2286 thru 2290
2302 T-2289

2290 T-2289
2302

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Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

HYDROGRAPHIC- H-2286 thru H-2290, H-2302
Type of Survey TOPOGRAPHIC- T-2289

Field No. ..... *Office No.* .....

LOCALITY

State Alaska

General locality SERGIUS NARROWS
to
Locality SITKA SOUND

DATE - 1896 - 1897

~~1896~~

CHIEF OF PARTY

E.K.Moore

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DATE .....

B-1870-1 (1)

H02286A H02286B
H02287 H02288
H02289

U.S.C.& G.S.Str.PATTERSON.

SEASON of 1897.

DESCRIPTIVE REPORT.

SERGIUS NARROWS to SITKA SOUND.

E. K. Moore,
Lieut.Comdr.,U.S.N.,
Chief of Party.

U.S.C.& G.S Str.Patterson.

List of Names, Seasons I896 and I897.

Topographic Sheet '/40000. Reg No 2289

The following list comprises the names used on the general topographic sheet, scale '/40000. Those in black are sanctioned either by the Alaska Coast Pilot or by existing charts. Those in red have been applied for the first time and the reasons for use given. Names marked by an asterisk have been changed in their spelling to agree with the list furnished by Mr.George Kostrometinoff, Court Interpreter of Alaska, who has made an investigation of the subject, and who is probably the best authority on Indian and Russian names. His list is appended.

Names in Black.

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Baranof Island
Beehive "
*Beloi Rock
Big Gavanski Id.
Cape Georgiana
Channel Islets
Chichagoff Island
Crosswise "
Crow "
Dog Point
Eastern Point
Eastern Island
Fish Bay
Fish Point
Francis Rocks, E.& W.
Fortuna Strait
Gagari Island
Goloi "
Guide "
Haley anchorage
Halleck Island
Harbor Point
Hayward Strait
Hayward Point
*Kalinina Bay
Kane Islands
Kamenoi Point
*Katlan Bay
Klokachef Point
Klokachef Island
Kresta Point
Krestof Island
Krugloi "
Kruzof "
Leo Anchorage
Little Gavanski Id.

Lisianski Peninsula
Lisianski Point
Magoun Islands
Middle "
Nakwashina Passage
Near Point
Neva Point
Neva Strait
Old Sitka Harbor
Old Sitka Rocks
Olga Point
Olga Strait
Piper Island
Pattofschikof Id.
Port Krestof
Point Kakul
Point Krugloi
Point Seroi
Point Zeal
Promisla Bay
Range Point
Salisbury Sound
Salmonberry Cove
Schulze Head
Schulze Cove
Scraggy Island
Sea Rock
Sergius Point
Sinitsin Island
Siginaka "
Sitka Sound
Shoal Point
Souhoi Inlet
St.John Baptist Bay
Sulovoi Point
Sulovoi Islet
Sulovoi Bay
Sulovoi Rock
Whitestone Narrows
Whitestone Point

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Names in Red

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Allan Point	After Recorder and Draughtsman W.S.Allan
Bart Island	From name of signal built on it.
Brad Rock	From contraction of Bradshaw.
Bradshaw Cove	After Ensign G.B.Bradshaw,U.S.N.
Brady Rock	After Governor Brady of Alaska.
de Groff Bay	After a prominent merchant of Sitka.
Dog Cove	From its proximity to Dog Point.
Double Island	From its appearance
Gilmer Cove	After Lieut.Gilmer,U.S.N.
Haley Rock	From its proximity to Haley anchorage

Halleck Point	From Halleck Island
Highwater Island	Because of its prominence and its being a H.W. islan
Kalinina Point	Proximity to Kalinina Bay
Mills Island	After a prominent merchant of Sitka
Morskoi Breaker	From its proximity to Sea Rock; the Morski Rock of the Russians.
Olga Rock	From its proximity to Salisbury Sound; the Olga Gulf of the Russians.
Partof Point	From Partofschikof Island
Point Brown	From the name of signal built there
Point Kruzof	From Kruzof Island
Point Leo	From name of triangulation signal built there
Point Rob	From the name of signal built there
Rodman Cove	After Recorder and Draughtsman Hugh Rodman
Round Island	From its appearance
Scraggy Point	From its appearance
Sinitsin Cove	From its proximity to Sinitsin Id.
Sound Islands	From their proximity to Krestof Sound.

TRANSLATION and correct SPELLING of RUSSIAN and INDIAN names on CHARTS of S.E.ALASKA.

ByG.KOSTROMETINOFF, U.S.Court Interpreter.

Sitka,Alaska, July 12,1897.

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Chart #6244.

The names on the chart	Correct spelling	The translation of names	In what language
Kutchuma Is.	Kutchumoff Is.	Family name	Russian.
Boiddarkin Is.	Bydarka Is.	Skin canoe	Aleut
Eckholms Is.	----------	Family name	Sweden
Tsaritza Rk.	----------	Czarina	Russian
Kayak Is.	----------	Skin canoe	Esquimo
Bamdoroshni Is.	Podoroshni Is.	On the road	Russian
Galankin Id.	Galanka Id.	A brick stove	Russian
Katz Id.	----------	Family name	German
Morne Id.	----------	Family name	American
Kutkan Id.			
Aleutski Id.	----------	Aleut Id.	Russian
Nepoverotni Rks.	Nepovorotni Rs.	Not to turn	Russian
Nevski Is.	----------	Neva's Is.	Russian
Roshimosti Id.	Reshimosti Id.	Resolution	Russian
Virublennoi	----------	Trees cut down	Russian
Japonski Id.	----------	Japanese	Russian
Sasedni Id.	Sosedni Id.	Neighbor	Russian
Kirushkin Id	Korushkin Id	Smelt (fish)	Russian
Mogilnoi Id	----------	Grave	Russian

The names on the chart	Correct spelling	The translation of names	In what language
Makhnati Id	----------	Shaggy	Russian
Nevi Id	Neva Id	Named after the (ship "Neva")	Russian
------000------			
Chart #8240.			
------000------			
Aleut kina B.	----------	Aleut woman	Russian
Engeten			
Bouronov Pt.	Bouroon Pt	Breakers	Russian
Kulitch Rk.	Kulitchok Rk.	Snipe	Russian
Obsetchki Id	Obsetchka Id	Miss fire	Russian
Poverot Pt.	Poverot Pt	Turn	Russian
Kita Id	----------	Whale	Russian
Koka Id	----------	Family name	Finland
Ilput Id			
Kanga Id	----------	Mongolian gun	Asiatic
Peisar Id	Peesar	Writer	Russian
Visokoi Rk.	----------	High	Russian
Elevoi Id	Elovoi Id	Spruce	Russian
Legma Id	----------	Calm	Aleut
Tava Id	----------	Enough	Aleut
Akaton Id			
Golomi Id	Golovni Id	Fire-brand	Russian
Vasilevka Id	----------	Basil's	Russian
Kachali Rk.	----------	Roll	Russian
Neprop Id	----------	Not to be omitted	Russian

The names on the chart	Correct spelling	The translation of names	In what language
Biorka Id	----------	White-side	Scandinavian
'aid	----------	----------	English
Vitskari Id	----------	(Capt.)Witz's chastisement	Russian
Goloi Id	----------	Bare	Russian
Lesnoi Id	----------	Woody	Russian
Bieli Rk.	Beloi Rk.	White	Russian
Jablosh Id	Ya-blo-shni	Apple	Russian
Glouboki Lake	----------	Deep	Russian
Vodopado River	Vodopad	Falls	Russian
Veistova Mt.	Verstova-ya	Verst:russian measure cont'g 3500 ft.	Russian
Lazaria Id	Lazarev Id	Lazarus	Russian
Dranish Mt.			
Cornoi Id	Gornoi Id	Mountain Id	Russian
Kasiana Ids		Family name	Russian
Gavan Hill		Harbor Hill	Russian
Peschani Pt.		Sandy Pt	Russian
Voroni Id		Crow Id	Russian
Gagari Id		Diver Id.(bird)	Russian
Starri-Gavan B.		Old Harbor B.	Russian
Gavanski Ids		Harbor Ids.	Russian
Katliana B.	Katlan's Bay	Family Name	Indian
Lisianski Pt	Named after Capt.	Lisiansky	Russian
Kresta Pt		Cross Pt	Russian
Promisla B.		Furs B.	Russian

The names on the chart	Correct spelling	The translation of names	In what language
Siginaka Ids			
Otmeloi Pt.		Shoal Pt	Russian
Lesnoi Id		Wood Id	Russian
Kamenni Pt	Kamenoi Pt	Rocky Pt.	Russian
Kruzof-ov Id	Kruzoff Id	Family name	Russian
Krestof-ov I.M.B.	Krestoff I.M.B.	Family name	Russian
Magun Id.			
Agayak Id			
Oubeloi Id		Ebb-tide Id	Russian
Olga St.		Feminine name	Russian
Makwasina Pass	Makwashina Pass	Fermented Pass	Russian
Krugloi Id. Pt.		Round Id	Russian
Neva St.	Named after ship "Neva".		Russian
Partovshikov Id		Party Id	Russian
Soukoi Inlet	Souhoi Inlet	Dry	Russian
Userdi Pt		Zealous	Russian
Kakul Pt			
Suloia Id. B. Pt.	Sulovoi Pt	Ripple	Russian
Rubia B.		Fish Bay	Russian
Shulze B.		Family name	German
Piper Id		Family Name	English
Siroi Pt		Damp	Russian
Liesnoi Id	Lesnoi Id	Wood Id	Russian
Opasni Is.		Danger Is.	Russian

The names on the chart	Correct spelling	The translation of names	In what language
Pogibshi Pt.	Pogibshi Pt	Peril Pt	Russian
Cusna R.			
Poverotni Id		Turn Id	Russian
Elovai Id	Elovoi Id	Spruce	Russian
Otstoia Id	Otstoi Id	Shelter	Russian
Cozain Rk.	Named after Pilot	Cozain	Slavonian
Poperetch Id	Poperetchnoi Id	Transversal	Russian
Peschan Pt	Peschanoi Pt	Sandy	Russian
Nismeni Pt	Nismenoi Pt	Low	Russian
Sinitz-s-in Id			
Kalinina B.		Family name	Russian
Morskoi Rk		Marine Rks	Russian
Klokachef Sound		Family name	Russian
Leo B.	Named after schooner "Leo"		American
Fortuna St		Fortune	Russian
Siouchi Pt. Id. B.		Sea-lion	Russian
Shelicova, Shelikof } B.	Shelikoff B.	Family name	Russian
	----------	----------	--------
Chichagof-ov Id	Chichagoff Id	Family name	Russian
Hoonjah, Hooniah, Hoonyah } Sound	Hoon-yah	Cold Lake	Indian

U.S.C.& G.S.Str. Patterson.

Descriptive Report. Seasons 1896 & 1897.

Inside waters from Sergius Narrows to Sitka.

Topographic Sheet '/40000. Reg. No 2289

Shoreline and Hydrographic Sheets, various scales.

The manner of doing the work was the same as that described in my report of 1895.

The topography of the season 1896 began at the south side of Deep Bay on the west side of Peril Strait, and at Pt. Siroi, the southern point of Bear Bay on the east side, lapping a little on that of 1895.

The hydrography began between Fish and Sulovoi Points, in Peril Strait, where it was left in 1895, and both shoreline and hydrography were continued to the southward as far as the main and secondary triangulations were carried.

The bad weather during the exceptionally short season of 1896 prevented the completion of the corresponding contour work, which was finished in the following season of 1897.

Considerable contouring was done however, that of Fish Bay being practically finished, as well as nearly all on the southern shore of Salisbury Sound. Contouring was also done in the vicinity of the northern entrance to Salisbury Sound, including Klokachef Island and extending two or three miles in the direction of Peril Strait, but leaving a strip to be filled in, connecting with the work on the photo-topographic sheet, scale '/20000, of Sergius Narrows and vicinity, season of 1895. The original shoreline sheet of Fish Bay, scale '/20000, contains also the southern end of Peril Strait, from Sergius Narrows to the South west end between Pt. Kekul and Round Island.

PERIL STRAIT,after passing Sulovoi Point,narrows to about 1/3 mile between Range Point and the low point which forms the North entrance to Bradshaw Cove. Beyond these points it widens,forming on the eastern shore Rodman Cove,between Range Point and the Channel Islets, nd on the western shore Bradshaw Cove,whose south point is abreast of the Channel Islets. Neither of these coves affords a good anchorage,the water being deep and the bottom rocky,while both are more or less affected by the tide swirls which form in the channel between them at the strength of the current,especially at the spring-tides.

At Channel Islets the strait is about 500 yards wide but the channel is reduced to about 300 yds by a sunken rock 175 yds off the western shore,named by us Brad Rock.

Beyond this point the channel widens gradually to about 3/4 mile at its junction with Salisbury Sound,between Pt.Kekul and Round Island.

FISH BAY,on the eastern side of Peril Strait,has its entrance between Fish Point on the north and Haley Rock on the south. It extends in a general easterly direction and is 5 miles long with an average width of about I mile.

Its shores are generally low with a sand or gravel beach showing at low water. At its head is an extensive flat with a fair sized stream running through 1/2 mile of meadow after leaving the timber.

Two small streams,about 3/4 mile apart,with sand flats of small extent enter the bay near the middle of the southern shore. One of these streams heads in a small lake about 500 feet above sea level, near Haley Anchorage,and from the dark color of the water it is probable the other one has a similar source.

On the southern shore the hills are rounded with a light growth

of timber,which in many places disappears in grassy flats near the summits. The heights range from 600 to 1200 feet in a distance of from one half to a mile and a half from the beach,except in the vicinity of Range Point,where the slopes are more abrupt and are considerably broken by cliffs and gulches. On the northern shore the hills are steeper and more heavily wooded,but even there the tops are bald. Near the head is the beginning of a short range of mountains, which extends in an E.S.E.direction,and is visible from Fish Bay,Krest-of Sound,and the southern entrance to Olga Strait. Nakwashina Passage, at its elbow,juts into the spurs from this range on its western slope. The elevation of only one of these peaks could be obtained,but they are from 4000 to 5000 feet. This bay is generally open and clear,and an anchorage can be had almost anywhere along its shores one mile to the eastward of Haley Rock.

HALEY ROCK is about 450 yds from the southern shore and 7/8 mile N.E.3/4 E.from Range Point. From the rock,the western half of Rapids Island is open on Fish Point, Sulovoi Point bears W.N.W.7/8 W. distant 7/8 mile,and Schulze Head NNE'/2E. 7/8 mile. It has 4½ feet over it at low water and is surrounded by kelp,with an additional kelp patch outside of it.

HALEY ANCHORAGE is 1'/2 miles to the Ed.of Range Pt.on the southern shore. It is only a shallow bight,terminating at its eastern end in a high water island,known as Haley Point. An Indian shack is on the anchorage side of the island and a sand flat 100 to 200 yds wide at low water extends from the island to the first point to the westward. The anchorage is fair in southerly weather,in from 14 to 20 fms with sandy bottom.

SCHULZE COVE is well described in the Coast Pilot,Alaska,Part I., page 186. The roar of Sergius narrows can be heard from this anchorageand on a still night. It is very noisy at the spring tides.

SULOVOI POINT is the farthest out point in the channel,on the west side of Peril Strait,abreast of Fish Bay,and is nearly in range between Sergius Pt.and Range Pt. It is a guide in coming through Sergius Narrows to clear W.Francis Rock,which is on range with Sulovoi and Range Points. There is good water close up to this point, but a ledge makes out about 100 yds from the next point about 500 yds south of Sulovoi.

RANGE POINT is not very high, but wooded and rather bluff, and shows prominently coming through Sergius Narrows. In coming from the Nd.you are clear of W.Francis Rock when Range point is shut in by Sulovoi Pt. About 200 yds N.by E.from this point is a bare high water rock about 100 yds off shore.

CHANNEL ISLETS are well described in the Coast Pilot and are unmistakable. There are heavy tide rips through this narrow part of the Strait and about these islets requiring a vessel to mind her helm.

Brad Rock is on the west side of mid channel about 175 yds from the west shore,and on range with the bare rock off Range Point and the outer Channel Islet,bearing S.W.3/4 W.from them. It is of small extent, has 7½ feet of water over it at L.W.and is marked by kelp which only shows at low water slack.

SALMONBERRY COVE,on the west side between Brad Rock and Round Id. is about 300 yds wide at its mouth by the same deep,and has been used by small vessels to supply a salmon saltery located there. There is a sunken rock,with 16 feet of water over it at low water,surrounded by kelp,as near the middle as it could be placed. It is open to the Sd.

and is a poor anchorage.

ROUND ISLAND is just off the point at the west side of the entrance to Peril Strait and shows as a point coming from any direction until quite close to,but is unmistakeable from its dome shaped top. It is about 200 feet high,thickly wooded and is especially prominent coming up Neva Strait,where it is seen as soon as it opens,about the Kane Islands.

POINT KEKUL. It is rather hard to determine which should be the point,but the farthest out of a group of L.W.islands has been selected, because it is the real entrance to Peril Strait,and is most important to avoid,because of a sunken rock 350 yds S.W. by W.'/2 W. from the outer and larger island. This rock has 16 feet of water over it at L.W. and is marked by kelp which only watches at slack water and is drawn under as soon as the current starts.

The shoreline in the bight between Pt Kekul and Channel Islets is foul and lined with kelp two hundred yards or more off shore.

SALISBURY SOUND lies between Chichagof Id on the north,Baranof Id on the east,and Kruzof Id on the south. It connects Peril Strait on the N.E.and Neva Strait on the S.E.with the Pacific Ocean between Cape Georgina and Klokachef Pt. It is about 6'/2 miles long in a general W.by S.direction,2 miles wide at the eastern end,and 4'/2 miles wide where it joins the ocean.

About 1 3/4 miles from the eastern end the channel is constricted to 1 mile by the Goloi Ids.on the north side and Sinitsin Id. on the south. Its shores are foul,especially that on the north side which is studded with islands,rocks,and reefs,with more or less kelp,from Round Id.to Pt.Leo. It is open to the prevailing wind and sea and there

is generally a S.W. swell rolling in and breaking all along the northern shore,which sometimes reaches in to Baranof Id.,and makes the crossing between Peril and Neva Straits uncomfortable for small vessels. There are no dangers through the middle of the sound,but the depths are irregular and the bottom rocky,20 fms having been found about the middle of the entrance.

The country back of the north shore is high,steep,and rugged,being composed of a group of bare rocky mountains,about 2800 feet high,showing plainly their volcanic origin.

The southern shore is more undulating,though quite high near the ocean,and is covered with trees from the top to the waters edge.

The wind draws through the Sound,most generally from the sea. There is usually fog along the coast with southerly wind,and it banks into this Sound very thick,but frequently dissipates at the mouth of Fish Bay on the N.E.and Neva Strait on the S.E.

Vessels from the N.W.,bound for Sitka,frequently use this Sound because it puts them sooner into smooth water.

KRUGLOI ISLANDS.Krugloi,meaning round,has been applied to the single, round island at the entrance to Peril Strait,but we think best to give it the English name,and apply Krugloi to the group of four islands to the westward,though the name is in no way indicative. The two western ones are wooded and the largest is about 75 feet high. The southern one is bare and about 30 feet high,while the eastern one is made up of ledges,many of which are bare only at low water,with several rocky pinnacles 10 to 15 feet high near the western end. A ledge extends from off the north side of this group,leaving a passage for a small vessel between,to the N.W. and connects with the nearest point of Chichagof Id,forming a small bight in which an anchorage can be had

by a small vessel in 15 to 20 fms,but the bottom is rocky and it is open to the S.E.and not recommended. There is another bight immediately to the westward,but it is deep with rocky bottom and open to the S.W. from whence the heavy swells come,and it is not recommended. There are two or three more bights to the westward but none are fit for anchorages.

GOLOI ISLANDS (Goloi,bare)are two bare islands i/4 mile S.W.from the eastern Krugloi Id The northern one is double and at high water forms two islands. The southern one is about 35 feet high and has the appearance,from almost any direction,of a flattened cone.

These islands are surrounded by kelp rather close to and the water is good up to the edge of the kelp. The description of these islands is important as they should be recognized if seen in a fog. Five hundred yards W.N.W.from Goloi,and 300 yds from the shore is a wooded island, not named,about 200 yds long by about 100 yds wide and 50 to 60 feet high. W.N.W.'/2 W.from Goloi,distant 1 mile and 300 yds off shore,is a round wooded island,not named,about 150 yds in diameter and 75 feet high. It is surrounded by ledges,especially on the north and west sides,which are bare at low water. There are a number of other islands between Goloi and Point Leo,some wooded and some bare,all more or less surrounded by kelp,with additional kelp patches between them,but the ones described are the most important.

POINT LEO is the S.W.point of Chichagof Id. The immediate point is low and rocky but rises rapidly back to barren rocky peaks about 2800 feet high. East of the point 500 yds,are some rocky islets behind which a boat can land in ordinary weather,and to the N.W. i/2 mile there are ledges bordered with kelp,which bare at low water,100 to 200 yds off shore.

KLOKACHEF ISLAND,distant 1 mile W.by N.from Pt Leo,is of a triangular shape,the apex being to the N.W.and Klokachef Pt.being the S.W. end and the northern entrance to Salisbury Sound. Its southern shore is rocky with abrupt ,rocky,whitish cliffs rising to a height of 1000 ft. and has the appearance of being the northern half of an old crater These cliffs are plainly visible in clear weather from St.John Baptist Bay,a distance of 13 miles and are visible well out to sea from the S.W. The island is thickly wooded except on these abrupt cliffs. At the east point are several low rocky islets,with a reef extending E.S.E.for about 1/4 mile over which the sea generally breaks. From this point the north shore of the island is comparatively clear until the N.W.point where it becomes very much broken,numerous rocky islets fringing the shore,some of which are wooded,and connected by rocky ledges and reefs at low water. W.by N.from this point,600 yds off shore,are two bare rocks, 25 feet high,close together, and connected at low water. Between these and the island is a partially submerged reef on which the sea always breaks. Extending to the westward from these rocks for nearly 1/2 mile is a sunken reef showing more or less kelp,on which the sea always breaks. These islands and reefs are in line with the northern shore of the island and extend 7/8 mile west from it.

The western shore is generally foul close to,with reefs extending 200 to 300 yds off shore which bare at low water. Two small islands lie 1/4 mile north of Klokachef Pt.,close inshore. A reef extends from and in continuation of the point which bares about 100 yds at low water

OLGA ROCK,1'/4miles W.by S.from Klokachef Pt,and 1'/2 miles S.W. from the extreme N.W.point of the island,bares(?)only at the lowest spring tides,and except at high spring tides and very calm weather, always shows a breaker. It is apparently a reef covering an area of 150

yds long by 100 yds wide. It was never smooth enough to get over it. It is on line with Klokachef Pt.and Pt.Leo,but Pt.Leo should be kept open on Klokachef to clear it. There is a good channel between Klokachef Id. and the Rock.

FORTUNA STRAIT separates Klokachef fromChichagof Id.and is about 3 miles long with an average width of i/2 a mile. The channel at the eastern end is narrowed to a quarter of a mile by the ledges extending to the Wd.from Chichagof and the reef extending to the S.E.from the E. end of Klokachef. There is a clear and good channel through the middle,but the west end is wider and more open than the east,with both shores at that end foul,and when the seas are breaking heavily over the reef west of Klokachef,the disturbed water extends clear across the channel,giving it the appearance of foul ground. A large wooded Id. lies west of the entrance of Leo Anchorage,and to the Wd of this,along the shore are a number of small Ids and rocks from 100 to 300 yds off shore.

LEO ANCHORAGE lies about half way through Fortuna Strait on the north side,and is half a mile long by i/2 mile wide at its entrance, narrowing to 200 yds at its head. On the east side of the entrance there are two small kelp patches,500 yds off shore,opposite a bluff point that should be avoided though 5 to 7? fms was found in them. A sunken rock with ? feet over it at low water, surrounded by kelp, lies S.by E. 1/2 E.,350 yds from the west entrance point,and the left tangent of the largest island west of the entrance,bears west from the rock. This affords a fair shelter for northerly winds,but it is open to the south through Fortuna Strait into the mouth of Salisbury Sound, and though Klokachef Id forms a breakwater for the heavy seas,a swell usually comes in through one end or the other,causing a vessel to roll

uncomfortably. This ,combined with rather deep water and poor holding ground,doesnot recommend it for an anchorage in southerly weather. The anchorage is near the middle in 15 to 20 fms,or for a small vessel near the head in 5 to 7 fms. There is less swell near the western shore. ıe bottom is hard with sticky patches. A small stream enters at the N.W. corner which is the outlet of a lake lying in the low valley at the head of the anchorage. A small lagoon,drained by a small stream, lies on the eastern shore,separated from the sea by a narrow strip of beach.

CAPE GEORGIANA,the southern entrance to Salisbury Sound,consists of four low bare rocky islets,connected at low water with the main shore of Kruzof Id,which is steep with several cliffs near the cape. Back of the cape 3/4 mile E.by N.is a round top hill 1400 feethigh,and 2 miles back,east from the cape,is the first prominent peak which from the southward and westward seems to rise from the low point gradually by a series of steps and is 2800 feet high. This is a prominent landmark from the S.W.for Salisbury Sound.

SEA ROCK is W.N.W.'/2 W.from Cape Georgiana,distant i/2 mile. It is an irregular H.W.ledge,200 yds.long by 100 yds.wide at low water, over which the sea breaks even in moderate weather. It is nearly in line with the tangent to the prominent points on the south side of Salisbury Sound.

MORSKOI BREAKER is 5/8 mile W.3/4 N.from Sea Rock and nearly in line with Sea Rock and Cape Georgiana,distant 1'/8 miles from the extreme point of the latter. It is a sunken rock over which the sea usually breaks. There is deep water between these two rocks, and between Sea Rock and the Cape,but neither is recommended. Strong tide rips

are found around the cape and these two rocks with the wind from N.W. or N.E\while with a southerly wind they are more prevalent around Point Leo.

POINT KRUZOF is 1 mile N.E.by N.from Cape Georgiana and between them the coast makes a bend into the island. This bend has a number of rocks and reefs,the furthest one off being half a mile from the shore The coast about the cape is bluff but not very high,and immediately back the country is rolling for a few hundred yards when it rises to a ridge about 1200 feet high,and back of this is a higher range. The country all along this south side of Salisbury Sound is thickly wooded down to high water mark.

KALININA POINT is 1'/4 miles N.E.by E.'/2 E.from Pt Kruzof and the shore between is comparatively clear and bold. It forms the west entrance point to Kalinina Bay.

KALININA BAY begins at Kalinina Pt and extends to the Sd.into Kruzof Id for nearly 2 miles. The average width the first mile is about 350 yds,but at the entrance to the head or basin it is contracted to 150 yds 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 3'/2 fms with a diameter of 500 yds and is comparatively landlocked. It is subject,however to severe squalls and williwaws in S.E. or S.W.weather,due to the high mountains and deep cuts on its S.W.shore. A stream empties into the basin on the west side,having its source in a lake,and there is a small flat at its mouth. There is a shoal in the entrance to the bay '/2 mile N.N.E.from Kalinina Pt,with 3'/2? fms at low water. It is well marked with kelp and shows breakers in a heavy swell. There is also a rock covered at about half tide on the extension of the straight part of the eastern shore running about N.W.x N,

200 yds off shore. It is out of the channel and is well marked by kelp.

SINITSIN ISLAND,which is the eastern entrance point of Kalinina Bay,is low and wooded with reefs and ledges close about it,and an extension ledge and sunken rock 250 yds from H.W.on its N.W.point. A low rocky island and reef lies near its S.W.point. The narrow channel between Kruzof and Sinitsin Ids is filled with kelp and should only be used by small boats and canoes.

Considerable confusion exists on the various charts and in the Coast Pilot between the names and the description of the coast between Sinitsin Id and Neva Strait. It has evidently arisen from defective information and inaccuracies in the charts,which we have endeavored to straighten out.

SINITSIN COVE is named on C.S.charts #8259 and #8050,Hayward Strait,and described in the Coast Pilot as the location of SOUHOI Inlet. B.A.chart 2337 is nearer correct as to names and coast line than anything else prior to our survey. It is east of Sinitsin Id,between it and Scraggy Pt,and is 3/4 mile wide at its mouth,extending 1'/4 miles S.S.E.into Kruzof Id,with the usual flat at its head where a small stream empties. The water is deep and the bottom irregular and rocky, with a ledge that covers at about three quarters tide,i/2 mile from the head,a little nearer to the western shore,and two high water rocks abreast of it nearer to the eastern shore,with more or less kelp about and between them. W.S.W.'/4 mile from Scraggy Pt is an extensive ledge which uncovers at half tide,and is a continuation of a ragged point bearing S.E.from it,with much kelp around and between them. In bad weather theswell rolls heavily into this cove. It is not recommended for an anchorage.

SCRAGGY POINT,called on charts 8050 and 8259,Hayward Pt,is rather low, the 200 ft curve being 400yds from the beach. The ledges which bare all about it for 100 yds or more give the extreme point a scraggy appearance at low water. Kelp surrounds the point for another 100 yds more.

SCRAGGY ISLAND,3/4 mile N.E.from Scraggy Pt,is named from its appearance. It is low and surrounded with ledges that bare from 100 to 200 yds off at low water,and has some scattered,weather worn trees on its north end with thicker timber at its south end. It is surrounded with kelp which extends in patches to the shore of Kruzof Id. on the west side,with several rocks between it and the island and the mouth of Souhoi Inlet,some of which are high water,and some low water rocks. There is a channel to the westward but it is not recommended.

SOUHOI INLET is well described in the Coast Pilot but not properly located. Its mouth is 1 mile S.S.E.from Scraggy Id and 3/4 mile W.S.W. from the Kane Ids,and is bounded on the east side by Hayward Pt and on the west by a small rocky island. It is about 4 miles long by 500 yds wide,and separates Partofs-chikof Id from Kruzof Id,connecting at high water by a canoe passage with Kruzof Sound. It is comparatively clear until near the head,where there are several ledges bare at low water,and the depth runs from 25 fms at the mouth to 5 fms near the head,with soft bottom in places,so that a fair anchorage can be had in any water desired. It is possible that the S.E.winds suck through strong from Kruzof Sound,but they should be steady in direction,and the sea smooth.

HAYWARD POINT,at the N.W.end of Partofs-chikof Id,is long,low,narrow,and wooded ,with a shorter and somewhat similar point on each side of it,forming two small coves. From a little distance the three ap-

-pear as one point,and at low water the ledges off their ends bare a shorter distance than those off the points to the westward,showing bold -er water.

Hayward Pt,Kane Islands,and a group of small rocky islets extending 00 yds off the northern shore,seem to form the natural dividing line between Salisbury Sound and Neva Strait,though the Coast Pilot gives it at Scraggy Id.

KANE ISLANDS are i/2 mile N.E.by E.from Hayward Pt in mid channel and consist of two principal islands,low and wooded,with several rocks and reefs,all close to except that on the east side which extends 300 to 400 yds in a direction parallel to the channel. They are surrounded by kelp and there is good water close to it's edge. The channel is good on either side of these islands,but that on the north side is always used as being more direct.

North i/2 mile from the West ~~Channel~~ Kane Islet are a group of bare rocks and islets extending 200 yds off the north shore. These islets are 2 miles S.E.by Efrom Pt Kekul and between them and the point the shore is bluff and the hill rises to 2000 feet about 1 mile back. From the first very bluff point i/2 mile south of Pt Kekul a ledge bares at very low tide about 100 yds from H.W.mark,otherwise there is deep water close up after passing the sunken rock off Pt. Kekul.

The current sets in to Salisbury Sound with the flood tide and out with the ebb,and runs from 1 to 2 Knots. At the eastern end the flood divides,one part running into Peril Strait for the first four hours, when it meets the flood coming through that strait,is turned and backed into Salisbury again,making slack water off the mouth of Peril Strait about the time of slack at Sergius Narrows,two hours before H.& L.W. The other part flows to the Sd. through Neva Strait,and when not influ-

-enced by the wind is slack soon after the time of high and low water, but may be carried much longer if the wind is with the old current.

Neva Strait separates Partofs-chikof from Baranof Id. It commences at Hayward Pt and the Kane Ids, and extends in a general southeasterly direction for 7 miles, terminating at Neva Pt, the junction of Krestof Sound, Olga Strait, and Nakwashina Passage. Its width varies from 1 mile at the northwest end to 1/8 mile in Whitestone Narrows near the southeast end. The first 3 miles, to Entrance Id, is a clear open piece of water, but the remainder is more or less foul, requiring careful piloting, especially in Whitestone Narrows where the channel is only 120 feet wide and will not permit of any deviation. The water through the channel is good, 8 to 15 fms, except in Whitestone Narrows where it is 3'/2 fms at low low water, with a rise of I0 to 20 feet. The limits of the channel are well marked with thick kelp, which watches when the current is weak, but much of it is taken under when the current is strong. At low water slack, the limits are best defined by the bare rocks and kelp, to most of which a vessel can pass quite close. The shores are all thickly wooded from the tops to the waters edge.

KANE ISLANDS. Abreast these islands, the strait is 3/8 mile wide and there is a lone, small, round, wooded islet about 75 yds off the north shore which is a good landmark in a fog, for there is none other in this vicinity. This islet is'/4 mile to the eastward of the rocky islets previously mentioned, and 1/4 mile to the eastward of it, is a rock which bares at low water, 15o yds from the shore which bends into the island back of it. A little over 1/2 mile to the eastward of the lone islet is the west point of a cove, 3/8 mile deep by 1/4 mile wide, which near-

-ly all bares at low water,and has a sunken rock surrounded by kelp off the middle of the entrance. A ledge makes off from this point 200 yds in the direction of the sunken rock. An Indian shack stands on the east side. A very small vessel can anchor in the mouth of the cove.

GILMER COVE is on the south shore 1'/2 miles S.E.by E.from Kane Ids It is 300 yds deep by 50 yds wide,with the usual flat at the head, and is a fit anchorage only for small craft. A vessel the size of the Patterson can anchor in the mouth and moor with stern lines to trees.

St.JOHN BAPTIST BAY commences 2'/2 miles to the eastward of Kane Ids. It is 2 miles long by i/2 mile wide at its entrance,but soon narrows to less than i/4 mile,and terminates in the usual flat. The north shore is clear and bold for 1 mile,when some ledges extend 50 to 75 yds from H.W.mark and bare at low water. The south shore,from Entrance Id to where the bay narrows, forms a shallow bight which is filled with kelp and ledges,with two rocky islets about 300 yds off shore. After passing the choke place this shore is clear. The anchorage is in the narrow part after passing the first point on the north side,in 9 to I2 fms. This bay is open to the sea out through Salisbury Sound,and the cliffs of Klokachef are visible from its head,bearing W.'/2 N.,which gives the N.W.winds a clear sweep to the anchorage. In S.E.weather it is said to be subject to severe squalls and williwaws,all of which make the anchorage undesirable.

ENTRANCE ISLAND,small,round,and thickly wooded,is situated I50 yds from Pt Zeal,with a boat passage between. Neva Strait is contracted here to i/4 mile and bends a little more to the Sd. There are some ledges and low water rocks along the south shore about west from this island,and a shoal with 16½ feet,well marked with kelp,lies S.W.by S. distant 350 yds,and 200 yds from the other shore. The channel is bet-

ween the island and this shoal.

POINT ZEAL is comparatively low,wooded,and inconspicuous,as Entrance Id is more prominent.

HIGH WATER ISLAND is 3/4 mile to the eastward of Entrance Id;is val in shape,wooded,and stands out prominent on the N.shore. About half way between the two islands,a flat and some ledges extend out from the north shore nearly 100 yds and outside the line of the two islands. About 175 yds S.W.from the N.W.end of the island,and 150 yds from the south shore,is a shoal or sunken rock with 15 feet over it,well marked with kelp. The channel is between the island and this shoal.

From Entrance Id to Neva Pt,the channel is much constricted,the shoals generally extending from the northern shore except in Whitestone Narrows. To the eastward of High Water Id.1/2 mile,is a second class can buoy,painted red,which marks the southern end of a shoal which is bordered with thick kelp from the island to the buoy. The shingly point to the westward of the buoy has good water close to. Several ledges and flats show at low water both above and below this buoy. To the Ed of this buoy 5/8 mile,is a spindle on a bare rock always uncovered,100 yds from the southern shore. Ledges extend in both directions from this rock nearly parallel to the channel. A shallow bight with a sand flat,nearly bare at low water, lies inside and to the Sd of the spindle. To the Ed of the spindle 5/8 mile,a ledge makes off from the southern shore,small in extent,but enough to bother steamers coming around the old channel in Whitestone with a flood tide.

WHITESTONE NARROWS.Opposite the above mentioned ledge,on the north shore,commences a small flat which extends 800 yds to the Ed. It is the beginning of Whitestone Narrows, the total length of which is about 1/2 mile,and the narrowest part of the channel alittle over 100 feet,

with 3'/2 fms at low low water. There is a red spar buoy on the S.point of the sand flat,and midway between that and Whitestone Pt is an extensive ledge with 2 feet over it at low water,covered with kelp, marked on the north side with a 2d.class can buoy painted black,and the south side with a 1st.class spar buoy painted red and numbered 2 The old and deeper channel is to the Ndof the black can buoy,between it and the first mentioned red buoy,but the turns are sharp and hard to make with a long vessel when the current is running. Beginning abreast of the first mentioned red buoy off the sand flat,the shore on the south side is foul for 1/2 mile to the Edextending from 250 to 450 yds into the channel and almost closing it. This patch is covered with kelp at slack water or weak current,and at low water several ledges are exposed. The channel side of this series of ledges,which is on the starboard hand going to the Ed,is marked by two black spar buoys. The one to the Wd,No 3,is placed in 6 fms of water,and about 20 yds from the 12 ft curve. The one to the Ed,No 1,is in 5 fms of water,20 ft to the Nd of a sunken rock that has two feet on it at low water. The channel is between these two black buoys on the south side and the No 2 red buoy on the middle ledge,the line joining the two black buoys being not more than 100 ft from the red buoy,has an 18 ft patch near the middle between the two black buoys. This channel is clear and plain,when the buoys are in place,and theyare well cared for,with 3'/2 fms at low low water,but should the buoys be gone or out of place it should not be undertaken by any one not having local knowledge and his own marks,except at high water in a small vessel which would go over the dangers. The kelp is not a guide in this channel as it grows clear across. It is,however,thinner in mid channel than on the edges,being cut up by vessel's screws. The current runs through the narrow part of this chan-

-nel parallel to its axis,but divides on the middle ledge,and a part of it passes around Whitestone Pt to the Nd of the ledge. When the conditions are normal,it is slack about the time of H.& L.water at Sitka,with a rise and fall also about the same. This,however,is dependnt on the wind outside which may accelerate or retard the current two or three hours. The flood comes from the Wd and the ebb from the Ed, and at neap tides is weak but at high springs is between 2 & 3 knots.

There is no safe channel to the Sd of these buoys,though at high tide there is plenty of water.

WHITESTONE POINT is on the north side of the narrows,300 yds east of the middle ledge with a good channel between. It is low and rocky around the point,with a ledge extending in continuation nearly one quarter of the way across.

WHITESTONE COVE is north of Whitestone Pt and is a good anchorage for a small vessel,out of the current and protected from all winds. A vessel requiring more than 100 yds swinging room must moor with quarter lines to trees.

WHITESTONE is a rock on the south side of the channel 300 yds to the Ed of buoy No 1. It is about 50 feet wide by 100 ft long at low water,but at high water is much smaller and shows white,about 3 ft above the.water. Between it and buoy No.1,one third of the way from the rock, is a 14 foot patch. 100 yds S.E.by E.from the rock and in continuation of it,is a sunken rock having 9 ft over it,with a small shoal about it, and abreast of this latter,on the north shore,is a shoal extending 100 yds from high water mark,contracting the channel to 100 yds. Both of these are plainly marked by kelp at slack or weak current. 300 yds east of this ledge is a high water rock close to the north shore

NEVA POINT,the end of a ridge between it and Whitestone Pt and the

entrance to Neva Strait on that side,is rather low and thickly wooded, with a ledge extending 200 yds S.S.E.from it,the end of which is marked with a spindle surmounted by a barrel. On the south shore S.W.by W. from Neva Pt,and W.S.W.from the spindle,is a very distinct high water sland which is a leading mark crossing from Olga Strait. Due south from Neva Pt,dist.3/8 mile,and 600 yds from the spindle,is a high water rock of small extent,which may,however,cover at extreme high tide. Thr -ee hundred yds to the Ed of this rock the Sound Islands commence which,with the rock,divide Krestof Sound from Neva Strait. N.E.of and clo -se to Neva Pt is a cove about 1/4 mile square,but it is not an anchorage. S.E.by E.'/2 E.from Neva Spindle is a cove,off the N.W.end of Krestof Id,south from Olga Pt,where an anchorage can be had but it is not good,the bottom being rocky and irregular.

Neva Strait ends and Nakwashina Passage begins between Neva Pt and Olga Pt,while Olga Strait commences between Olga Pt and Halleck Pt.

The ship channel turns to the N.E. at Neva Pt until it reaches Olga Pt where it again resumes its general E.S.E.direction through Olga Strait.

OLGA STRAIT separates Halleck Id from Krestof Id,and is 4 miles long with an average width of 1/4 mile,joining Sitka Sound between Krugloi Pt and Eastern Pt. It is generally clear with a depth ranging from 7 to 20 fms in mid channel,and a vessel can anchor anywhere in its length. There is a bar or shoal,however,1 3/4 miles east of Olga Pt, and 3/8 to 1/2 mile east of Creek Pt,and between two small streams,one on each side,with 16 ft over it at extreme low water. It shoals clear across,but with deeper water on both sides;the deepest being on the north side. Kelp grows all over the shoal,but is rather fine,and watch es only at low water about slack. The flood tides meet from Salisbury

and Sitka Sounds in this vicinity,and it is thought that this bar may have been formed by the silt carried down in the many streams and deposited here by the meeting of the currents,though by a careful examination with the lead,the bottom was found to be hard and in some places it seemed to be rocky. A little more than 3/4 mile west of Eastern Pt is a shoal patch,off the south shore,extending about one third of the way across. This,too,is marked with kelp which watches only with a weak current. On both sides of the channel are small flats,where streams empty,that bare at very low water. The shores are fringed with kelp except off these flats.

OLGA POINT,the N.W.end of Krestof Id,is 9/16 mile E.by S.from Neva Spindle,and is rather low,round,and wooded,with good water quite close to it. In the cove south of this point are several high water rocks but they are close to shore and connected with it at low water.

HALLECK POINT,the west extremity of Halleck Id. ,is N.E.BY E.1/2 E, 3/4 mile from Olga Pt. It is a small rounded peninsula formed by a little cove to the Sd and a bight in the coast to the Nd. A very small vessel can find an anchorage in this cove,but there is a fair anchorage about the middle of the bight for any vessel in 9 to 12 fms,1/8 to 1/4 mile off shore.

ERKEK POINT is on the north shore of the Strait 1'/4 miles from Olga Pt. It has good water close to it,and a small stream comes down behind it. From this Point to the east end the immediate shores are low,and bare well out at low water,but rise gradually back to 1500 and 1800 ft.on Halleck Id on the north and Krestof Id on the south.

KRUGLOI POINT,at the S.E.extremity of Halleck Id,is rather low, narrow,and rocky at the end. Three eighths of a mile to the Wd is a

low rocky point, to the Ed of which is a cleared spot used by the Indians for raising potatoes. A shack stands near the middle of the clearing and in front of the shack stands a lone dead tree, having the appearance of a flag staff, conspicuous from well to the Ed.

EASTERN POINT, S.S.W. 5/8 mile from Krugloi Pt, is the N.E. extremity of Krestof Id. It is low and wooded and has the appearance of an island close under the shore, as the land breaks away ~~from~~ to the Sd immediately behind it.

NAKWASHINA PASSAGE begins at the western end of Olga Strait and the eastern end of Neva Strait, between Olga and Neva Pts, and extends around Halleck Id to the Nd and Ed, separating it from Baranof Id, and joining Sitka Sound at its N.E. corner between Krugloi and Dog Pts. It is about 11 miles long.

THE WEST ARM extends from its beginning, N.N.E. for about 2'/2 miles with an average width of 3/4 mile, and has good water through the middle. Close to the north shore there are some ledges that bare 200 to 300 yds off the prominent points, and some high water rocks close to. The most prominent of them being 3/4 mile and 2 miles from Neva Pt. The latter bares 300 yds and marks the entrance to a cove north of it, where a small vessel can find an anchorage in 8 to 10 fms. The south shore is clear except a flat 1/2 mile long and 200 to 300 yds wide commencing 1 mile north from Halleck Pt. N.N.E. 1'/2 miles from Olga Pt and 300 yds off the west shore is BART ISLAND, which is bare, low, and rocky. After passing this island the water does not exceed 20 fms, and soon drops to less than 10 fms, so that an anchorage can be had at any place. N.E. by N. 3/4 mile from Bart Id are three, bare, rocky, islets in line and nearly in the middle of the passage, leaving it about 300 yds wide on each side. From this point it runs in a general E.N.E. direction for 3'/2 miles to

Allan Pt. The channel is winding, and in many places is contracted to 100 yds or less by immense flats and meadows, formed by the silt from the mountain streams emptying into it, and by the meeting of the tides in this part, which prevents the currents from carrying it out. At high ter these flats are covered, but at low water they are bare, showing the narrow winding channel which is only suitable for small craft.

THE EASTERN ARM is over 5 miles long, nearly north and south, (and about one mile wide except at its junction with Sitka Sound) where the Beehive and Crosswise Ids contract it to 1/4 mile. The water in this arm is deep, and the shores comparatively clear, with 20 fms 300 yds from the flats.

About 1/2 mile south of Allan Pt on the west shore is a cove, 1/4 mile deep by the same wide, where an anchorage can be had in 10 to 15 fms, ,but it is open to the S.E. and is not a good anchorage. The rest of the west shore to Beehive Id is clear with good water close to, except one high water rock 7/8 mile south from Allan Pt, and 200 yds off shore.

BEEHIVE ISLAND is mound shaped as its name indicates, and is connected with Halleck Id by a spit at extreme low water. There is quite a bight to the Nd of it but the water is deep and the anchorage is not good. There is a cove between Krugloi Pt and this island, where a small vessel can find a good anchorage in 5 to 8 fms of water with 100 yds swinging room, and trees to carry mooring lines to if necessary.

CROSSWISE ISLAND, so called because it lies across the mouth of ıkwashina Passage, separates it from Sitka Sound. It is about 200 ft high and 120 yds long, cut in two by a high water passage. There is a narrow but deep passage between this island and Beehive, and the water is deep close to, all around this island.

DOG POINT, the S.W. point of Lisianski Peninsula, and the S.E. entran-

-ce point to Nakwashina Passage, is low and partly cleared, with an Indian shack near its end. The two high water rocks lie about 50 yds off the north side but the water is good close to the channel side of the point.

About 1 3/4 miles north from Dog Pt, is a small wooded island, a little less than 1/4 mile off the east shore, with two bare H.W. rocks lying close to its NE. and SW. sides respectively. Three hundred yards S.E. of this are two small islands nearly 200 yds off shore, and 300 yds N.E. is a wooded, high water island, connected with the point at low water. To the Nd of this point is a bight 1 mile wide, into which a rather large stream empties, forming a flat, which extends 400 yds out from high water mark. This bight is abreast of the low neck of land forming Lisianski Peninsula and separates Nakwashina Passage from Katlan Bay by 1/2 mile, over low ground. The water is deep close up to the flat, but an anchorage can be had on the northern side in 5 to 20 fms depending on the swinging room required. The northern side of this bight terminates in a prominent point and ridge, the latter about 200 ft high. About 3 miles from Dog Pt, and to the Nd. of the last described point, is another bight in which an anchorage can be had, with fair S.E. protection, in from 10 to 20 fms, depending again on the swinging room required, but the bottom is rocky. North from this bight 1'/2 miles is another prominent point which is 4'/4 miles N.'/4 W. from Dog Pt and 1 mile S.E. by E '/2 E from Allan Pt. N. 3/4 E., dist. 1/2 mile, from this point are two bare rocks, the southern one covering at extreme high water, but the northern one never covers. Between this point and Allan Point the shore line forms an extensive bight into the head of which empties one of the largest mountain streams, with a sand and gravel flat, 3/4 mile long by 1/2 mile wide, bordered by considerable grassy meadows between the flat and the tree

line. This stream abounds in salmon and trout in the season,and there are several shacks on each side of it,near the tree line,used by the Indians in the season for curing their fish. The N.W.shore of this cove is steep and rocky with ledges close to. A rocky islet lies to the north side of the channel 1/2 mile N.by E from Allan Pt,and another on the south side of the channel a little more than 100 yds N.E.from Allan Pt. Northwest from these two islets and Allan Pt,in the mouth of the narrow North Arm,is a large flat,the most extensive one in the Arm.

The clearest anchorage and the best holding ground in this Arm is between these islets and Allan Pt in from 3 to 20 fms of water depending on the size of the vessel.

KRESTOF SOUND lies N.E.of the middle of Kruzof Id,between it and Partofschikof and Krestof Ids. It is 7 miles long N.W.and S.E.with an average width of about two miles. The middle is a large clear sheet of water,having a depth of about 40 fms,with an Arm extending two miles to the N.W. which connects with Souhoi Inlet by a high water passage 1 mile long. The depth in this Arm is 15 fms and less,with a group of rocky islets and an extensive flat near its head. The S.E.end is well filled up with the Magoun Ids,leaving a channel on either side of them, and one for small boats through the middle,leading through Hayward Strait into Sitka Sound at its N.W.extremity. The shores are generally low and wooded,with sand or gravel beaches of small extent. The entrance from the N.E.is from Neva Strait between Sound Ids and Partof PT. and is 1/2 mile wide,divided by the H.W.rock described under Neva Strait with a channel on either side, but the best is to the Wd and is 500 yds wide. There is also a narrow but clear channel east of Sound Ids.

SOUND ISLANDS consists of two round topped,wooded,islands in continuation of Neva Strait,visible above Whitestone,and conspicuous coming through the narrows. The larger one is especially rounded on top. There are two high water rocks close to;one off the N.W.end of the maller island and the other off the N.E.end of the larger one.

PARTOF POINT,the S.E.end of Partofschikof Id,is bluff and wooded, about 500 ft high at I00 yds back from the point,making it conspicuous. The water is deep close to the point. About 3/8 mile south from the point is a bare rocky islet with ledges close about it,and 200 yds further in the same direction is a group of rocky islets and ledges covering an area about 200 yds square. These,with the rock in the entrance, comprise all the dangers in this part of the Sound. Northwest of these rocks and between them and the shore are two round,wooded islets,not named,but of no importance.

S.by W.2 miles from Partof Pt,near the S.W:shore,is a group of 7 islands,not named,generally low and wooded. There is a narrow passage between the two larger ones and the shore,and a small vessel may find an anchorage among them.

S.BY E.1/2 mile from Sound Ids is a small wooded island,connected at low water with a smaller wooded islet,,S.W.,distant about 100 yds.

About 3/4 mile S.S.E.'/2 E.from these two islands,and a large '/4 mile off shore is a bare rock,with a small wooded island and a low water rock close to it,towards Krestof Id. One mile in the same direction as the bare rock and 200 yds off shore is Brady Id and a larger wooded Id These are all nearly in line with the west end of Sound Ids and the channel is to the Wd of them. There is a channel on the east side of Brady Id but it is narrow,with considerable kelp on both sides, and a rock off the east side of the island

while that to the west side is wider and clear.

DOUBLE ISLAND,named from its appearance,is S.BY W.'/2 W.1'/8 miles from the bare island mentioned above. It is wooded,with a low neck of land between the two higher ends. About 3/8 mile E.by S. from this sland is Mills Id,round and wooded,and a little to the Sd of the latter is a small rocky islet. The channel is to the Ed of these islands.

MAGOUN ISLANDS. This name is applied to the whole group of irregular islands and rocks which almost choke up the S.E.mouth of Krestof Sound. At extreme low water most of them are connected by reefs,leaving a fair channel to the Ed,a poor one to the Wd,and a narrow boat channel amongst the islands,with quite a basin in the middle.

EASTERN CHANNEL enters to the Ed of Double Id and between Mills and Brady Ids. It separates Magoun Ids from Krestof Id.

de GROFF BAY is east of Magoun Ids,through a narrow passage opening to the Ed,about half way through theeastern channel. The entrance does not exceed 200 ft wide and is grown over with kelp,but 18ft can be carried in,and when inside it opens up 1'/8 miles long by 3/8 mile wide. A smaller lagoon connecting by a series of rapids with the channel,lies immediately to the Wd of this bay,the dividing strip being narrow and in some places devoid of trees.

One half mile S.E.of the entrance to de Groff Bay,on the west side of the channel is a rock awash at half tide. It is well marked by kelp nd nearly in the middle of the width of the channel,which begins to widen to the Nd of it. This rock is nearly opposite a bight in Big Magoun Id west of it.

WESTERN CHANNEL is to the Wd of Double Id and all the Magoun Ids except the two western ones,of which it passes to the Ed. It joins the Eastern Channel at Points Brown and Rob,where they form Hayward Strait.

This channel is circuitous and has a sharp elbow about the middle of its length, around a small lone island opposite to which on the south shore is a broad open bight with an extensive flat, called in the Coast Pilot Port Krestof, but locally known as Crab Bay. It is a short distance across the neck to Shelikof Bay, on the outside of Kruzof Id, and the land is low between but thickly wooded, with an Indian trail connecting them.

An anchorage can be had off this flat with good holding ground in from 5 to 15 fms, but care should be taken not to get on the flat at high water.

POINT BROWN is rather low, rocky, and wooded but bluff, with ledges showing close to ~~through~~ at low water. There is one extending W.N.W. into Krestof Sound about 300 yds, in continuation of the shore from S.E. and behind this is a sand flat with an Indian shack.

POINT ROB is bold and rocky at the waters edge but wooded back. There is a small ledge and three low water rocks close to the point, with a cluster of rocks in the middle of a bight 600 yds to the Ed. None of these interfere with the channel which is bold close up to this and Pt Brown.

HAYWARD STRAIT is about 1'/2 miles long and '/2 mile wide where it connects with Krestof Sound, widening into the broad expanse of Sitka Sound to the Ed. There is a good channel through it, but the shores are studded with rocks and reefs, esppcially the S.W. shore where they extend nearly half way across, and the S.E. shore where they extend well off

GUIDE ISLAND, situated at the N.W. extremity of Sitka Sound is a guide to Hayward Strait, and the entrance to Krestof Sound. It stands alone, '/2 mile south of Kresta Pt, is wooded and has extensive ledges off both N.W. and S.E. ends.

A line from the S.W.side of this island to Pt Rob carries good water. The channel is to the S.W.of the island.

KAMENOI POINT,the S.W.entrance point to Hayward Strait,is low and rocky,with rocks and reefs extending 5/8 mile north fron it,and '/2 ile off shore,nearly half way across the strait.

TIDES and CURRENTS:The flood tide enters Krestof Sound from Salisbury Sound through Neva Strait,and when the water has risen high enough,through Souhoi Inlet. Also from Sitka Sound through Hayward Strait, and they meet somewhere in the Sound. There is not much current in the N.W.part of the Sound,but it is quite strong through Hayward Strait and the narrow channels at the S.E.end. It is probably slack at about the time of high and low water at Sitka,depending somewhat on the prevailing winds.

KRESTOF ISLAND,lies between Krestof Sound on the west,Olga Strait on the N.E.,and Sitka Sound on the S.E. It is of an irregular triangular shape,considerably broken,and densely wooded,rising to about I800 ft near the eastern shore. A spur consisting of three knolls projects to the Ed from this ridge and forms Eastern Point. de Groff Bay extends more than half way through the Island with comparatively low land between its head and Olga Strait.

HALLECK ISLAND separates Olga Strait from Nakwashina Passage and is a little greater in area than Krestof but not the same elevation; `800 feet. It is also considerably broken and is heavily wooded. Off its S.E.point lie Beehive and Crosswise Ids There is probably a lake near the S.E.end of the island as there is a small waterfall near that end ,on the Olga Strait side,which always flows.

SITKA SOUND.(The description in the Coast Pilot is good as far as it goes.) The north end of Sitka Sound is from 5 to 6 miles square

between Baranof Id on the east,Krestof Id on the north,and Kruzof Id on the west. There are a number of islands,rocks,and reefs in it,but there is a large open sheet of water on the west side,and a comparatively clear channel on the east side,divided by an almost continuous chain of islands,which breaks the heavy seas and swells that roll into the outer sound,and make this a smooth passage from Olga Strait to Sitka. From Eastern and Krugloi Pts the axis of this channel runs S.E.by E.for nearly three miles when it changes to S.S.E.for 2 miles,then changes again to about S.E.by E.^{1}/2 E.for 4 miles to Sitka. The first 3 miles is through clear,open,deep,water between Siginaki and Big Gavanski Ids to the Wd,and Lisianski Peninsula to the Ed,with bold shores and no dangers. The next 2 miles is between the Gavanski Ids on the west and Baranof Id on the east,and is clear in the middle,but Old Sitka Rocks on the east,and some rocks off the S.E.end of Little Gavanski Id are to be avoided. The last 4 miles is between Baranof Id on the east and middle;Kasiana,Apple,and Japonski Ids,with a great many islets,rocks, and reefs on the west;all of which form a good natural breakwater. This channel is also good with plenty of water up to Channel Rk and the two buoys that mark the entrance to the Western Anchorage. It is well to keep near the middle of this channel as there is a rock bare at low water off the S.E.end of Middle Id,and another one off the S.E.end of Kasiana Id,both plainly marked by kelp,and the eastern shore is shoal close to. This channel is,however,in no place less than 600 yds wide. From Channel Rk and the buoys to Sitka,the channel is narrow but the water is good except across the flat abreast Harbor Rk,marked by a spindle,where more than 14 ft can not be depended on at extreme low water, and there may be some boulders with 12 ft. The channel to the Ed of the spindle has deeper water,over 3 fms at extreme low,but it is narrow

and the turn is short for a long vessel,so that most vessels going in that way wait until the tide is high enough to cross the flats. Vessels going to the wharf should go with the head to the Ed on account of a backbone of rock quite close to on that side,over which it is not well to put the screw and rudder. Then it is fairer to move out that way, turn in the lower bay and return if there is water enough over the flats,or if not,pass out the middle or eastern channel and return by the western channel,thus going around the flat.

SIGINAKA ISLANDS are a group of some two dozen islands and rocks, covering an area of about 1 mile in diameter,lying close to the S.E. from Eastern Point. They are comparatively low and generally wooded, with several channels between them suitable for small craft.

BIG GAVANSKI ISLAND lies a little more than '/2 mile S.E.from the S. Siginaka Id and is 3/4 mile long by '/2 mile wide,less than 200 ft high and thickly wooded. There is a wide and deep channel between it and S.Siginaka Id. About 300 yds west from the north point of the island and 50 yds off shore,are two rocks that bare at low water,and off the south end,between this and Little Gavanski are several rocks,extending more than 100yds off,some of which bare at low water and some do not.

LITTLE GAVANSKI ISLAND is south from Big Gavanski and separated from it by a narrow channel which is good only for boats. It is about '/2 mile long by 1/4 mile wide,rather low and wooded. There is a ledge extending off the north and west end of the island about 100 yds,and off the south side are a number of rocks and ledges,some bare and some sunken,extending 300 yds off shore. S.S.E.'/3 mile from the S.point of the island is a bare H.W.rock showing white,and half way between this and the point is a similar but smaller one. S.W.3/4 S.,dist.800 yds from

this same point and nearly in the middle of the channel between this and Middle Id.is a rock which bares at low water,and there is more or less kelp all through this channel,though there is good water.

LISIANSKI PENINSULA separates Katliana Bay from Nakwashina Passage, nd is rater high,thickly wooded and lumpy. It has the appearance of being made up of a lot of mounds ranging from 500 to 1500 ft high.

DOG COVE,1/4 mile to the Ed of Dog Pt,is formed b y a high water island and gives good protection in southerly weather to a small vessel, out of the current. The Patterson moored here,with one anchor in the mouth and quarter lines to trees,and had excellent protection.

LISIANSKI POINT,the northern entrance point to Katliana Bay,is high,bluff,and bold.

KATLIANA BAY enters between Lisianski Pt and the north poin' of Old Sitka Harbor,and extends in a gentle curve to the Nd and Ed into Baranof Id for about 4 miles. It is about 1/2 mile wide at the entrance,soon narrowing to 1/3 mile,and then expanding until it is nearly 1 mile wide at its head,with shores high and bluff on all sides except at the heads. Two and a half miles from the entrance an Arm extends to the Wd 1'/2 miles forming Lisianski Peninsula. On the north side of this Arm is a group of small wooded islets and rocks,otherwise the bay is entirely clear of dangers,with deep water to the flats and no anchorage in the East Arm,and to the islets in the West Arm. A large stream enters at the head of the East Arm,with considerable grassy meadow about it. There are several shacks about the middle,used by the Indians in the hunting and fishing seasons.

A fair anchorage can be had in the West Arm to the Nd and Wd of the west islet in 15 to 20 fms,and a small vessel can anchor anywhere in the narrow part in 5 to 10 fms.

HARBOR POINT,1 mile S.E.by S.from Lisianski Pt,is low with a high water rock on the point. The larger trees have been cleared away from the immediate vicinity and to the Ed.

OLD SITKA HARBOR,between Harbor point and the south entrance to Katlian Bay,is a shallow bight open from south to north,via west,with 20 fms or over until quite closeto shore. The holding ground is good but the westerly winds and some sea have a fair sweep into it. There is a sunken rock 150 yds off the north shore,just beyond the end of the sand flat,and on range between the bold,bluff,north point of the harbor and the first point south of the stream. The sand flat is extensive with a good sized stream emptying into its head,and some Indian shacks on the first point south of the stream. Between this point and Harbor Pt is another smaller stream with a small flat making out from it,and between these two flats is an anchorage for a small vessel in 10 fms. This is the site of the old Russian settlement and trading post of New Archangel,which was destroyed by the Indians in 1802,when the settlement was moved to the present site of Sitka.

HALIBUT POINT lies 1'/2 miles S.by E.'/4 E.from Harbor Pt and is low with a ridge rising immediately back of it,but the two points are not intervisible. A small stream empties just to the Nd of the point and forms a sand spit extending 200 yds into the channel. Half a mile to the Nd,extending 200 yds off shore and in line with Old Sitka Rocks, is a small prominent island with a few straggling trees on top,and some rocks close to on the north end. There is a good but narrow channel between this island and Old Sitka Rocks,and the island is a guide to it

About 300 yds S.S.E.from Halibut Pt is a small woodedhigh water island extending about 150 yds off shore,with a rock close to its south end that bares at extreme low water,but the water is good quite close

to on the channel side. The shore from this island to the buoys abreast of channel rock is low with stretches of sandy beach, but rises immediately back to a ridge 2500 feet high. Some of these sand beaches bare at extreme low tides 200 yds off shore and theone near the black buoy ven more.

OLD SITKA ROCKS are a group of about a dozen high water and sunken rocks lying off the east shore about half way between Harbor and Halibut Pts, extending W.N.W. and E.S.E., the farthest one off being just 1/2 mile from shore. The northern and largest one has two or three small scraggy trees on it but the rest are bare. They lie in the middle of what would otherwise be the natural channel, but the main channel is to the Wd with a narrow channel to the Ed, between the eastern Sitka Rock and the island, near the shore, herebefore described. This latter channel is sometimes used in thick fog when the eastern shore can be picked up and followed.

Harbor Pt bears from the outer Sitka Rock Nby E.'/2 E. dist. 1 mile and 100 yds. Eight of these rocks always show at high water, connected in four groups at low water.

MIDDLE CROW and GAGARI ISLANDS, (C.S. Chart #8259) (called IABLOSH, (Apple)Blue , and Jet, on #8240), with their attendant smaller islands, rocks and reefs, not only separate the channel from the main part of the sound, but with Rocky and Halibut Pts divide the main sound from the orth end. Middle Island is the largest and most prominent island in North Sitka Sound, and is nearly 2 miles long and I mile wide. It is well wooded and rises to a height of 800 ft near its northern end. Crow and Gagari are low and well wooded, with deep water passages between them and Middle Id, but there are rocks and reefs, so that they are only fit for small craft. The ground is more or less foul all around close

to these islands. The farthest off dangers on the north side are a rock that bares at low water,600 yds N.W.by N.from the north end of Middle Id,another one 300 yds off the N.W.end of Crow Id,and a sunken rock 800 yds S.W.from the same point and 300 yds N.W.from another small island. Between Gagari and Beloi Rk the ground is all foul,as it is also to the Sd of the group for 1'/2 miles,though there is a deep water passage,not buoyed, but well marked at low tibe,between these,Kasiana, and Apple Ids.

BELOI ROCK (white rock),3/8 mile west of south from Gagari Id,is a very prominent whitish rock,about 75 ft high,visible well to the Sd in Sitka Sound. The water is good quite close to this rock to the Sd and Wd.

KASIANA GROUP lies E.S.E.from Middle Id and consists of a number of wooded islands and islets nearly all connected at low water. A reef well marked with kelp extends from the N.E.side of these islands in a S.E.direction for 1100 yds where it terminates in a rock,bare at low water and spring tides. This is on a line between the east tangent of KASIANA Ids and the middle of Battery Id.

Apple Islets,S.S.E.of the Kasiana Group,are low and wooded with an extensive ledge around them which bares at low water. Outside of these islets is a chain of islets,rocks and reefs,5 miles long E.by S.and W.by N.and 1 mile wide,extending from the south end of Middle Id to the Sd of the anchorages,forming a fair natural breakwater to this part of the channel and the anchorages. In southerly weather the swell does, however,roll in through the west and middle passages to create some sea in the east and west anchorages,while Japonski Id cuts it all off from the middle,which is small and only fit for small craft unless moored head and stern.

SEE PACIFIC COAST PILOT,ALASKA, Part I.

SITKA SOUND N.W.is a clear open sheet of water through the middle with depths ranging from 20 to 100 fms. The passage between Big Gavanski Id and South Siginaka Id is over 1/2 mile wide and clear close up on both shores,except one low water rock close to the north end of Big Gavanski. There is good water also between Middle and Little Gavanski Ids,but as there are rocks,reefs,and kelp through it,it is not recommended except at low water slack when all dangers show or are marked by kelp.

KRESTOF POINT,3 miles S.W.by W.'/4 W.from the north end of Big Gavanski and 1 5/8 miles N.E.'/4 E.from Kamenoi Pt,is the southern point of Krestof Id and the N.E.entrance point to Hayward Strait. It is a promontory,comparatively low,thickly wooded and rugged around the shore,(with islets, rocks, and ledges to the westward extending 3/8 mile off shore) but not into the channel proper,which is to the S.W.of Guide Id, 3/8 mile S.'/W.from the point. E.by S.from the point,dist 500 yds,is a sunken rock usually showing a breaker except at high water and smmoth sea. Between this and Eastern Pt are several bights,but nothing of importance except Promisla Bay.

PROMISLA BAY is east of a peninsula terminating in Krestof Pt. It is 1 mile deep,W.by S.,and 1/2 mile wide,with a small wooded island in its mouth and a bare high water rock 500 yds N.E. by E.'/4 E.from the eastern point of the island. The depth ranges from 15 to 20 fms,and a fair anchorage can probably be had near its head in the former depth, though the bottom is rocky.

ROCKY POINT is 3 miles nearly south from Kamenoi Pt and 2 miles S. W.by W.from Beloi Rk. It is an ugly rocky ledge which bares '/2 mile from high water mark and the tree line at extreme low water,with bold water close to the ledge,but it should be given a good berth at any

time except extreme low water,when its end can be seen.

POINT of SHOALS,5 miles S.'/2 E.from Rocky Pt,appears from any direction as long,low,and wooded. The wast shore of Sitka Sound,between this and Kamenoi Pt,a distance of 8'/2 miles,is low with some streaches f sand and gravel beach,and several rocky points and ledges extending off from 1/4 to 1/2 mile from the high water mark,and the shore should be approached with caution closer than the latter distance. The land for 2 miles back has the appearance of a low plain with occasional mounds,rising gradually to the foot of Mount Edgecombe and the Camels Back.

LOW ISLAND,1/2 mile E.N.E.from Point of Shoals,is a low bare flat rock,500 yds in diameter at low water,over which the seas wash at high tide,in heavy weather,with shoal water and kelp extending 1/2 Mile around it. There is no good passage between the island and the Pt of Shoals. To the Nd and Wd of the island about 1 mile an anchorage can be had in from 4 to 15 fms,which is good in fair weather but the bottom is hard and the S'ly seas swing into it.

VITSKARI ROCKS consist of a mass of bare rocks and reefs,most of which show at extremely low water but cover at extreme high,1 mile long W.by N.and E.by S.,and 1/2 mile wide. The largest rock,which may be called an island,bears E.N.E.'/2 E.from Pt of Shoals,distant 3 miles, and its south side bears from the south side of St.Lazaria Id N.E.'/2 E. which is the course to be steered between them. It is about 20 ft abov high water and contains the beacon described in the Coast Pilot. There is a good channel over 1 mile wide between Vitskari and Low Ids.

All distances,bearings,and depths should be checked as soon as a proof sheet is struck off.

For further description see Pacific Coast Pilot,Alaska, Part I,and Report of Lieut.Comdr.W.I.Moore,U.S.N. Season of 1893.

Very respectfully

W.I. Moore

Lieut.Comdr.U.S.N.

Chief of Party.

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

22868

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 22868

State . S. E. ALASKA . . . . . .

General locality . . ~~SALISBURY SOUND~~ Baranof I. — NW. Coast . . . . . .

Locality . ~~PT. KAKUL, BARANOF ISLAND~~ Salisbury Sound — Off Pt. Kakul . . . . . .

Chief of party . A. M. SOBIERALSKI . . . . . .

Surveyed by . AUGUSTUS P. RATTI . . . . . .

Date of survey . JULY 6, 1925 . . . . . .

Scale . . 1 - 10000 . . . . . .

Soundings in . . . MLLW . . . . . .

Plane of reference . . MLLW . . . . . .

Protracted by P.R.Hathorne . . . Soundings in pencil by . . . . .

Inked by . . P.R.H. . . . Verified by . . . . . .

Records accompanying sheet (check those forwarded):

Des. report, X Tide books, ... Marigrams, ... Boat sheets,

..... Sounding books, 2 Wire-drag books, ... Photographs.

Data from other sources affecting sheet . . . . . .

Remarks:

2286a

Descriptive Report to accompany Wire Drag Sheet of Kakul Rock, Salisbury Sound, S. E. Alaska. Scale 1-10000.

2286a

Hydrographic sheet No. 2286 shows a rock with 16 feet (4.9 m) over it, 350 yards southwestward of the outer and larger island at Point Kakul, Salisbury Sound.

This rock was found non-existant by three lines of wire dragging.

Length of drag used was 900 feet in each case; length of towline 59 meters; length of section 300 feet. The drag was set to 36 feet in each case; reducing to 29 feet for the first line and 30 feet for the second and third lines. The light wire drag was used for all three lines.

The drag was towed at a speed of 1.5 knots.

The "dual control" system was used entirely.

C. & G.S. chart #8282 was used for ~~both~~ boat sheets on both launches.

Hydrographic launches were used as Guides and End.

Respectfully submitted

Augustus P. Ratti

Augustus P. Ratti
Jr. H & G Engineer

E.C.

ADDRESS THE DIRECTOR
U.S. COAST AND GEODETIC SURVEY

AND REFER TO No. 3-VEC

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
WASHINGTON

August 3, 1926.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet H-2286a

Examination of Kakul Rock, Baranof Island, Alaska.

Surveyed in 1925

Instructions dated Feb. 4, 1925 (SURVEYOR)

Chief of Party, A. M. Soberialski.

Surveyed by A. P. Ratti.

Protracted and inked by P. R. Hathorne.

Verified and Area and Depth Sheet by R. L. Johnston.

1. This survey comprises a wire drag examination of Kakul Rock ($2\frac{3}{4}$ fathoms) located by a survey party in 1896 and plotted on H-2286 (see position 1, i day vol. 4 Cosmos).

2. The records failed to conform to the General Instructions in the following respects:

   a. The end launch data was not transcribed into the guide launch records, nor was any space left in the guide launch records for such transcription. When dual control is used, the columns headed angles should be used for both guide and end launch angles, the left hand column generally containing the guide launch angle and the right hand column the end launch angles.

   b. The use of the word "same" or "do" over several pages to designate signals is objectionable. Names should be entered at least at the beginning of every page.

   c. The direction to the buoy (in the end launch records) given by the designation: B - Gun 100-30 instead of using the standard method of + and - viz: Gun + 100-30.

   d. No tests for left are recorded and no statement thereto was entered.

3. The work conforms to the requirements of the Specific Instructions.

The area within a radius of at least 100 meters of the supposed location of the rock was dragged with the light wire drag to an effective depth of 30 feet by 3 passings of the drag with no indication of grounding. This together with the fact that lighthouse tenders have never been able to find the rock (see #17 of instructions) would seem to be practically conclusive that the rock does not exist in its present charted position. It is to be observed, however, that an inspection of the original records for this rock, discloses sufficient evidence that the party actually found a rock - two distinct soundings of 16 feet and two of 22 feet having been obtained besides a number of other soundings ranging from 4 to 9 fathoms. The locus of the right angle for the rock passes through the shoal making out to the southwestward of Point Kakul and by changing the left angle 10° the position of the rock would fall on this shoal inside the 10 fathom curve and in depths conformable to those obtained around the rock. It is ... suggested that whenever work is done in this vicinity this shoal be examined and preferably by a wire drag. For the present it seems safe to remove the rock from the charts, particularly since buoy N-2 marks the end of the shoal on which the rock is probably located.

4. Character and scope of surveying and field drafting excellent.

5. Reviewed by A. L. Shalowitz, July, 1926.

Wire Drag Sheet No 2286-a

This work was done to prove the existence or non existence of Kakul Rock. The position in which the rock is shown on Hyd 2286, has been cleared three times by the drag. Once with an effective depth of 29 feet and twice with in effective depth of 30 feet. As there is nothing in the records to indicate that the drag was not functioning properly it is evident that there is no rock in this position.

R. L. Johnston

WW 3

June 3, 1926.

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in
1 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 2286A

Locality: S. E. ALASKA.

Chief of Party: A.M.Sobieralski in 1925.

Plane of reference is
9.8 ft. on tide staff at Sitka.

For reduction of soundings, condition of records satisfactory
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted
3. Time meridian not given at beginning of day's work.
4. Time (whether A. M. or P. M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
x8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

G Rude

Chief, Division of Tides and Currents.

2286b

Diag. Cht. No. 8252-1

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., *Director*

State: Alaska

DESCRIPTIVE REPORT

~~*Topographic*~~
Hydrographic

WIRE DRAG
Sheet No. 2286b

LOCALITY

W. Coast of Baranof Island

Entrance to Kakul Strait

1926

CHIEF OF PARTY

A.M. Sobieralski

GOVERNMENT PRINTING OFFICE

2286b

Form 537
11—5812

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WIRE DRAG

HYDROGRAPHIC TITLE SHEET

REG. NO. 2286b

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 2

REGISTER NO. 2286b

State Alaska

General locality West Coast Baranof Island

Locality ~~Kakul Strait~~ Entrance to Kakul Strait

Scale 1-10,000 Date of survey October, 1926

Vessel Str. SURVEYOR

Chief of Party A. M. Sobieralski

Surveyed by Augustus P. Ratti

Protracted by Ira T. Sanders

Soundings penciled by Ira T. Sanders

Soundings in fathoms ~~feet~~

Plane of reference M.LLW Sitka

Subdivision of wire dragged areas by Ira T. Sanders

Inked by

Verified by

Instructions dated August 4, 1926

Remarks:

GPO

Descriptive Report

to accompany

Wire Drag Sheet #2 W.D.

In accordance with supplementary instructions dated Aug.4 an investigation was made in the vicinity of Kakul Rock, entrance to Kakul Strait to determine the correct position of the rock.

Some triangulation stations were recovered and a few signals located by plane table cuts and some sextant cuts. The plane table sheet was later used for the smooth hydrographic sheet.

The locality where Kakul Rock had previously been shown was dragged to an effective depth of 43 feet. As tide and weather conditions were favorable the drag was carried through Kakul Strait. The drag was tested for lift during the operation.

In addition to the drag work, a few soundings were taken inside of Kakul Rock Buoy to determine the correct position of Kakul Rock. The rock is quite plainly visible and the least water (2-1/2 fathoms) could easily be located. At this position the angles to Rip Ro and Dun are 28-11, and 25-08. It will be seen that the left angle is approximately 10°less than the left angle in the original position and this is probably the cause of the erroneous location of the rock. Consequently, Kakul Rock should be shown inside of the Kakul Rock Buoy as located this year instead of where previously shown.

The 2-1/6 fathom sounding shown on 135 was taken from the end launch close to the rocks off Channel Islets.

Sitka tide gauge was used for the reduction of soundings.

Duplicate

Descriptive Report

to accompany

Wire Drag Sheet #2 W.D.

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In addition to the drag work, a few soundings were taken inside of Kakul Rock Buoy to determine the correct position of Kakul Rock. The rock is quite plainly visible and the least water (2-1/2 fathoms) could easily be located. At this position the angles to Rip Ro and Dun are 28-11, and 25-08. It will be seen that the left angle is approximately 10° less than the left angle in the original position and this is probably the cause of the erroneous location of the rock. Consequently, Kakul Rock should be shown inside of the Kakul Rock Buoy as located this year instead of where previously shown.

The 2-1/6 fathom sounding shown on ⟨35 was taken from the end launch close to the rocks off Channel Islets.

Sitka tide gauge was used for the reduction of soundings.

WWB

(11)

January 27, 1927.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 2286B

Locality: S. E. ALASKA.

Chief of Party: A. M. Sobieralski

Plane of reference is M L L W
6.2 ft. on tide staff at Sitka (Allowance made for place of sounding).

For reduction of soundings, condition of records satisfactory
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted
3. Time meridian not given at beginning of day's work.
4. Time (whether A. M. or P. M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

G. Rude

Chief, Division of Tides and Currents.

8248 2/27/54 Exam. with reconstructions & chart 8248 D.J. Kennon

Filed with Hydc Reports

U.S.C.& G.S.Str.PATTERSON.

S.E.Alaska.Season of 1897.

SAILING DIRECTIONS.

Sergius Narrows to Sitka.

E. K. Moore,
Lieut.Comdr.,U.S.N.,
Chief of Party.

Hydro. Sheet* 2286, 2287, 2288, 2289, 2298 and 2304. as furnished by Willenbucher

U.S.C.& G.S.Str.Patterson.

S.E.Alaska. Season of 1897.

Sailing Directions.

Sergius Narrows to Sitka.

E. K. Moore,
Lieut.Comdr.,U.S.N.,
Chief of Party.

U.S.C.& G.S.Str.PATTERSON.

Sailing Directions, 1896 and 1897.

Inside waters from Sergius Narrows to Sitka.

Topographic Sheet 1/40000.

The sailing directions of these waters in the Pacific Coast Pilot, Alaska,Part 1, 3d.Edition,1891,are generally correct and very good,so that only such parts will be touched upon as have been omitted or found to be in error,and that volume is here referred to.

As soon as the surveys of 1895,1896 7 1897 are charted,so that courses and distances can be taken off accurately,they should be rewrit -ten,commencing at Chatham Strait and proceeding to Sitka,which is the probable course a vessel will take in making her first voyage.

The outside part of Sitka Sound should be written from the sea in, as it now is,for the same reason.

Page 185,Olga Strait. Keep in mid channel until 3/4 mile to the Ed of Creek Pt., when keep half way between the middle and the north shore until about '/4 mile from the point,to clear the shoal in the middle,if drawing more than 16 ft and the tide is low.

"When Neva Strait is well open,head for Whitestone",keeping the rock just open on the port bow and pass half way between it and the north shore,to clear the sunken rock 100 yds S.E.by E.'/2 E.from Whitestone and the shoal making out 100 yds from the north shore abreast of it.

Black buoy #1 in line with the eastern red buoy #2 just clears the former,while the two reds in line just clears the latter,when the buoys ride to slack water over their moorings.

For the straight channel,now universally used,when up to White--stone keep the black buoy No I open on the port bow until the channel between the two black buoys on the south side and the eastern red buoy on the north side is open,when head straight through it. Observe the way the current is running and straighten the vessel out before passing the first buoy for there is no room to wiggle when between them. In coming from the Wd keep well over to the red buoy marking the east end of the sand flat,until the channel opens between the buoys when head through it,observing the current and allowing for it.

Page 186. "Keep this course until Scraggy Id is" abeam,when head for Round Id,N.W.3/4 W.,until Pt Kekul is abaft the beam,and clear of Kekul Rk having 16 feet, when round into Peril Strait keeping about the middle to clear Brad Rock having 7½ feet.

Fish Bay requires no special directions. If coming from the Sd stand over for Shulze Head until clear of Haley Rk.

For Haley Anchorage stand in for the bend in the coast,favoring the Haley Pt side and anchor in 15 to 20 fms,hard sandy bottom.

SALISBURY SOUND. If from Peril Strait haul gradually around Krugloi and Goloi Ids from '/4 to '/2 mile dist.,and when abeam of Goloi heading W.'/2 S.,continue that course if bound to the Nd until I'/2 miles past Klokachef Pt,to clear Olga Rk. If from Neva Strait this course can be laid when in mid channel,abeam of Scraggy Id. If bound to the Sd or Wd shape the above course accordingly,continuing I'/2 mile outside of Cape Georgiana to clear Morski Rk before hauling down the coast.

FORTUNA STRAIT. Continue on the above course until past Pt Leo, when haul in gradually to about N.N.W.,keeping about midway between the two reefs,which will show either by kelp or breakers. This mid channel

is clear and well defined,but if the sea is heavy from the S.W. the breakers over the reef on that side confuse the water clear across. If bound through,keep a mid channel course,rather favoring the klokachef side. A heavy sea over the reefs at the west confuses the water in mid channel here also.

LEO ANCHORAGE.When clear of the kelp patch off the bluff on the east side turn up for the head of the bay until the west end of Klokachef is shut in,when anchor in I5 to 20 fms,or if the vessel is small go nearer the head in 6 to 8 fms. If from the Wd continue in mid channel until the head of the bay is wide open,and clear of the sunken rock S.by E.'/2 E.350 yds from the west entrance point,marked by kelp,when proceed as above.

KALININA BAY. Stand on until the mouth of the bay opens S.E.by E., when stand into it on that course,favoring Kalinina Pt to clear a shoal marked with kelp off the mouth and about the middle. When in the bay keep about the middle until after making the first turn to the Wd,when favor the west shore to clear the two low water rocks off the point on the east shore where it makes a bend to the Ed. Anchor in the middle of the basin in 3'/2 fms,having a care not to get too close to the flat at the head.

SINITSIN COVE is not recommended for an anchorage but should it be used,no ~~further~~ directions are necessary further than to enter at low tide if practicable and anchor where the water is found shoal enough,wi-th swinging room. A small craft can pass above the two rocks near the head and anchor off the flat in soft bottom with good protection.

SOUHOI INLET. When midway between Scraggy and Kane Ids.,with the mouth of the inlet bearing south,head for it,and enter between Hayward

Pt.on the east and a rocky islet on the west side. Keep down the middle and anchor in any place desired,according to the draft of water and the swinging room required. The best anchorage is 2 3/4 miles beyond the rocky islet,opposite a small stream and flat on the west side,in 10 fms with 500 yds swinging room. Only small craft should go into the narrow arm beyond this.

GILMER COVE and WHITESTONE COVE. A very small craft can enter and anchor in the middle. A larger one should drop anchor off the mouth, run quarter lines to trees and haul her stern in,when she will be entirely protected and out of the current.

KRESTOF SOUND. From Neva Strait,after passing Whitestone and abreast of the H.W.rock on the east side,head S.S.E.for Mills Id.,round and wooded,passing half way between the H.W.Id on the west side and the H.W.rock off the Sound Ids.on the east side. If from Olga Strait,head for the H.W.Id on the west side until past the H.W.rock,when round it and take the above course. When about 3/8 mile from Mills Id and the eastern channel opens S.E.'/2 E.change to that course,passing between Brady and Mills Ids;keep a mid channel course until it turns to S.'/2 W. ,off the S.E.end of Big Magoun Id.,when favor the east side to clear the L.W.rock west of mid channel,off the above point. When up to Pt Rob pass midway between that and Pt.Brown and steer E.S.E.'/4 E.through Hayward Strait,passing to the Wd.of Guide Id. If bound to Sitka,when Guide Id bears north change to N.E.and enter the main channel between Siginaka and Big Gavanski Ids. If bound out through Sitka Sound,when Guide Id is broad on the port bow,shape the course for the middle between Beloi Rk and Rocky Pt.,thence between Vitskari Ids and Low Id.

For the Western Channel pass to the Wd.of Double Id.and all of the

Magoun Ids.except two,which lie close to the west shore,and haul short arounda small,round,bare,island close to the S.W.end of the Magoun Ids.

This channel makes 2/3 of a circle and is only fit for small craft, while the Eastern Channel makes I/3 of a circle and is wide and clear enough for any vessel likely to navigate these waters. To anchor in Port Krestof needs no special directions except a caution to keep off the flat when the tide is up.

de Groff Bay.- Only small craft should attempt to enter. Keep in the middle of the channel through the kelp and look out for dangers, avoiding them when seen.

NAKWASHINA PASSAGE. The West and East Arms are both wide open and clear requiring no special directions except to keep clear of the ledges and flats shown on the chart,near the shores. No special directions can be given for the North Arm,except to enter it at low tide rising,when the channel is plainly marked by the bare flats,and should the vessel ground on one,the tide will soon rise and float her off.

To anchor north of Halleck Pt.steer for the middle of the first bight to the Nd of the Pt.and anchor in 7 to I5 fms,hard bottom,out of the strength of the current,with good S.E.and S.W.lee.

SIGINAKA ISLANDS. Small craft can pass between these islands and Eastern Pt,and through the various channels among the islands,but no special directions can be given except to follow the channels and keep a look out for rocks.

PROMISLA BAY. Enter on either side of the island and rock off the mouth and anchor in the basin near its head in about I5 fms,where good southerly protection should be had. The bottom is hard and there are no flats in this bay.

The passage between Siginaka and Big Gavanski requires no description, but that between Little Gavanski and Middle Ids. should be navigated only at low water slack, when the dangers will show or be indicated by kelp, except by those having local knowledge.

KATLAN BAY is open and deep, requiring no directions. Anchor in the N.W. corner of the West Arm, in 10 to 15 fms, where some protection may be had, or with a small craft steer up the middle of the West Arm and anchor near its head.

Very respectfully,
E. K. Moore,
Lieut Comdr U.S.N.
Chief of Party.

8248 2/27/74 Exam. with reconstruction
of Ckt. 8248 no corr —
D. J. Kennan

2287

Diag. Cht. No. 8252-1

Department of Commerce and Labor

COAST AND GEODETIC SURVEY

Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

N 71 c *Sheet No* 2287

LOCALITY:

See

2286

1897

~~190~~

CHIEF OF PARTY:

E K Moore

2287

2288

Diag. Cht. No. 8252-1

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Hyd. Sheet No 2288

LOCALITY:

See

2286

1897
~~190~~

CHIEF OF PARTY:

E K Moore

2288

2289

Diag. Chart No. 8258-1

Department of Commerce and Labor

COAST AND GEODETIC SURVEY

Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Hyd C *Sheet No.* 2289

LOCALITY:

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2286

1897

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CHIEF OF PARTY:

E K Moore

2289

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Diag. Chr. No. 8252-1

Department of Commerce and Labor

COAST AND GEODETIC SURVEY

Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Hyd c *Sheet No.* 2290

LOCALITY:

See

2286

1897

~~1900~~

CHIEF OF PARTY:

E K Moore

2290

2302

(See Hyd. 2286 Rept.)

Diag. Cht. No. 8252-1

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: SE Alaska

11—5613

DESCRIPTIVE REPORT.

Hyd. *Sheet No.* 2302

LOCALITY:

192

CHIEF OF PARTY:

2302

Acc No.

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

_____
Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Hyd C *Sheet No.* 2302

LOCALITY:

See

2286

1897
~~190~~

CHIEF OF PARTY:

E K Moore