S.E. Alaska
Season of 1896

Descriptive Report
Topographic Sheets 2247, 2248, 2249.

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Descriptive Report of Topographic Sheet, season of 1896.

The topographic work of the season of 1896, begins at the entrance of Fish Bay, on the western shore of Peril Strait, and on the eastern shore near the narrow peninsula known as Ide's Neck which forms the head of Salubry Cove. From these points it was continued to the southward and includes all the shoreline in the area covered by the main and secondary triangulation. The shoreline is covered by six sheets, the northern one including Fish Bay and the southern end of Peril Strait; the middle one covering Salisbury Sound; and the southern, Revve and Alge Straits, with Knud Fjord and the northern arm of Nativania Strait or Passage. These sheets are all on 1/20,000 scale. The southern one is a duplicate, but the other two are original field sheets.

The bad weather during the exceptionally short season prevented the completion of the corresponding contour work which was begun on a scale of 1/40,000. This will have to be finished in some subsequent season, for which the uncompleted sheet must be retained on board as it is of the utmost importance in putting in the remaining contours. On this sheet the contour work of Fish Bay was practically finished and nearly all of the southern shore of Salisbury Sound. Contouring was also put in in the vicinity of the northern entrance.
point of Salisbury Sound, including Hectorsheff Island and extending two or three miles in the direction of Peril Strait. This leaves a small strip of country to fill in, to connect with the work on the phototypographic sheet, scale 1/20,000, of Sergius Narrows and Vicinity, Season of 1895.

Peril Strait and Fish Bay, scale 1/20,000.

Peril Strait, after passing Point Lucia, narrows to a width of about one third of a mile between Range Point and the low point which forms the north eastern entrance point to Bradshaw Cove. Beyond these points it expands, forming Rodman Cove, on the eastern shore, between Range Point and the Channel Islets; and on the western shore, Bradshaw Cove whose southermost point is almost the Channel Islets.

Neither of these coves affords an anchorage, the water being deep and the bottom either hard or rocky, while both are more or less affected by the swifts at the strong Spring Tides.

At the Channel Islets, the total width of the channel is about 450 yards, but the navigable portion of it is restricted to 350 yards by a sunken rock 200 yards off the western shore, and nearly on range between the outer rock of the Channel Islets, and the northerm point of Salmonberry Cove. This rock, named Road Rock, is also on range.
with the outer rock of the Channel Ilets, and the small rocky island lying close to Range Point. It has 12 feet over it at low water, and at low slack shows help which is drawn under as soon as the current begins to run.

Beyond this point the channel widens gradually to a width of half a mile at its junction with the waters of Calibury Sound at Point Ketuk. From Point Ketuk bearing S.S.W., S. and distant 500 yards is a sunken rock 175 yards off shore, named by us Ketuk Rock. This rock has 17 feet over it at low water, and shows help at slack tide, which disappears as soon as the current begins to run. From Round Island the rock bears E.S.E. distant 1/2 mile...

Fish Bay, on the eastern shore of Pill Strait, has its entrance between Fish Point on the north and Range Point on the south, and extends in a general direction for 5 miles with an average width of about one mile. Its shores are generally low with sand or gravel beaches showing at low water. At its head is quite an extensive flat, with a fair sized stream running through half a mile of grassy meadow after leaving the timber. Two small streams, about three-quarters of a mile apart, with sand flats of rather small extent enter the bay near the middle of the southern shore.
One of these streams leads in a small lake about 500 feet above sealevel near Haley Anchorage, and from the dark color of the water it is very probable that the other stream has a similar source.

On the southern shore of Fish Bay, the hills are rounded, with a light growth of timber which disappears in green flats near the summits. Their height range from 600 to 1200 feet in a distance of from one to one and one-half miles from the beach, except in the vicinity of Range Point, where the slopes are more abrupt, and are considerably broken by cliffs and deep gulleys.

On the northern shore the hills are steeper and more heavily wooded. Near the head is the beginning of a short range of mountains which extends in a general E.S.E. direction, and is visible from Fish Bay, Trask Sound, and the southern entrance of Olga Strait. Nakanekine Strait at its elbow juts into the spurs making out from this range on its western slope. The elevations of these peaks have not been obtained but they will be in the neighborhood of 2000 feet.

Fish Bay with one exception is entirely free from dangers to navigation. Haley Rock, carrying 3 feet at low water, well marked by kelp, and with an additional
Keep path lying outside of it, is 400 yards from the southern shore and \( \frac{7}{8} \) of a mile, S W \( \frac{2}{3} \) W, from Range Point. From the rock, the western end of Rapids Island is just open of the shoreline north of Fish Point. Point Sylvia bears W x N, distant \( \frac{7}{8} \) miles, and Schulze Head bears ENE \( \frac{3}{8} \) E, distant \( \frac{7}{8} \) of a mile. One and five eights miles inside of Range Point on the southern shore is Haley Anchorage a shallow light terminating at its eastern end in a high water island known as Haley Point. An Indian shack, showing more or less signs of recent use is on the anchorage side of the island. Sand flats varying in extent from 100 to 200 yards make into the light which affords an anchorage in 15 fathoms soft bottom.

On the northern shore, nearly opposite Haley Anchorage and about \( \frac{3}{4} \) mile from Fish Point is Schulze Cove, the entrance to it being on the western side between Piper Island, low and wooded on the east and Schulze Head on the west. This cove affords a good anchorage in 12 fathoms sandy bottom, and is made frequent use of by vessels waiting for slack water in Dungeness Narrows. From this anchorage the noise of the tide in Dungeness Narrows is heard quite plainly, as the land between the head of the cove and the narrows is low
and not much over two hundred yards in width. The passage between Piper Island, and the eastern shore of the cove should not be attempted except by small vessels. The tidal station for Fish Bay was located at N salir Anchorage.

Salish Bay, Scale 1/20000.

Salish Bay Sound from the Baranof Island shore to its junction with the Pacific Ocean between Klekaduff Point, the south-west point of Klekaduff Island, is about six and one-half miles in length in a W.S.W. direction. About two miles from the Baranof Island shore its width is constricted to a mile by the Leleoi and Kungloki Islands on the north, and Buiton Island on the south. Beyond this point it expands to width of a little over four miles at its entrance. Penl Strait enters between Round Island and Pt. Ketul at its north-eastern angle, and New Strait at its south-eastern angle.

The northern shore from Round Island to Point Loe, a distance of five miles is very much broken, numerous rocky islands and ledges making off shore in the neighborhood of a quarter of a mile. Round Island is a small wooded island, dome-shaped, lying close in to the northern shore. It is visible for a considerable distance
down Howe Strait. Okisi and Knaplo islands are groups of rocky islets, the former bare, and the latter in some cases partially covered with timber. Numerous rocky ledges lie between and extend from these islands, which lie further south than the others on the northern shore, and are prominent for that reason.

The country in the vicinity of Point Leo, is very steep and rugged, being composed of an isolated group of bare rocky mountains about 2800 feet in elevation and showing unmistakable evidence of their volcanic origin.

Klokachell Island, distant one mile from Point Leo, is of a triangular shape, the apex being the north-western and Klokachell Point its south-western point. Its southern shore is circular, with abrupt rocky cliffs rising to a height of 1200 feet. It is evidently the northern half of an old crater, whose southern wall has been broken away. These cliffs, in clear weather are seen very distinctly from St. John Baptist Bay in Howe Strait, a distance of 13 miles. At the southeast point of Klokachell Island are several low rocky islets, with a reef extending to the S.E. for about one quarter of a mile. From this point, the northern and eastern shore of the island is comparatively clear until near the north-west point, where it becomes very much broken, numerous
rocky islets, some of which are broken, fringing the shore and connected by rocky ledges and reefs at low water. Six hundred yards off shore, in a W.N.W. direction from the point are two bare rocks, about 25 feet in height, close together and connected at low water. Between these rocks and the island is a partially submerged reef on which the sea always breaks. Extending to the westward for nearly half a mile from these rocks is a sunken, rocky, reef, showing more or less help, and always showing breakers.

The western shore is generally fruited with reefs of about 200 yards extent. Two small islands, wooded and steep, lie about one-quarter of a mile north of Akashchuff Point and close inshore. A small reef extends off shore from Akashchuff Point for a hundred yards in the direction of the point.

The northern and western slopes of the island are well wooded to the summit.

Olga Rock, one and one-quarter miles W.N.W. from Akashchuff Point, bares only at lowest spring tides and except at a high spring tide during very calm weather always shows a breaker. It is apparently a reef about 150 yards in length by 100 yards in width.

Fortuna Strait lies between Akashchuff and Chichagauff Islands and is about two miles in length, curving to the westward.
Lee Anchorage lies in the strait on the north shore and consists of a small open field about one-half mile in width at its entrance by nearly the same distance in depth. A sunken rock with 3 feet at low water lies 400 yards off its western entrance point in a S.E.E direction, and must be taken to give it a good berth in entering or leaving the harbor. While affording fair shelter from northerly winds, Lee Anchorage is open to the southward and there is nearly always a swell rolling in which in combination with rather deep water and poor holding ground make it an indifferent harbor. A small stream enters at its head, the outlet of a lake lying at the low valley at the head of the harbor. A small lagoon, drained by a small stream is on the eastern shore separated from the sea by a narrow strip of beach.

The coast beyond Lee Anchorage, continuing to the northward, is apparently foul, with numerous small islands and rocky ledges extending to seaward. This condition exists apparently beyond the limits of the present chart. A small group of islands connected at low water to the northern shore, lie immediately to the westward and about one-quarter of a mile from Lee Anchorage.

Cape Georgiana, the southern entrance point of Salisbury Sound, consists of four low bare rocky islets, connected at
low water to the main shore of Krugof Island, which is very bold, with several rocky cliffs near the cape.

Point Krugof, distant one mile N. E. E. from Cape Georgiana is lower and lies rugged with a small rocky high water inlet close to the point. Between the point and Cape Georgiana are several rocky inlets and ledges extending out for half a mile with numerous small patches between.

One half mile west from Cape Georgiana is Sea Rock, an irregular ledge over which the sea breaks in very moderate weather. Five-eighths of mile west from Sea Rock is a cairn of rock, which generally shows a breaker, and has been called Morekoi Breaker.

One and one quarter miles N. E. E. from Point Krugof is Tolimina Point, the western entrance point of Tolimina Bay which extends to the southward for nearly two miles. For the first mile the average width is about 350 yards, but at the entrance to the head of basin, is contracted to 150 yards, by two rocks covered at high water projecting from a low point on the eastern shore. The basin at the head affords an anchorage in 3½ fathoms, with a diameter of about 500 yards, and complete shelter from the outside swell. It is subject however to severe squalls and williwaws, in south-east or south-west
weather due to the high mountains and deep cuts or gulches on its south-west shore. On its western shore a stream with a small flat makes into the basin coming from a lake in a low valley extending in the direction of Cape Georgina.

From Point Kalinina, E. N. E. one half mile, is a kelp patch covering a ledge that has 3½ fathoms over it at low water. In heavy swells this shows a breaker.

Kamije Island, which is really the eastern entrance point of Kalinina Bay is low and wooded, with extensive rocky reefs. A low rocky island and reef lie near its south-west point. The narrow channel between Kamije and Kroulf Islands is filled with kelp and except for small boats and canoes is of little use.

There is also a rock, covered at about half tide in the extension of the eastern shore of Kalinina Bay about 250 yards off shore, but out of the regular channel. It is well marked by kelp.

From Kamije Island to Nova Strait considerable confusion exists between the names on the chart, and the descriptions in the Coast Pilot, while the actual topography differs from both. This has evidently arisen from insufficient information. The point described as
Hayward Point and the point of Aultchin Cove, called by us Seraggy Point, have been considerably mixed.

Aultchin Cove is about one mile in depth by the same width at the entrance. About one quarter of a mile from Seraggy Point W.S.W., is a ledge baring at low water well marked by Kelp. Several ledges and rocky inlets are at the head of the cove, which is wide open with hard and irregular bottom, and affords little or no shelter.

From Seraggy Point the shore trends in a general easterly direction to Aukhui Inlet, the eastern point of which is locally known as Hayward Point.

Aukhui Inlet separates Rutag-chitof Island from Krougof Island, and at high water connects by a cause passage with an arm of Krougof Sound. Aukhui Inlet is named Hayward Strait on Coast Survey Chart No. 8050 although Commander Coghlan U.S.N. in his report has particularly described the latter as connecting Krougof and Rutagof Sounds. This inlet is about 4 miles long with an average width of about 500 yards. A small bare rocky inlet lies in the entrance close to the western shore. This inlet is clear until near the head, where are several ledges bare at low water. Between Seraggy and Krougof Islands are several rocky ledges most of which are visible at half tide.
This passage is full of kelp and should be avoided in the channel to the northward and eastward of Lenagy Island is clear.

Lenagy Island needs no additional description to what is already furnished by the Coast Pilot.

Beyond the dangers noted, Salisbury Sound is clear. The bottom however is extremely irregular and soundings are of little or no value. The depths run from 20 to 100 fathoms in mid-channel, a patch carrying the former depth lying almost halfway between Alga Rock and Monekai Breaker, in the entrance. None of these patches have shown breakers although noted particularly in exceptionally heavy swells during a very severe westerly gale.

In entering from sea, after passing Alga Rock and Monekai Breaker, a mid-channel course leading mid-way between Holui and Kunitin Islands, and continuing to the northward and eastward of Lenagy Island, clears all dangers.

Reve and Alga Strait, and Vicinity, scale 1/20 000.

From Hayward Point, Reve Strait extends in a general south-easterly direction for seven miles, terminating at the junction of Twiestf Sound, Alga Strait, and Nakwarene
Passage. Its width varies from a mile at its northern end to less than a quarter of a mile at its southern end.

With the exception of Calmar Cove, a smalllight suitable for mooring only, its western shore offers nothing of note until almost White Stone Point, where extensive reef contact the navigable part of the channel to less than a hundred feet. This section known as White Stone Narrows will be referred to later.

Two-thirds of a mile east from Neckward Point, in mid-channel are the Kane Islands, consisting of two principal islands, low and wooded, with several small rocks and reefs close aboard. The channel is to the eastward of the islands.

A small open light, dry at low water, lies east of the Kane Islands on the eastern shore. A sunken rock, with three feet of water at low tide, well marked by a bell lies 400 yards from its northern point. An Indian shelter is on the southern shore, near the southern point of the light.

Two miles below the Kane Islands is the entrance to St. John Baptist Bay, which extends in an easterly direction for two miles, terminating in the usual flats at its head. Entrance Island, small, low, and wooded lies 150 yards west from St. Teal, its southern entrance point.
The Bay is about one-half mile in width at its entrance but narrows to half that width a mile inside. The south shore from Point Zeal to where the bay narrows forms a rather shallow bank, which is full of kelp and ledges, with two rocky inlets about 200 yards off shore.

The Bay is open to north-westerly winds which have a clear sweep through Salish Sound to the anchorage; and in southerly winds is subject to severe squalls and williwaws caused by the comparatively high land on the northern shore.

From Point Zeal to Neva Point the navigable part of the channel is much restricted. The shallow water just below on the extreme west generally extending from the eastern shore. One and one half miles below Point Zeal is a shoal in mid-channel marked by a 2nd Class Kru Buoy, painted red, on the western edge of the shoal. Several ledges and flats show at low water on the eastern shore above and below the buoy. Both shores are well marked by kelp.

Two-thirds of a mile below the buoy is a spindle on a bare rock always uncovered near the western shore. A small flat, nearly bare at low water, lies inside and shallow bank to the southward of the spindle.

One and a half miles below the red buoy
a sand flat makes out from the section shore marked at its
westem extremity by a red spar buoy. This is the beginning
of Whitestone Narrows, the total length of the channel being
about one half mile, but between the buoys is barely 100
feet in width, with a depth at low water of eighteen
feet. Midway between the red spar buoy off the sand flat
and Whitestone Point is a sunken rock and baffle patch mark-
ed by a black can buoy. The channel now is marked by in-
marked by three spar buoys, a red, No. 2, to the westward
of the black can, with a sunken ledge between them; and
two black, No. 1 and 3 on each side of the red, on the
westem side of the channel. Midway between buoys No. 1
and 3 is a sunken rock, almost on line with them,
and just inside, within a few yards of buoy No. 1, is
another. No deviation is possible from the course in-
dicated by these buoys.

A bare rock always visible lies nearly in
midchannel 200 yards below Whitestone Point. From this
rock, S.E. by E, distant 150 yards is a sunken ledge with nine
feet over it at low water. From the shore almost this
rock, a shoal makes out for 150 yards the outer edge of
which bears E by N from the rock, is at distant 200 yards.
In going to its southward after passing black
As you say the tide must be taken to avoid these two dangers. And a spar buoy, placed off the tail of this ledge would simplify the navigation of this channel.

Off Neva Point a reef extends for a considerable distance marked by a spindle at its extreme point.

The current in Whitestone Narrows at Spring Tides is not exceed three knots and are of but little importance.

Their duration depends largely upon the prevailing winds and weather on the outside coast.

From Neva Point the main channel bends sharply to the eastward for three-quarters of a mile, and then assumes its general south-easterly direction through Olga Strait. This latter is deserving of no particular notice. Its northern entrance is between Olga and Hallokt Point, and its southern between Easton and Tongstoi Point. The channel separates Krestof and Hallokt Islands and is about four miles in length with an average width of a quarter of a mile. Below Easton Point 1/4 mile, the depth shoals to 18 feet clear across channel, showing more or less help at low water slack. This bar is evidently formed by the deposition of silt from the meeting of the tides in this vicinity and presents no dangers that have been observed.
To the westward of Treatof Island is a comparatively large open body of water, about five miles in length by two miles in width. An arm at its northwest angle a mile and a half in length connects at high water with the head of Suctoi Inlet. At its southern end it connects with Siletz Sound by what is called in the Pilot, Hayward Strait. This body of water has been named Treatof Sound, as no name had been given to it in the Pilot, although reference to it has been made in several places.

Its southern part is filled by numerous islands which have been grouped under the name of the Mazoum Islands. These are generally low, and covered with a good growth of timber. They enclose a small body of water suitable as an anchorage for small craft. The main entrance to which is from the northward.

On the eastern side of these islands is a narrow channel, with a large island in its northern entrance. From this channel, about a mile from its southern entrance point, an inlet with a very narrow entrance extends to the eastward for about a mile and a half into Treatof Island. A smaller lagoon, connected by rapids to the channel lies immediately to the northward of the entrance.
the dividing strip of land being very narrow and in some places devoid of trees.

One half mile below this inlet a rock visible at half tide and well marked by kelp, lies nearly in mid-channel, the channel being to the eastward of the rock.

On the western side of Magoun Islands a similar narrow channel exists which has a broad open light with extensive flats at its elbow. This is called Fort Inlet in the Pilot but is locally known as Arch Bay.

This channel beyond Fort Inlet unites with the eastern channel and forms a connection with Little Sound about a mile in length.

In the northern entrance to Fort Inlet are a group of prominent islands, named by us the Sound Islands, with a small rock lying 250 yards NW from the northern and smallest one of group. The channel for entering is to the northward and westward of this group.

Several islands, with bare rocky cliffs and ledges, close abord lie one-half mile S from the southern point of Fort Inlet, called Island. Three-quarters of a mile S from the Sound Islands is a wooded island connected at low water with a smaller wooded island lying 100 yards off its western point. Three-quarters of a mile SE of these two islands
is a bare rock, one third of a mile off shore with a small wooded island between it and the Torstof Island shore.

About a mile from this rock is a prominent double island, the two parts being connected by a narrow neck of land. To the southward of this island are two several detached islands before reaching the Magrern Islands.

On the western shore of the Sound are several islands, low and generally wooded, forming a group lying close to the shore.

The shores of Torstof Sound are generally low and wooded with sand or gravel beaches of small extent. But little change can be made, except as regards distances and direction, to the description furnished by the Pilot.

Narwalina Passage begins at the north end of Alga Strait, at Hellick Point, the north west point of Hellick Island, and extends around the island to the eastward and southward, and joins Alga Strait between Dog Point on Baringo Island and Point Tingloe, the south east point of Hellick Island.

From Hellick Point it extends in an east-northeast direction for two miles with an average width of one-half mile; this part being an open sheet of water, broken
by only one small low island, named by us Bart Island. From this point it runs in a south-easterly direction for three miles to Allen Point.

The channel is obstructed in many places to a hundred yards or less by immense flats and meadows formed by the silt from the mountain streams emptying on its eastern shore and the meeting of the tides at these points, so that the current does not carry it out.

At high water these flats are covered but at low they are bare. The channel is narrow, shallow, and winding over these flats, and is suitable only for small vessels.

All drawings are magnified

Very respectfully

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Draftsman.