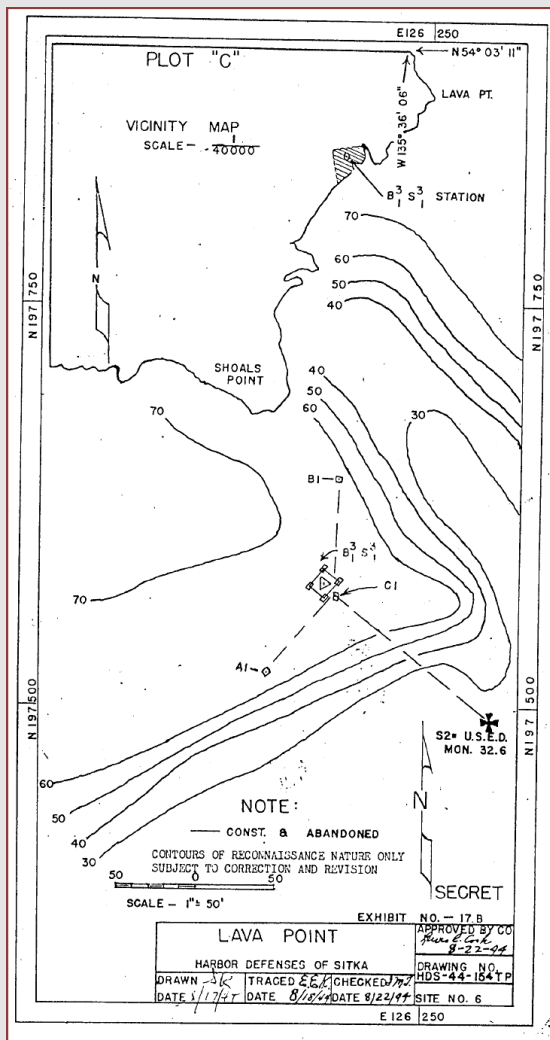
Post for DEC tower



Shower tile from living quarters

# SHOALS AND LAVA POINT, KRUZOF ISLAND

## Base End Station B3 S3 & Searchlight Nos. 7 & 8



BC/CFR station on top of magazine for Battery 290  
(Alaska Heritage Resources Survey Photo, AKDNR).

Battery 290 (Fort Babcock) was noted in military records to have been 88 percent completed and its coordinating base end station on Lava Point was completed to 90 percent by the war's end. All but the wiring at this base end station was completed. Searchlights Nos. 7 and 8 were constructed between Shoals Point and Lava Point and unlike other searchlights housed in splinter-proof concrete bunkers, these lights on Kruzof were wood frame construction. Each light had an accompanying wood-framed power plant.

A 50-foot timber tower was built as an observation fortification for the double distant electric control station. This one splinter-proof concrete shelter served both searchlights and had a 250° view.

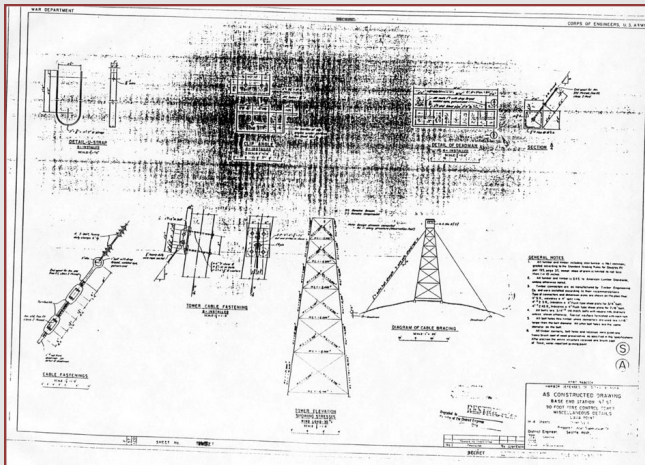
Topographic Map of Lava Point Station  
(Supplement to the Harbor Defense Project,  
Harbor Defenses of Sitka, National Archives  
Record Group 407, 1934-37).

Construction of Searchlight No.1 and No.2 at West Point with a base end station at Hill 800 was planned with a wood plank access road. Only 3 out of 8 miles of road were constructed before it was abandoned near the end of the war.

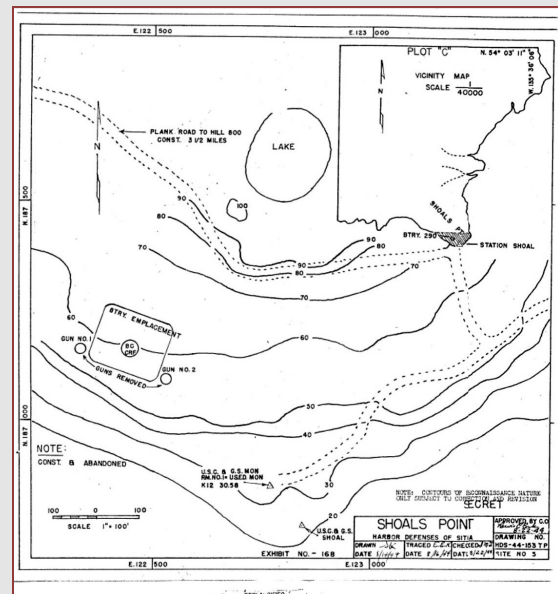
Kruzof Island provided an excellent strategic locale due to its “sheltering” effect. Consequently several buildings were constructed around its perimeter. Military records note that 15 men were stationed at Shoals Point to man the Battery. There were four 20mm gun emplacements at Shoals Point.



Quonset Hut at Fort Babcock, 1942 (Photo courtesy of Corporal Ted Gutches, 266th Coast Artillery).



Plans for Observation Tower at Lava Point ((*Supplement to the Harbor Defense Project , Harbor Defenses of Sitka, National Archives Record Group 407, 1934-37*).



Topographic Map of Battery 290 at Shoals Point (*Supplement to the Harbor Defense Project , Harbor Defenses of Sitka, National Archives Record Group 407, 1934-37*).



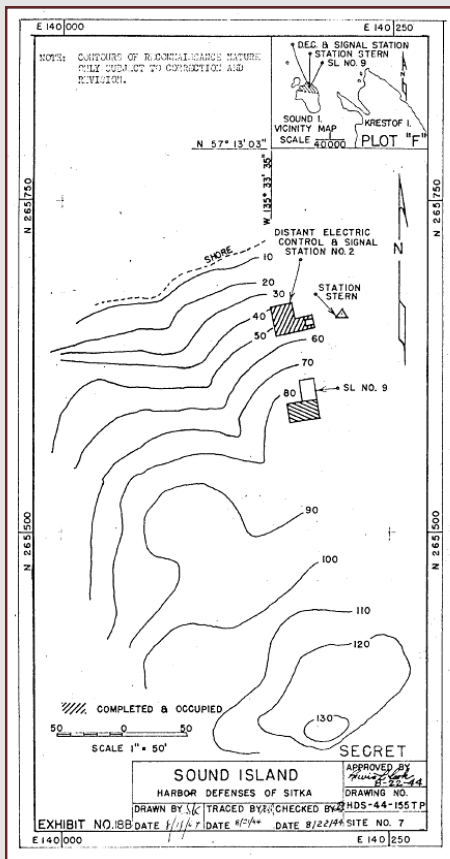
View from 20mm Gun Emplacement, at Shoals Point, 2012 (Slayer, U.S. Army Corps of Engineers).

# SOUND ISLAND

## Searchlight No. 9

### SOUND ISLAND

Located at the entrance to Neva Strait, Sound Island was the site of a splinter-proof concrete bunkers housing mobile searchlight number 9 with an interior dimension of 12 feet 6 inches by 21 feet. It was a Sperry Gyroscope 60 inch high intensity light positioned in a mobile carriage. The light was powered by a Westinghouse 93 SK Special generator. Sound Island was also the site of Signal Station No. 2 with where the Distance Electric Control station.



Distant Electric Control (DEC) station, Sound Island



Inside DEC, Sound Island

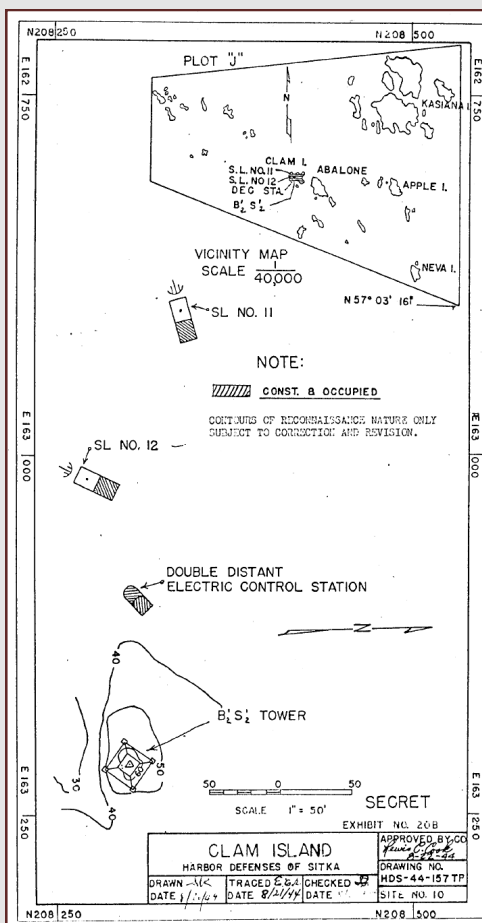
Topographic Map of Sound Island Station (Supplement to the Harbor Defense Project, Harbor Defenses of Sitka, National Archives Record Group 407, 1934-37).

# CLAM ISLAND

## Base End Station B1 S1 & Searchlight Nos. 11 & 12

### CLAM ISLAND

Clam Island was the site of two separate splinter-proof concrete bunkers that housed mobile searchlights No. 11 and No. 12, each measuring 12 feet 6 inches by 10 feet. Both searchlights were Sperry Gyroscope 60 inch high intensity lights. One 15 by 17-foot wood-framed Westinghouse 93 SK special power plant structure served both searchlights. For both lights, a double distant electronic control station was installed and had a 252° view. This control station measured 10 feet 2 inches by 9 feet, had three rooms, and was a splinter-proof concrete bunker.



Topographic Map of Clam Island Station  
(Supplement to the Harbor Defense Project,  
Harbor Defenses of Sitka, National Archives  
Record Group 407, 1934-37).



Splinter-proof DEC station, Clam Island

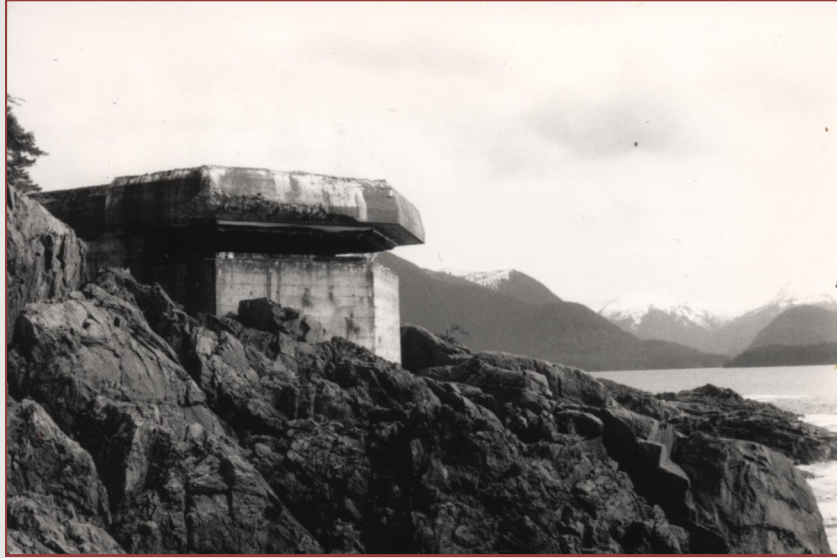


Searchlight bunker Clam Island

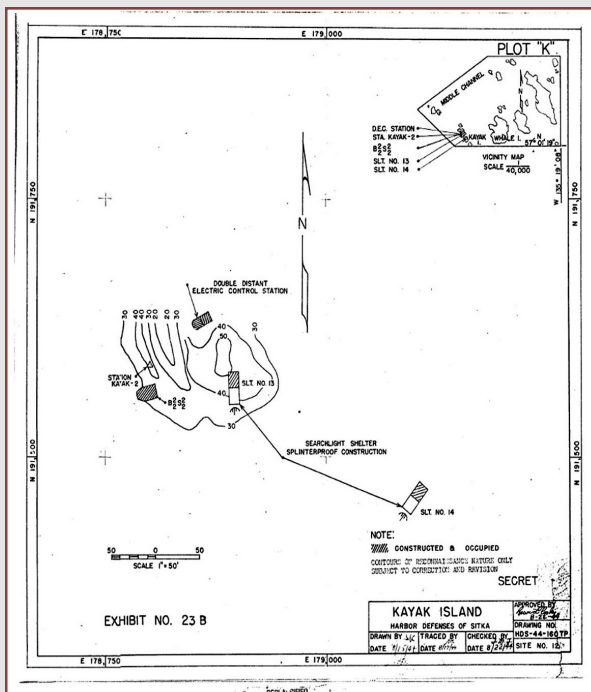
# KAYAK ISLAND

## Base End Station B2 S2 & Searchlight Nos. 13 & 14

Kayak Island was home to Searchlights Nos. 13 and 14 housed in splinter-proof concrete. The site had an elevation of 33 feet and the height of the instrument was 36 feet, which allowed for a viewing area between 179° and 324°. For the two searchlights, there was a double distant electric control station which had a visibility of 252°. Four men were assigned to man this station.



Splinter-proof DEC station, Kayak Island



The DEC bunker on Kayak Island consisted of three rooms and measured 10 feet 2 inches by 9 feet.

The mobile searchlights were housed in a 21 feet by 12 feet 6 inches splinter-proof concrete structure which also housed the power plant for the light. Like the other searchlights, the bunker housed a Sperry Gyroscope Company brand 60 inch high intensity light.

Topographic Map of Kayak Island Station (*Supplement to the Harbor Defense Project, Harbor Defenses of Sitka, National Archives Record Group 407, 1934-37*).



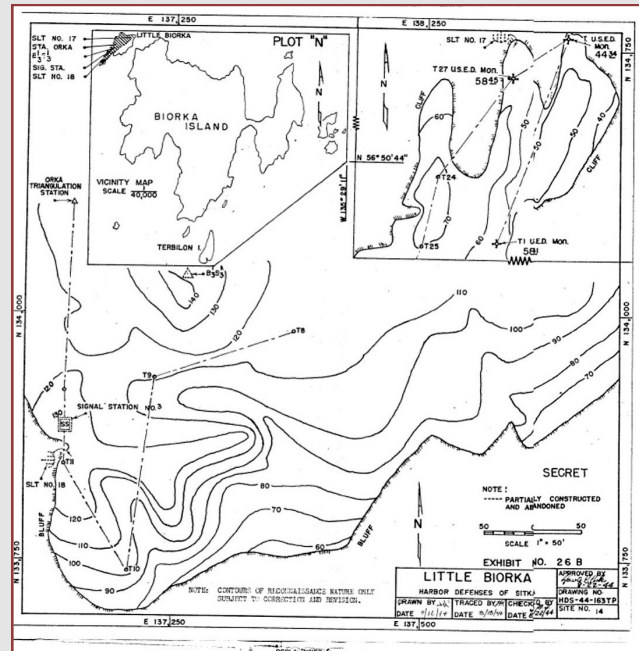
# LITTLE BIORKA ISLAND

## Base End Station B1 S1 & Searchlight Nos. 17 & 18

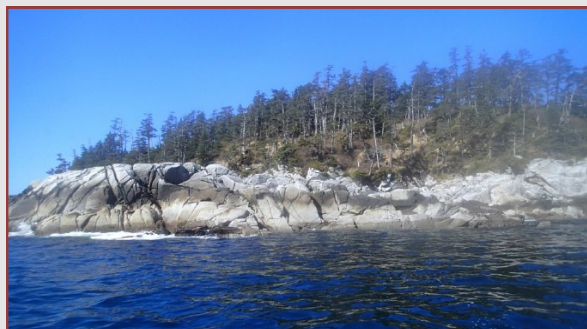
The searchlights station on Little Biorka for lights Nos. 17 and 18 were 98 percent complete before the post was abandoned in 1944. Plans had called for a 90-foot fire control station at an elevation of 136 feet and an instrument height of 229 feet. This station was to serve Battery 291 (Fort Pierce) on Biorka Island.



Collapsed Mess Hall, Little Biorka Island  
(USACE, 2014)



Topographic Map of Little Biorka Island Station  
(Supplement to the Harbor Defense Project, Harbor  
Defenses of Sitka, National Archives Record Group 407,  
1934-37).



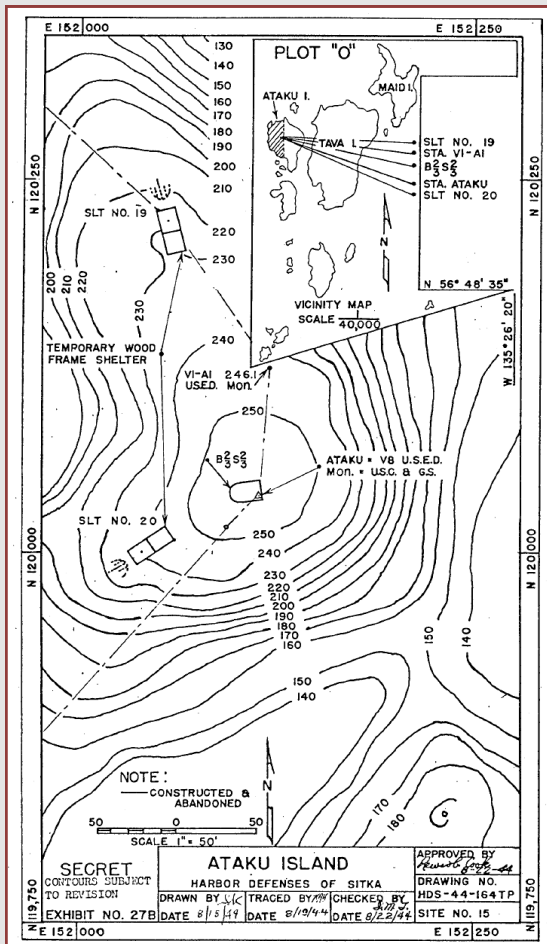
Little Biorka Island (USACE, 2014)

# ATAKU ISLAND

## Base End Station B2 S2 & Searchlight Nos. 19 & 20



Base end station on Ataku Island



Four men were assigned to the Ataku Island base end station B2S2 that housed searchlights Nos. 19 and 20, before it was abandoned in 1944. These structures were 260 feet in elevation with an instrument height of 270 feet. The site consisted of a double distant electric control station.

Topographic Map of Ataku Island Station  
 (Supplement to the Harbor Defense Project ,  
 Harbor Defenses of Sitka, National Archives  
 Record Group 407, 1934-37).

# *HISTORIC PRESERVATION OF WWII SITES AROUND SITKA SOUND*

*Embracing &  
Learning from our Past*

The World War II sites and relics mentioned in this booklet illuminate Alaska's integral role during WWII, a significant event in our local, state, national, and world history. As such, these places and fragments of the past qualify under national and state policy for protection and preservation. This protection serves as a respectful reminder of our shared history and provides a tangible means to enable future generations to comprehend the great efforts of their forefathers and mothers.

Within the Sitka Sound area, Forts Ray, Pierce, and Babcock have been determined eligible for inclusion to the National Register of Historic Places. Identified as significant to our national history, in 1986, portions of Japonski Island and the adjoining causeway known as Fort Rousseau were listed within the Sitka Naval Operating Base and U.S. Army Coastal Defenses National Historic Landmark.

This booklet is a result of cooperative cultural resource management by federal, state, local, tribal, and private entities and is intended to further educate the citizenry about World War II.

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⇒ *Field Manual 4-15, Seacoast Artillery, Fire Control and Position Finding,* 1943.

⇒ *Field Manual 4-29, Service of Seacoast Searchlight,* 1944.

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*View from Ataku Island Searchlight Bunker, (Kinsman, 2014)*



*Front Cover: (Top) View of Sitka Sound from Clam Island Searchlight Bunker, (Middle) Officer Walter Dangel stationed at Searchlight in at the Kodiak Fortifications, (Bottom) Clam Island Searchlight Bunker (Pollnow, 2014) Alaska Defense Command patches worn by 250th Coast Artillery .*



*Ataku Base end station, Ataku Island, (Kinsman, 2014)*

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